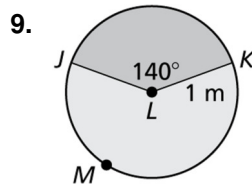Name _____ Date _____

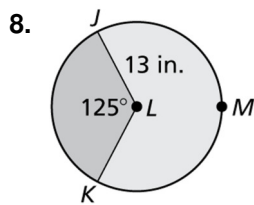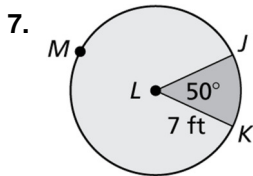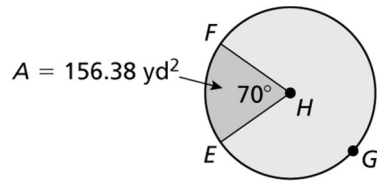**In Exercises 1–4, find the indicated measure.**

1. area of a circle with a radius of 6.8 feet

2. area of a circle with a diameter of 19.2 centimeters

3. radius of a circle with an area of 1017.9 square meters

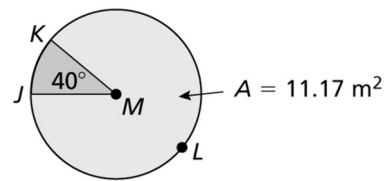4. diameter of a circle with an area of 707 square inches

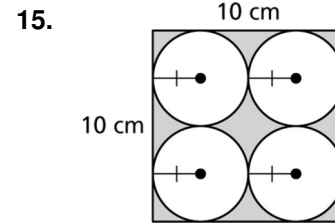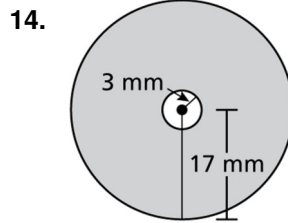**In Exercises 7–10, find the areas of the sectors formed by ∠JLK.**

7.

8.

9.

10.
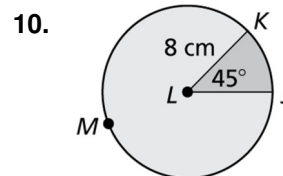
11. Find the area of ⊙H.

12. Find the area of ⊙M.

$A = 156.38 \text{ yd}^2$

70°

$A = 11.17 \text{ m}^2$

40°

In Exercises 13–15, find the area of the shaded region.

13.

17 ft

8 ft

14.

3 mm

17 mm

15.

10 cm

10 cm
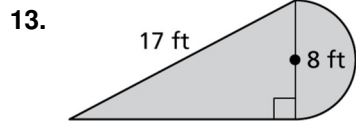
16. The diagram shows the coverage of a security camera outside a building. A new security camera is installed in the same position that doubles the radius of the coverage area. How does this affect the coverage area? Explain.

130°

⊢ 40 ft ⊣
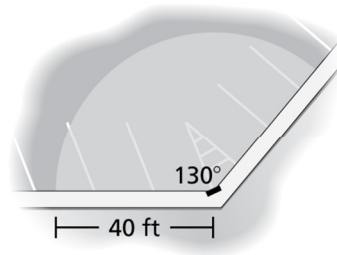
11.2 Practice A

1. 145.27 ft^2

2. 289.53 cm^2

3. 18 m

4. 30 in.

5. about 10,610 people/mi^2

6. about 883,573 people

7. about 21.38 ft^2, about 132.56 ft^2

8. about 184.35 in.^2, about 346.58 in.^2

9. about 1.22 m^2, about 1.92 m^2

10. about 25.13 cm^2, about 175.93 cm^2

11. 804.24 yd^2

12. about 12.57 m^2

13. about 85.13 ft^2

14. about 879.65 mm^2

15. about 21.46 cm^2

16. coverage area is 4 times greater;

$$\frac{\text{new coverage area}}{\text{old coverage area}} \approx \frac{7260.57 \text{ ft}^2}{1815.14 \text{ ft}^2} \approx 4$$