

## Handout 2: You Spin My Head Right Round

1. Find the area of a circle with radius 5 m.
2. Find the area of a circle with circumference  $14\pi$  ft.
3. Find the diameter of a circle that has an area  $16\pi$  mi<sup>2</sup>.
4. Find the area of a circle that has a diameter of 22 ft.
5. Find the area of a semicircle with diameter 6 in.
6. The area of a circle is  $9\pi$  cm<sup>2</sup>. What is the circumference?
7. The area of a circle is 36 cm<sup>2</sup>. Find the diameter.
8. What is the area of a wheel with a diameter of 18 in?
9. For an extra fee, the car dealer is willing to upgrade your wheels to be 22 inches in diameter. Compared to a wheel with an 18-inch diameter, how much bigger is the area of this wheel?
10. You decide to stick with the 18-inch wheel. After driving the car for a few months, the tires lose pressure and the area is now  $64\pi$  in<sup>2</sup>. If the wheel is still perfectly circular, what is the tire's radius?