

NAME _____

Module 8 Points, Lines, Angles, and Triangles

Lesson 6 Similar Triangles

Lesson Objectives

- Determine if triangles are similar.
- Develop the properties of similar triangles (ratio of sides and congruent angles).
- Use similar triangles to solve problems.

Subtopic 1 Similar Triangles

Similar Figures

- Have the same _____
- May or may not be the same _____
- Corresponding angles are _____.
- Corresponding _____ are proportional.

To _____ two triangles are similar:

- Show _____ pairs of _____ are congruent.

(AA Similarity Rule)

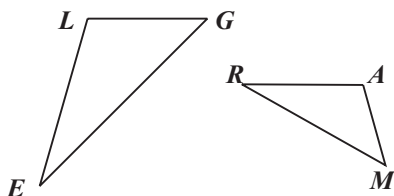
- Show that all _____ sides are _____.

(SSS Similarity Rule)

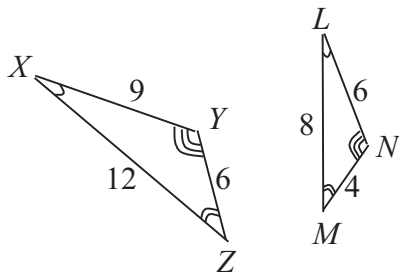


$\triangle LEG \sim \triangle ARM$

Which angles are congruent? Which sides are proportional?



- 2 Determine if the two triangles are similar.

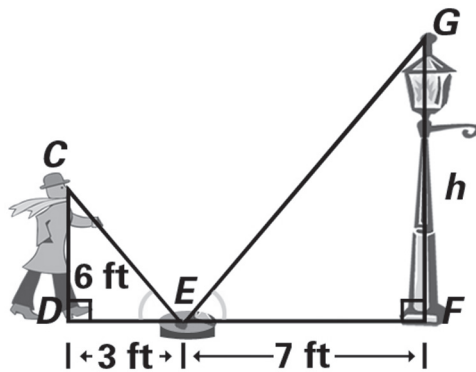


Subtopic 2 Using Similar Triangles

Indirect Measurement

A method of estimating distances that is _____ to measure directly

- 3 To measure the height of a street lamp, Rodney places a mirror on the ground and stands where he can see the top of the lamp in the mirror. Use the diagram to estimate the height of the street lamp.



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- 4 To measure the height of a flagpole, Martha used shadows. Use the diagram to estimate the height of the flagpole.

