Handout 2: You Spin My Head Right Round - Answers

1. Find the area of a circle with radius 5 m.
25π m^2

2. Find the area of a circle with circumference 14π ft.
49π ft^2

3. Find the diameter of a circle that has an area 16π mi^2.
8 mi

4. Find the area of a circle that has a diameter of 22 ft.
121π ft^2

5. Find the area of a semicircle with diameter 6 in.
4.5π in^2

6. The area of a circle is 9π cm^2. What is the circumference?
6π cm

7. The area of a circle is 36 cm^2. Find the diameter.
$\frac{12\sqrt{\pi}}{\pi}$ cm

8. What is the area of a wheel with a diameter of 18 in?
81π in^2

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?
40π in^2 or about 1.5 times larger

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 64π in^2. If the wheel is still perfectly circular, what is the tire's radius?
8 in

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