

6.8 Exercises

1. What is the radius of a circle with diameter 42.8 meters?
2. The diameter of a circle is 10 centimeters greater than the radius. How long is the radius?

Find the circumference to the nearest tenth of each circle with given radius or diameter. Use $\pi \approx 3.14$.

3. $d = 15$ in.
4. $d = 7$ m
5. $r = 5.5$ cm
6. The circumference of a circle measures 63.4 feet. Find the circle's diameter to the nearest tenth.
7. Find the radius to the nearest whole number of a circle that has a circumference of 1,298 meters.

Find the area in terms of π of each circle with given radius or diameter.

8. $r = 11$ ft
9. $d = 60$ cm
10. $r = 1.5$ in.

Find the area to the nearest tenth of each circle with given radius or diameter. Use $\pi \approx 3.14$.

11. $d = 16$ m
12. $r = 9$ ft
13. $r = 12.8$ cm
14. A circle has a circumference of 25 inches. Find the area of the circle to the nearest whole number.
15. If you double the diameter of a circle, you increase its circumference by ____.
A. 2 times B. π times C. 2^2 times
16. If you double the radius of a circle, you increase its area by ____.
A. 2 times B. π times C. 2^2 times