

# Additional Practice

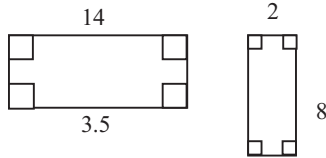
## 9.4

NAME \_\_\_\_\_

Module 9 Characteristics of Geometric Shapes  
Lesson 4 Similar Polygons

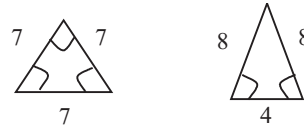
Determine if each pair of polygons is similar. Write *yes* or *no*.

1.



**Yes**

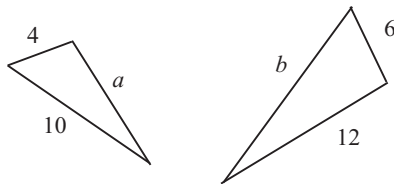
2.



**No**

Find the unknown lengths in each pair of similar figures.

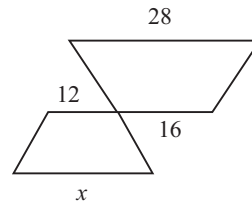
3.



$$a = 8$$

$$b = 15$$

4.



$$x = 21$$

5. A map has a scale of one inch to 150 miles. The actual distance between two cities is 525 miles. What is the distance between the two cities on the map?

**The distance on the map between the two cities is 3.5 inches.**

6. A poster is a 25% copy of the original painting. The original painting measures three feet by four feet. What are the dimensions of the poster?

**The poster measures  $\frac{3}{4}$  ft by 1 ft.**

7. A regular pentagon with a perimeter of 25 inches is enlarged by a scale factor of 250%. What is the perimeter of the enlargement?

**The enlargement's perimeter is 62.5 inches.**

8. Richard is making a scale drawing of a soccer field and is using a scale of 2 mm = 1 m. If the length of the actual soccer field is 104 meters, what is the length on his drawing?

**The length of the drawing is 208 mm.**