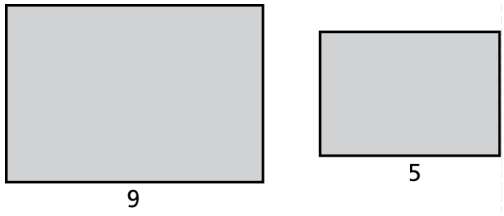
Name_____ Date _____

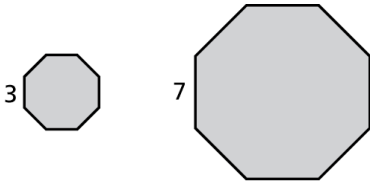
2.6 Homework

The two figures are similar. Find the ratio (small to large) of the perimeters and of the areas.

1.



2.



3. How does doubling the side lengths of a rectangle affect its area?

4. The ratio of the corresponding side lengths of two similar rectangular tables is 4 : 5.

a. What is the ratio of the perimeters? = _____

b. What is the ratio of the areas? = _____

c. The perimeter of the larger table is 44 feet. What is the perimeter of the smaller table?

5. The figures are similar. The ratio of the perimeters is 5 : 9. Find *x*.

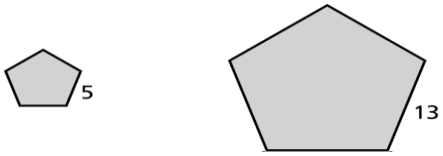
6. The ratio of the area of Triangle *A* to Triangle *B* is 16 : 49. Triangle *A* is similar to Triangle *B*.

a. Which triangle is larger, *A* or *B*?

b. What is the ratio of the corresponding sides of Triangle *A* to Triangle *B*?

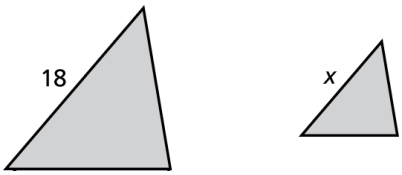
c. A side length of Triangle *B* is 3.5 inches. What is the corresponding side length of Triangle *A*?

7. The two figures are similar. Find the ratio (small to large) of the perimeters and of the areas.



8. How does tripling the side lengths of a pentagon affect its perimeter?

9. The figures are similar. The ratio of the perimeters is 12 : 7. Find *x*.



10. The ratio of the corresponding side lengths of two similar parallelogram signs is 9 : 14.

a. What is the ratio of the perimeters? = _____

b. What is the ratio of the areas? = _____

c. One side length of the smaller sign is 45 feet. What is the side length of the corresponding side of the larger sign?

11. The area of Circle P is 4π. The area of Circle Q is 25π.

a. What is the ratio of their areas? = _____

b. What is the ratio of their circumferences? = _____