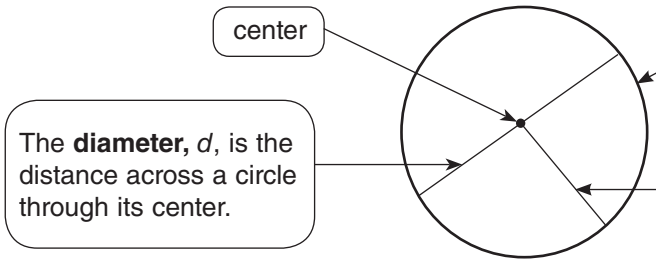
NAME _____ DATE _____ PERIOD _____

Geomentry - Lesson 5

Circumference



The diameter of a circle is twice its radius.	$d = 2r$
The radius is half the diameter.	$r = \frac{d}{2}$
The circumference of a circle is equal to π times its diameter or π times twice its radius.	$C = \pi d$ $C = 2\pi r$

Example 1

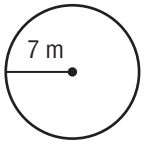
The radius of a circle is 7 meters. Find the diameter.

$d = 2r$

$d = 2 \cdot 7$ Replace *r* with 7.

$d = 14$ Multiply.

The diameter is 14 meters.



Example 2

Find the circumference of a circle with a radius that is 13 inches. Use 3.14 for π. Round to the nearest tenth.

$C = 2\pi r$ Write the formula.

$C \approx 2 \times 3.14 \times 13$ Replace *r* with 13 and π with 3.14.

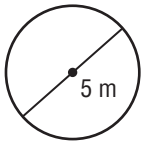
$C \approx 81.64$ Multiply.

Rounded to the nearest tenth, the circumference is about 81.6 inches.

Exercises

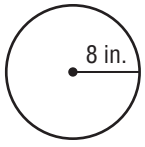
Find the circumference of each circle. Use 3.14 or $\frac{22}{7}$ for π. Round to the nearest tenth if necessary.

1.



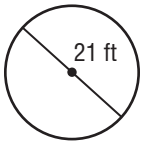
3.14 × 5 = 15.7 m

2.



3.14 × 16 = 50.2 in.

3.



$\frac{22}{7} \times 21 = 66$ ft

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NAME _____ DATE _____ PERIOD _____

Geomentry - Lesson 5

Circumference

Find the radius or diameter of each circle with the given dimensions.

1. $r = 13$ cm
26 cm

2. $d = 4$ ft
2 ft

3. $r = 10$ mm
20 mm

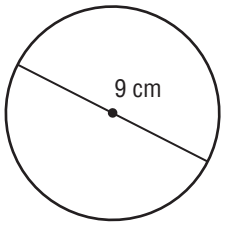
4. $d = 16$ in.
8 in.

5. $r = 7$ mi
14 mi

6. $d = 22$ yd
11 yd

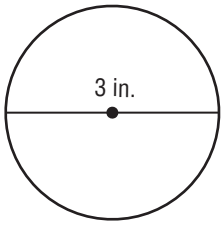
Find the circumference of each circle. Use 3.14 or $\frac{22}{7}$ for π. Round to the nearest tenth if necessary.

7.



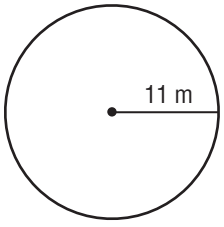
3.14 × 9 = 28.3 cm

8.



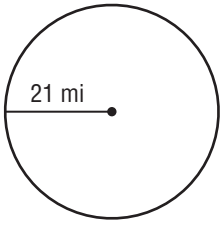
3.14 × 3 = 9.4 in.

9.



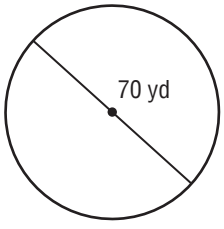
3.14 × 22 = 69.1 m

10.



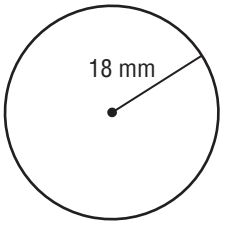
$\frac{22}{7}$ × 42 = 132 mi

11.



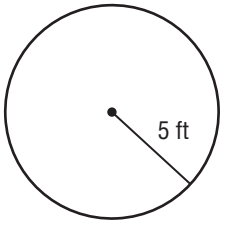
$\frac{22}{7}$ × 70 = 220 yd

12.



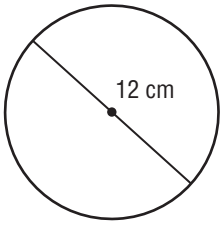
3.14 × 36 = 113.0 mm

13.



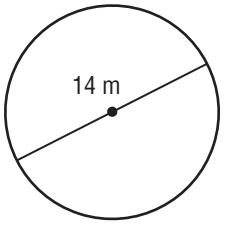
3.14 × 10 = 31.4 ft

14.



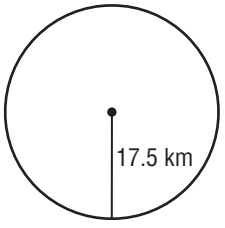
3.14 × 12 = 37.7 cm

15.



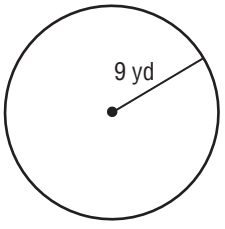
$\frac{22}{7}$ × 14 = 44 m

16.



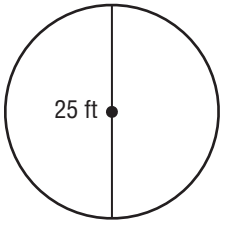
$\frac{22}{7}$ × 35 = 110 km

17.



3.14 × 18 = 56.5 yd

18.



3.14 × 25 = 78.5 ft

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