

Name _____

Hour _____

5

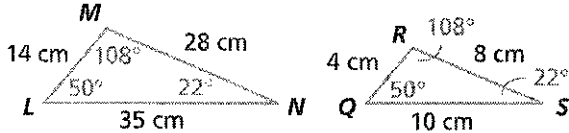
READY TO GO ON?

SECTION 5.8

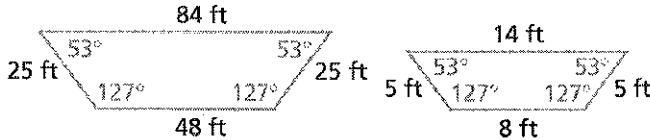
Quiz for Lessons 5-7 Through 5-9 *Show work.*

5-7 Similar Figures and Proportions

1. Tell whether the triangles are similar.



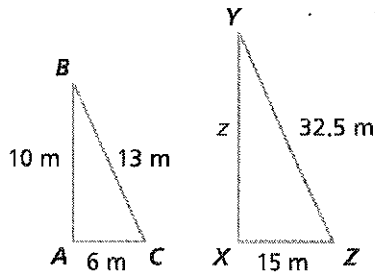
2. Tell whether the figures are similar.



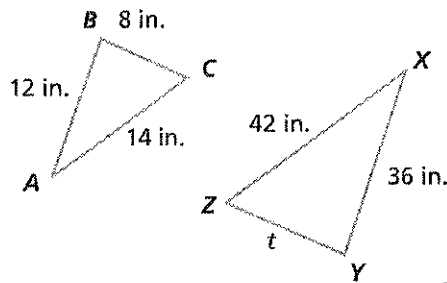
5-8 Using Similar Figures

$\triangle ABC \sim \triangle XYZ$ in each pair. Find the unknown lengths.

3.



4.



5. Reynaldo drew a rectangular design that was 6 in. wide and 8 in. long. He used a copy machine to enlarge the rectangular design so that the width was 10 in. What was the length of the enlarged design?

6. Redon is 6 ft 2 in. tall, and his shadow is 4 ft 1 in. long. At the same time a building casts a shadow that is 19 ft 10 in. long. Estimate the height of the building.

5-9 Scale Drawings and Scale Models

7. An actor is 6 ft tall. On a billboard for a new movie, the actor's picture is enlarged so that his height is 16.8 ft. What is the scale factor?

8. On a scale drawing, a driveway is 6 in. long. The scale factor is $\frac{1}{24}$. Find the length of the actual driveway.

9. A map of Texas has a scale of 1 in. = 65 mi. If the distance from Dallas to San Antonio is 260 mi, what is the distance in inches between two cities on the map?

Ready to Go On?

LESSON

5-9

Practice C

Scale Drawings and Scale Models

Identify the scale factor.

1.

	Bear	Stuffed Animal
Height (in.)	62	15.5

2.

	House	Dollhouse
Height (ft)	32.4	2.7

3.

	Airplane	Model
Length (ft)	25.5	1.5

4.

	Alligator	Toy Alligator
Length (in.)	128.1	6.1

The scale factor of each model is 1:16. Find the missing dimensions.

	Item	Actual Dimensions	Model Dimensions
5.	barn	height: 32 ft length:	height: length: 3.5 ft
6.	submarine	length:	length: $18\frac{3}{4}$ ft
7.	bookcase	height: 96 in.	height:
8.	tree	height:	height: $2\frac{1}{2}$ ft
9.	car	length: 13 ft height: 5.5 ft	length: height:
10.	shark	length:	length: $14\frac{1}{4}$ in.

11. Hillary took a photograph of her house, which has an actual height of 28.5 feet. If the house measures 3.6 inches tall in the photograph, what is the scale factor? _____

12. On a road map, the distance from Portland to Seattle is 8 centimeters. What is the actual distance between the cities if the map scale is 2 centimeters = 37.5 miles? _____

13. A sculptor plans a statue by making a drawing to scale. On the drawing, the statue is $8\frac{2}{5}$ inches tall. The scale factor in the drawing is $\frac{1}{23}$. Find the height of the statue. _____