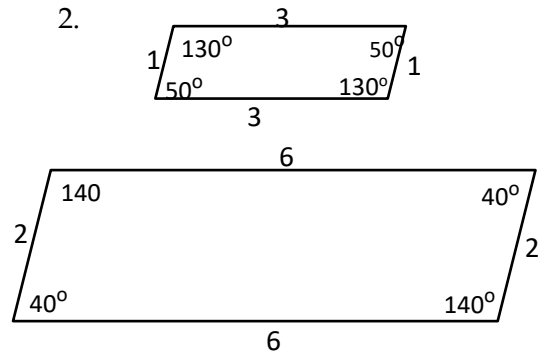
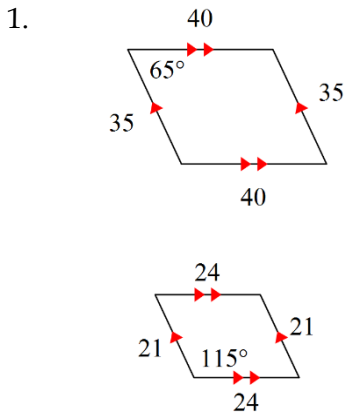


# 10.3 Triangle Similarity

Name \_\_\_\_\_ Hour \_\_\_\_\_

Review, state whether each of the following illustrates two similar figures. How do you know?



For questions 3 - 6,  $\triangle PLU \sim \triangle ABC$ .

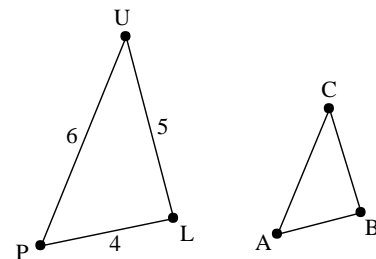
**Given a length for AB Find what the lengths of AC and BC would be.**

3.  $AB = 1$   
 $AC = \underline{\hspace{2cm}}$   
 $BC = \underline{\hspace{2cm}}$

4.  $AB = 3$   
 $AC = \underline{\hspace{2cm}}$   
 $BC = \underline{\hspace{2cm}}$

5.  $AB = 4$   
 $AC = \underline{\hspace{2cm}}$   
 $BC = \underline{\hspace{2cm}}$

6.  $AB = x$   
 $AC = \underline{\hspace{2cm}}$   
 $BC = \underline{\hspace{2cm}}$



$\triangle CAT \sim \triangle DOT$ . Complete each statement.

7.  $\angle C \cong \underline{\hspace{2cm}}$

8.  $\angle CTA \cong \underline{\hspace{2cm}}$

9.  $\angle DTO \cong \underline{\hspace{2cm}}$

10.  $\angle A \cong \underline{\hspace{2cm}}$

11.  $\angle D \cong \underline{\hspace{2cm}}$

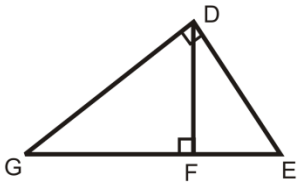
12.  $\angle O \cong \underline{\hspace{2cm}}$

13. How does the SSS and SAS postulate for similar triangles differ from the SSS and SAS postulate for congruent triangles?

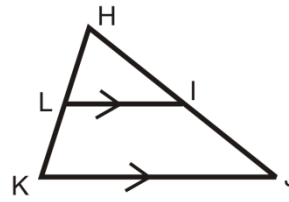
14. What is the AA postulate for similar triangles?

Are the following triangles similar? If so, write a similarity statement. If not, give your reasoning why.

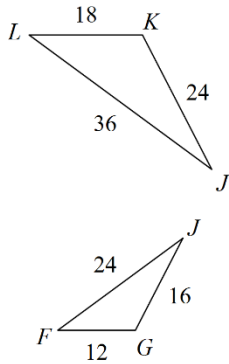
15.



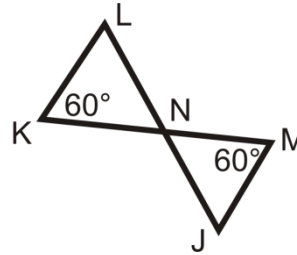
16.



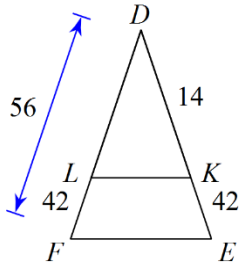
17.



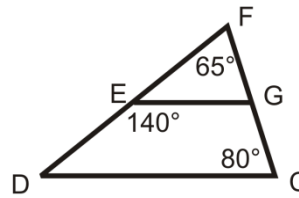
18.



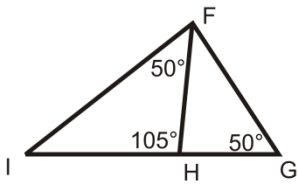
19.



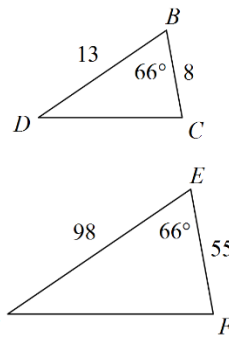
20.



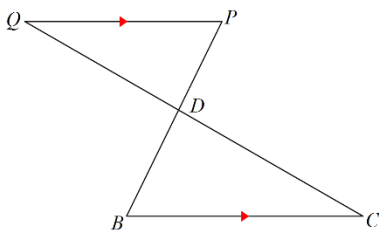
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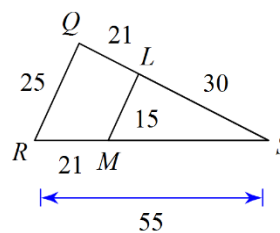
22.



23.

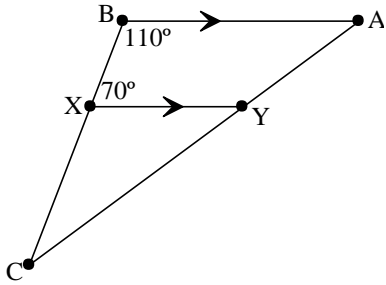


24.

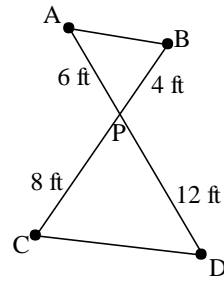


Determine whether each pair of triangles is similar or not. If they are similar right a similarity statement.

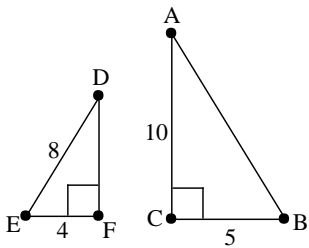
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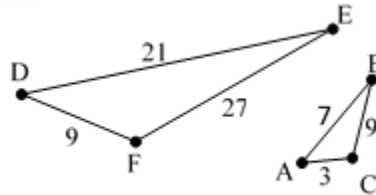
26.



27.



28.



29. The shapes are similar. Find segment lengths for CB and EF, and find x and y.

