Date

**LESSON 6.3 Practice B** *For use with pages 371–379* 

List all pairs of congruent angles for the figures. Then write the ratios of the corresponding sides in a statement of proportionality.

**1.**  $\Delta ABC \sim \Delta DFE$ 



**2.**  $WXYZ \sim MNOP$ 



Determine whether the polygons are similar. If they are, write a similarity statement and find the scale factor.



Name

## In the diagram, *WXYZ* ~ *MNOP*.

- 5. Find the scale factor of *WXYZ* to *MNOP*.
- 6. Find the values of x, y, and z.
- 7. Find the perimeter of *WXYZ*.
- 8. Find the perimeter of *MNOP*.
- 9. Find the ratio of the perimeter of *MNOP* to the perimeter of *WXYZ*.

## The two triangles are similar. Find the values of the variables. 10.



## 11.



In the diagram,  $\Delta XYZ \sim \Delta MNP$ . 12. Find the scale factor of  $\Delta XYZ$  to  $\Delta MNP$ .

13. Find the unknown side lengths of both triangles.

14. Find the length of the altitude shown in  $\Delta XYZ$ .

**15.** Find and compare the areas of both triangles.



