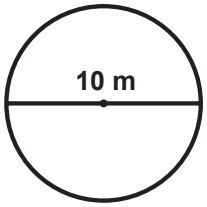
math Antics
Exercises

Name: _____

Date: _____

Circles: Circumference & Area

1 Estimate the circumference of this circle by using a rounded-off value of 3 for PI.



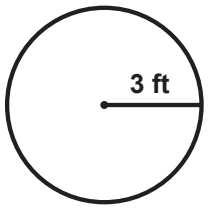
$C = \pi \times d$

$C = \pi \times 10\ m$

$C = 3 \times 10\ m$

$C = 30\ m$

2 Estimate the area of this circle by using a rounded-off value of 3 for PI.



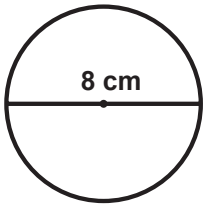
$A = \pi \times r^2$

$A = \pi \times (3ft \times 3ft)$

$A = 3 \times 9\ ft^2$

$A = 27\ ft^2$

3 Calculate the circumference of this circle using the more accurate value of PI = 3.14



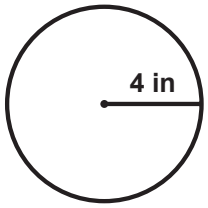
$C = \pi \times d$

$C = \pi \times 8\ cm$

$C = 3.14 \times 8\ cm$

$C = 25.12\ cm$

4 Calculate the area of this circle using the more accurate value of PI = 3.14



$A = \pi \times r^2$

$A = \pi \times (4 \times 4)$

$A = 3.14 \times 16\ in^2$

$A = 50.24\ in^2$

5 If the radius of a circle is 2.5 meters, what is its circumference?

$d = 2 \times r$

$d = 2 \times 2.5\ m$

$d = 5\ m$

$C = \pi \times d$

$C = \pi \times 5\ m$

$C = 3.14 \times 5\ m$

$C = 15.7\ m$

6 If the diameter of a circle is 22 inches, what is its area?

$r = d \div 2$

$r = 22 \div 2$

$r = 11\ in$

$A = \pi \times r^2$

$A = \pi \times (11 \times 11)$

$A = 3.14 \times 121\ in^2$

$A = 379.94\ in^2$

7 A circle has a radius of 1.2 meters. Find its circumference and area. (Round answers to the nearest tenth)

$d = 2.4\ m$

$C = \pi \times d$

$C = 3.14 \times 2.4 = 7.5\ m$

$A = \pi \times r^2$

$A = 3.14 \times (1.2 \times 1.2) = 4.5\ m^2$

8 A circle has a diameter of 15 feet. Find its circumference and area. (Round answers to the nearest tenth)

$r = 7.5\ ft$

$C = \pi \times d$

$C = 3.14 \times 15 = 47.1\ ft$

$A = \pi \times r^2$

$A = 3.14 \times (7.5 \times 7.5) = 176.6\ ft^2$

See Video for step-by-step solutions to each problem.