Name:\_\_\_

Geometry Area/Perimeters of Similar figures

## For each pair of similar figures, find the ratio of the perimeters and the ratio of the areas.



Find the similarity ratio of each pair of similar figures.

- 4. two regular hexagons with areas 8 in.<sup>2</sup> and 32 in.<sup>2</sup>
- 5. two squares with areas  $81 \text{ cm}^2$  and  $25 \text{ cm}^2$
- **6.** two triangles with areas  $10 \text{ ft}^2$  and  $360 \text{ ft}^2$
- 7. two circles with areas  $128\pi$  cm<sup>2</sup> and  $18\pi$  cm<sup>2</sup>

## For each pair of similar figures, the area of the smaller figure is given. Find the area of the larger figure.



For each pair of similar figures, find the ratio of the perimeters.



1. If figure A and figure B are similar with a ratio of similarity of  $\frac{5}{4}$  and the perimeter of figure A is 18 units, what is the perimeter of figure B?

2. If figure A and figure B are similar with a ratio of similarity of  $\frac{1}{8}$  and the area of figure A is 13 square units, what is the area of figure B?

3. If figure A and figure B are similar with a ratio of similarity of 6, and the perimeter of figure A is 54 units, what is the perimeter of figure B?

4. If figure A and figure B are similar with a ratio of their perimeters is  $\frac{17}{6}$  what is their ratio of similarity?

5. If figure A and figure B are similar with a ratio of their areas is  $\frac{49}{9}$  what is their ratio of similarity?