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## Practice B

For use with pages 677-682

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

1. 


2.

3.


4.


Solve.
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 $\mathbf{1}$ 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.

