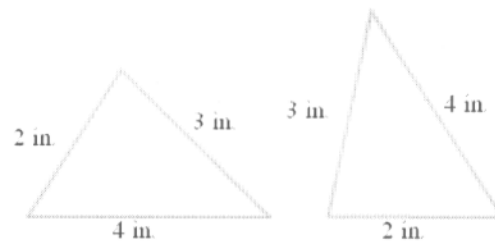


Student: \_\_\_\_\_  
Date: \_\_\_\_\_  
Time: \_\_\_\_\_

Instructor: courtney trabue  
Course: GMC LSS Mathematics  
Book: Martin-Gay: Developmental  
Mathematics

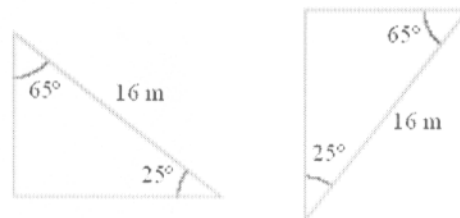
Assignment: MAT 097 Congruent &  
Similar Triangles (6.7)

1. Determine whether the pair of triangles is congruent. If congruent, what is the reason? (SSS, SAS, or ASA)



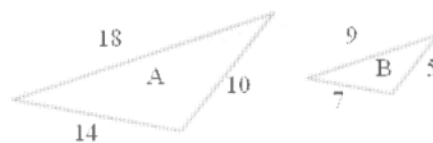
- A. Congruent, ASA  
 B. Congruent, SSS  
 C. Congruent, SAS  
 D. Not Congruent

2. Determine whether each pair of triangles is congruent. If congruent, what is the reason? (SSS, SAS, or ASA)



- A. Congruent, SSS  
 B. Congruent, SAS  
 C. Congruent, ASA  
 D. Not Congruent

3. Triangles A and B are similar triangles.  
Find the ratio of the corresponding sides  
of triangle A to triangle B.



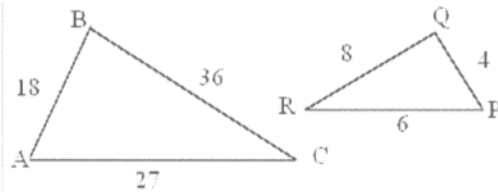
The ratio of the corresponding sides of triangles A to B is .  
(Type an improper fraction.)

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Similar Triangles (6.7)

4. Find all the ratios for the similar triangles shown.  
Reduce all fractions to lowest terms.

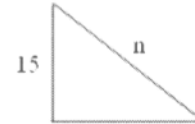


$$\frac{AB}{PQ} = \frac{\square}{\square}$$

$$\frac{AC}{PR} = \frac{\square}{\square}$$

$$\frac{BC}{QR} = \frac{\square}{\square}$$

5. Given that the pair of triangles is similar, find the length of the side labeled n.



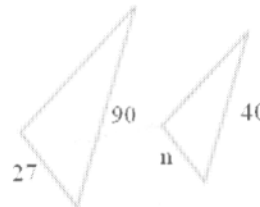
$$n = \square$$

6. Given that the pair of triangles is similar, find the length of the side labeled n.



$$n = \square$$

7. Given that the pair of triangles is similar, find the length of the side labeled n.



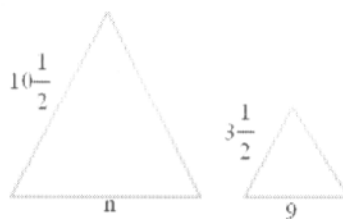
$$n = \square$$

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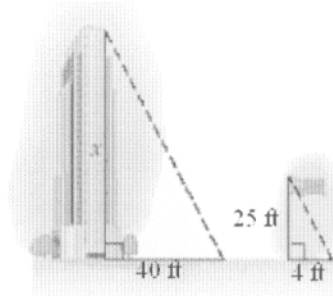
Assignment: MAT 097 Congruent &  
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8. Given that the triangles are similar, find the length of the side labeled  $n$ .



The unknown length  $n$  is . (Type an integer or a decimal.)

9. A triangle is formed by the building's height and shadow. Another triangle is formed by the flagpole's height and shadow. Using the following diagram, find the height of the building.



The height of the building is  feet.

10. Samantha Black, a 6-foot-tall park ranger, needs to know the height of a tree. She notices that when the shadow of the tree is 42 feet long, her shadow is 2 feet long. Find the height of the tree.

The height of the tree is  feet.

11. If a 40-foot tree casts a 16-foot shadow, find the length of the shadow cast by a 21-foot tree.

The length of the tree's shadow is  feet.  
(Type an integer or a decimal rounded to the nearest tenth.)