

Independent Practice

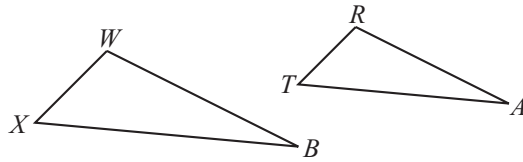
8.6

NAME _____

Module 8 Points, Lines, Angles, and Triangles

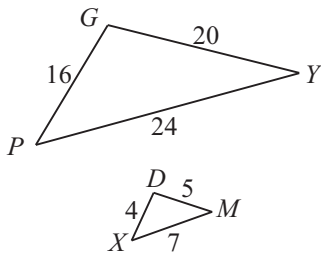
Lesson 6 Similar Triangles

1. In the figure at right, $\triangle WXB \sim \triangle RTA$.
List the corresponding sides and congruent angles.

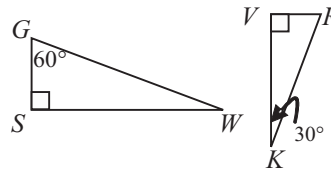


Determine if the triangles are similar. If so, write a similarity statement. If not, explain why not.

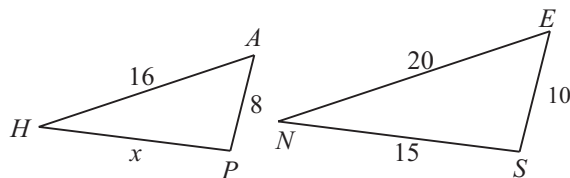
2.



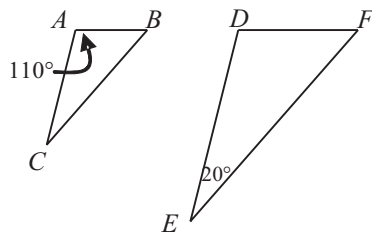
3.



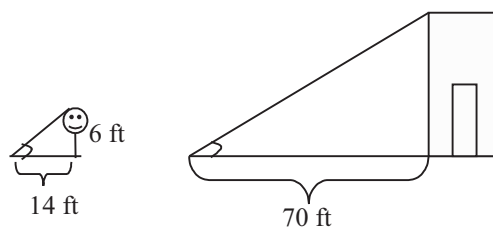
4. $\triangle HAP \sim \triangle NES$.
Find the value of x .



5. $\triangle ABC \sim \triangle DFE$
Find all the missing angle measures.

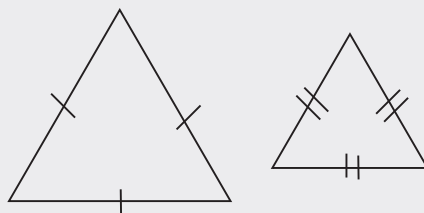


6. Clark makes a 14-foot shadow at the same time a nearby building makes a 70-foot shadow. Clark is six feet tall. Find the height of the building.



Journal

- How are similar and congruent triangles alike? How are they different?
- Explain how you know the triangles below are similar without knowing the measures of the sides.



- Describe two ways to prove two triangles are similar.

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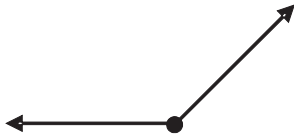
Module 8 Points, Lines, Angles, and Triangles

Lesson 6 Similar Triangles

Cumulative Review

Estimate the angle's measure and classify the angle.

1.

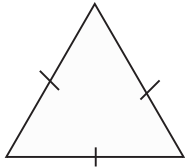


2.



Classify the triangle by its sides and by its angles.

3.



4.



5. Tito drew a triangle with side lengths of 12 inches, 12 inches, and 15 inches. Classify Tito's triangle by its side lengths.

6. Draw two congruent right isosceles triangles.

7. Draw two congruent equiangular triangles.

8. $\triangle TOP \cong \triangle LEF$

If \overline{TP} has a length of 15 centimeters, what side in $\triangle LEF$ must also have a measure of 15 centimeters?

9. $\triangle HAS \cong \triangle NOT$

If $m\angle H = 40^\circ$ and $m\angle S = 30^\circ$, what is $m\angle O$?