

## Practice B

Name

For use with pages 677-682

## The polygons shown are similar. Find the ratio (shaded to unshaded) of their perimeters and of their areas.



## Solve.

Lesson 11.3

- **5.** The ratio of the lengths of corresponding sides of two similar polygons is 3:7. What is the ratio of their areas?
- **6.** The ratio of the areas of two similar triangles is 32:24. What is the ratio of the lengths of corresponding sides?
- **7.** A regular hexagon has an area of 60 square centimeters. Find the scale factor of this hexagon to a similar hexagon that has an area of 96 square centimeters.
- **8.** The ratio of the lengths of corresponding sides of two similar triangles is 5:12. The smaller triangle has an area of 24 square centimeters. What is the area of the larger triangle?

## In Exercises 9–15, use the diagram of the garden and a ruler. The scale is 1 millimeter to 0.5 meter.

- **9.** Use a ruler to approximate the dimensions of the scale garden including the wall.
- **10.** Find the dimensions of the actual garden.
- **11.** What is the area of the scale garden? What is the area of the actual garden?
- **12.** What is the area of the scale fountain? What is the area of the actual fountain?
- **13.** Find the combined area of both scale flower boxes. What is the area of the actual flower boxes?
- **14.** Find the total scale area inside the walk. What is the total actual area inside the walk?
- **15.** Find the actual area of the grass inside the garden.

