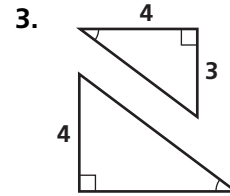
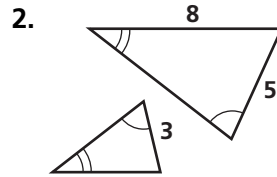
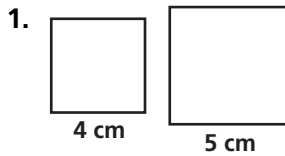


# Practice 8-6

## Perimeters and Areas of Similar Figures

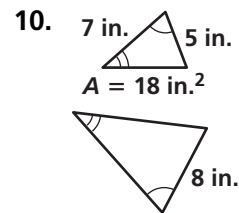
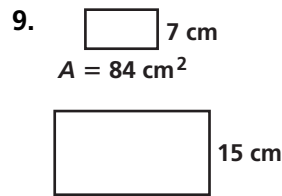
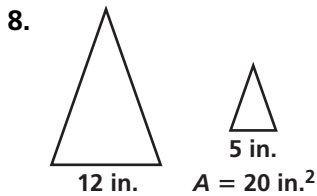
For each pair of similar figures, find the ratio of the perimeters and the ratio of the areas.



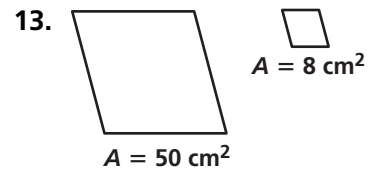
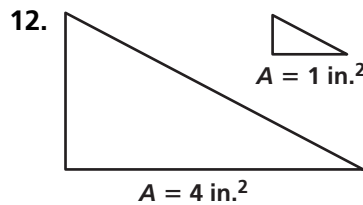
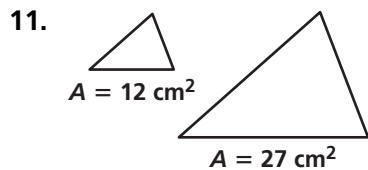
Find the similarity ratio of each pair of similar figures.

4. two regular hexagons with areas  $8 \text{ in.}^2$  and  $32 \text{ in.}^2$
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  $128\pi \text{ cm}^2$  and  $18\pi \text{ cm}^2$

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.



14. The shorter sides of a rectangle are 6 ft. The shorter sides of a similar rectangle are 9 ft. The area of the smaller rectangle is  $48 \text{ ft}^2$ . What is the area of the larger rectangle?