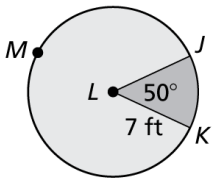
Name _____ Date _____

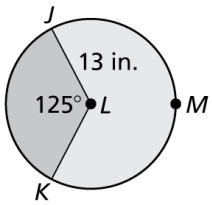
11.2 Practice A

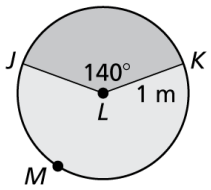
In Exercises 1–4, find the indicated measure.

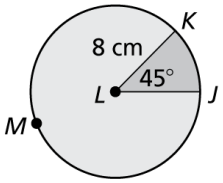
1. area of a circle with a radius of 6.8 feet
2. area of a circle with a diameter of 19.2 centimeters
3. radius of a circle with an area of 1017.9 square meters
4. diameter of a circle with an area of 707 square inches
5. About 1.2 million people live in a region with a 6-mile radius. Find the population 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 $\angle JLK$.

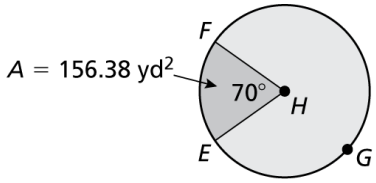
7. 

8. 

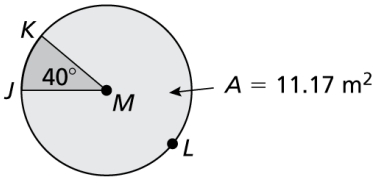
9. 

10. 

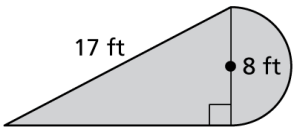
11. Find the area of $\odot H$.

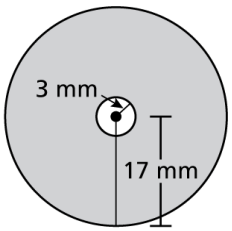


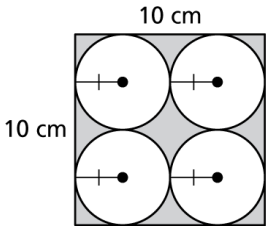
12. Find the area of $\odot M$.



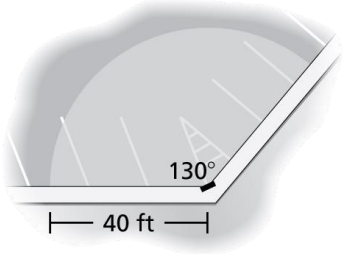
In Exercises 13–15, find the area of the shaded region.

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.



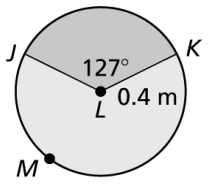
Name _____ Date _____

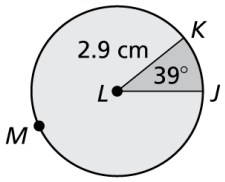
11.2 Practice B

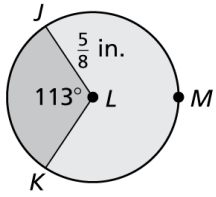
In Exercises 1–4, find the indicated measure.

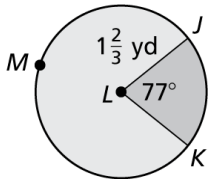
1. area of a circle with a radius of 6.75 inches
2. area of a circle with a diameter of $\frac{3}{10}$ mile
3. radius of a circle with an area of 63.7 square kilometers
4. diameter of a circle with an area of 1040.62 square yards
5. About 150,000 people live in a circular region with a population density of about 1578 people per square mile. Find the radius of the region.
6. About 1.75 million people live in a circular region with a population density of about 5050 people per square mile. Find the radius of the region.

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

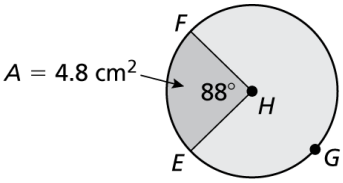
7. 

8. 

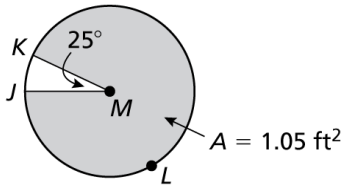
9. 

10. 

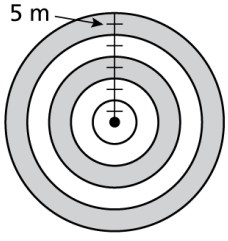
11. Find the radius of $\odot H$.

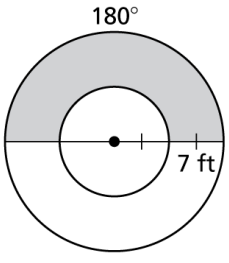


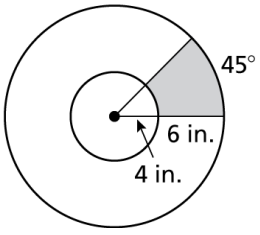
12. Find the radius of $\odot M$.



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

13. 

14. 

15. 

16. A piece of cake is a sector of a cylinder as shown. What is the volume of the piece of cake?