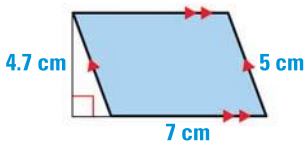
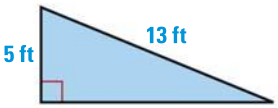
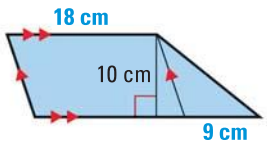
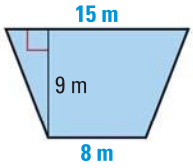
11 CHAPTER TEST

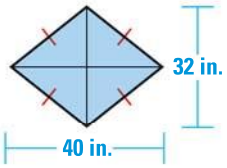
In Exercises 1–6, find the area of the shaded polygon.

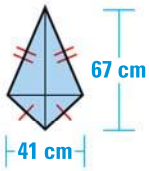
1. 

2. 

3. 

4. 

5. 

6. 

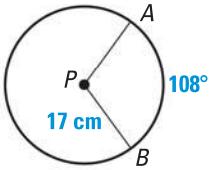
7. The base of a parallelogram is 3 times its height. The area of the parallelogram is 108 square inches. Find the base and the height.

Quadrilaterals *ABCD* and *EFGH* are similar. The perimeter of *ABCD* is 40 inches and the perimeter of *EFGH* is 16 inches.

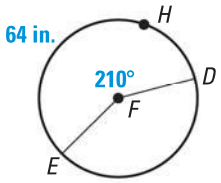
8. Find the ratio of the perimeters of *ABCD* to *EFGH*.
9. Find the ratio of the corresponding side lengths of *ABCD* to *EFGH*.
10. Find the ratio of the areas of *ABCD* to *EFGH*.

Find the indicated measure for the circle shown.

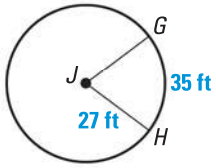
11. Length of $\overset{\frown}{AB}$



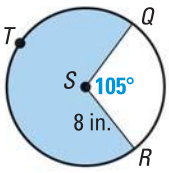
12. Circumference of $\odot F$



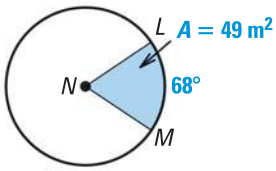
13. $m\overset{\frown}{GH}$



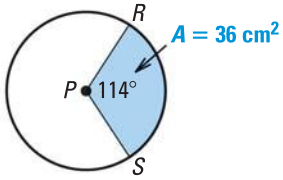
14. Area of shaded sector



15. Area of $\odot N$

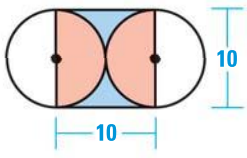


16. Radius of $\odot P$



17. **TILING** A floor tile is in the shape of a regular hexagon and has a perimeter of 18 inches. Find the side length, apothem, and area of the tile.

Find the probability that a randomly chosen point in the figure lies in the region described.



18. In the red region
19. In the blue region