

11.2 Practice WS

In Exercises 1–4, find the indicated measure. Draw and label an image.

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

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

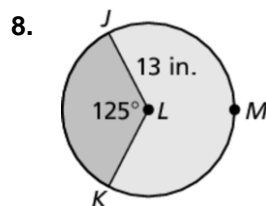
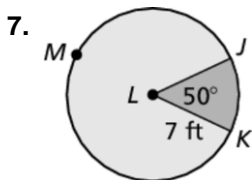
3. radius of a circle with an area of 1017.9 square meters

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

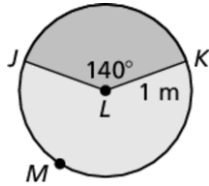
5. About 1.2 million people live in a region with a 6-mile radius. Find the population density in people per square mile.

6. A region with a 15-mile diameter has a population density of about 5000 people per square mile. Find the number of people who live in the region.

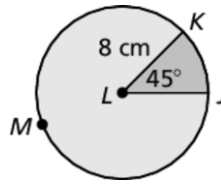
In Exercises 7–10, find the areas of the sectors formed by $\angle JLK$.



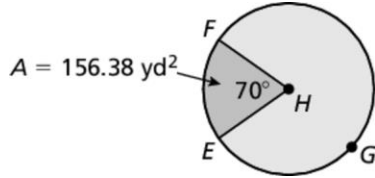
9.



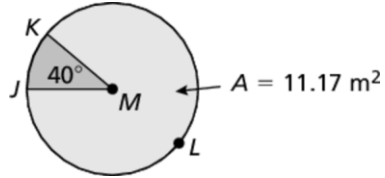
10.



11. Find the area of $\odot H$.

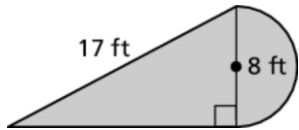


12. Find the area of $\odot M$.

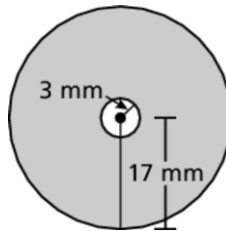


In Exercises 13–15, find the area of the shaded region.

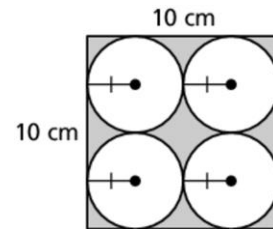
13.



14.



15.



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.

