Find the exact area of the circle. Then find the area to the nearest hundredth.

1.



2.



3.

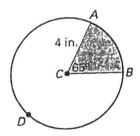


Find the indicated measure.

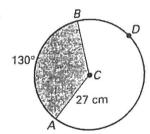
- 4. The area of a circle is 173 square inches. Find the radius.
- 5. The area of a circle is 290 square meters. Find the radius.
- The area of a circle is 52 square millimeters. Find the radius.
- The area of a circle is 342 square yards. Find the diameter.
- The area of a circle is 654 square centimeters. Find the diameter.
- The area of a circle is 528 square feet. Find the diameter.

Find the areas of the sectors formed by $\angle ACB$.

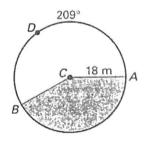
10.



11.

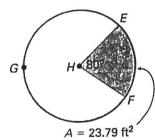


12.

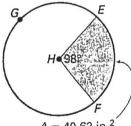


Use the diagram to find the indicated measure.

13. Find the area of $\bigcirc H$.

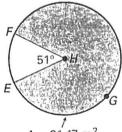


14. Find the radius of $\bigcirc H$.



 $A = 40.62 \text{ in.}^2$

Find the diameter of $\bigcirc H$.



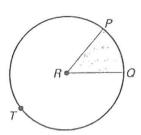
 $A = 31.47 \text{ m}^2$

The area of $\odot R$ is 295.52 square inches. The area of sector PRQ is 55 square inches. Find the indicated measure.

- **16.** Radius of $\bigcirc R$
- **17.** Circumference of $\bigcirc R$

18. \widehat{mPO}

- 19. Length of PO
- 20. Perimeter of shaded region 21. Perimeter of unshaded region



Find the area of the shaded region.

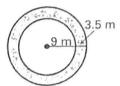
22.



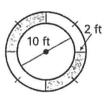
23.



24.



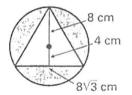
25.



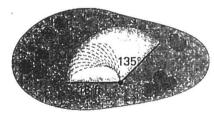
26.



27.



- 28. Fountain A circular water fountain has a diameter of 42 feet. Find the area of the fountain.
- 29. Landscaping The diagram below shows the area of a lawn covered by a water sprinkler.



- a. What is the area of the lawn that is covered by the sprinkler?
- b. The water pressure is lowered so that the radius is 10 feet. What is the area of lawn that will be covered?
- 30. Window Design The window shown is in the shape of a semicircle. Find the area of the glass in the shaded region.

