Name: _____

Circumference and Area of a Circle

1. Find the circumference and the area of the circle shown. Use $\frac{22}{7}$ for π . Round your answer to the nearest whole number.

2. The circumference of the circle is 22 meters. Find the radius of the circle to the nearest tenth of a meter.

Find the circumference of the circle. Use 3.14 or $\frac{22}{7}$ for π .



- 11. The diameter is 46.2 cm.
- 12. The radius is 25 yd.
- 13. The diameter is 6.8 m. 14.
- The radius is 13.8 m.

Find the radius and the diameter of each circle.

- **15.** Circumference = 62.8 mi
- **16.** Circumference = 69.1 yd
- **17.** Circumference = 12.6 yd
- **18.** Circumference = 25.1 ft
- **19.** Area = 201.1 in²
- **20.** Area = 78.5 ft²
- **21.** Area = 254.5 in²
- **22.** Area = 314.2 in²

23. Astronauts train for space flight in a centrifuge which consists of a rotating arm with a cab at the outer end of the arm. The arm, which has length of 58 feet, is revolved about the center of the centrifuge. An astronaut sits in the cab, which is then rotated 50 times per minute. To the nearest hundred feet, how far does the astronaut travel in 1 minute?



24. A rectangle that is 6 units by 5 units on graph paper. Use a compass to draw a half circle with a radius of 3 units on a larger side of the rectangle. Find the area of the figure to the nearest whole number.

25. An air traffic control radar screen is a circle with a diameter of 24 inches.

a. What is the area of the screen to the nearest square inch?

b. The radar screen is set to have a scale of 6 inches: 25 nautical miles. To the nearest square nautical mile, what is the area of the circular region covered by the radar?