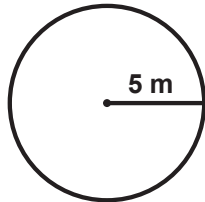


## Estimating Circumference and Area

G-CCA 1

**Instructions:** A good way to quickly estimate the circumference and area of a circle is to round PI off to the whole number '3' (instead of using 3.14). Use  $\pi = 3$  to estimate the circumference and area of each of the circles below.

1



$r = 5 \text{ m}$   
so  
 $d = 10 \text{ m}$

$$C = \pi \times d$$

$$C = 3 \times 10$$

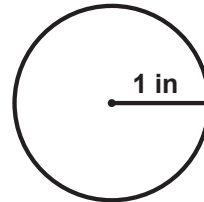
$$C = 30 \text{ m}$$

$$A = \pi \times r^2$$

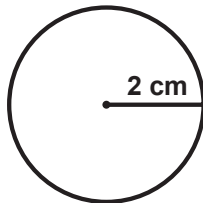
$$A = 3 \times (5 \times 5)$$

$$A = 75 \text{ m}^2$$

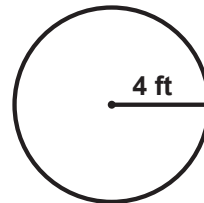
2



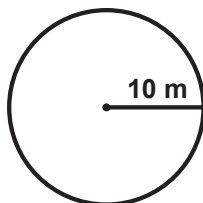
3



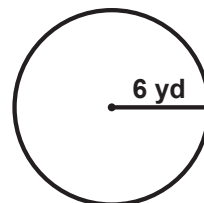
4



5



6

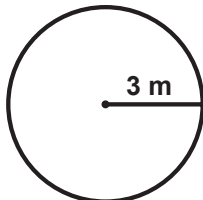


## Calculating Circumference

G-CCA 2

**Instructions:** Use the formula you learned in the video to calculate the circumference of each circle below. Use  $\pi = 3.14$  and round your answers to two decimal places. You can use a calculator.  
(Note: Sometimes the problem gives you the radius, but sometimes it gives you the diameter.)

1



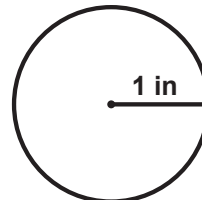
$$d = 3 \times 2 = 6 \text{ m}$$

$$C = \pi \times d$$

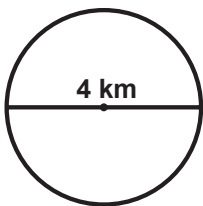
$$C = 3.14 \times 6 \text{ m}$$

$$C = 18.84 \text{ m}$$

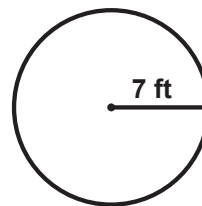
2



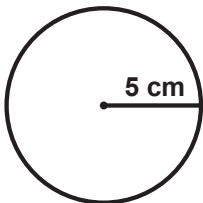
3



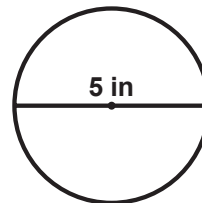
4



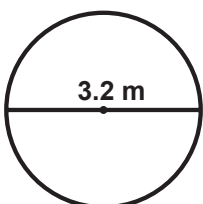
5



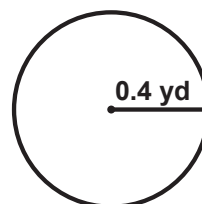
6



7



8

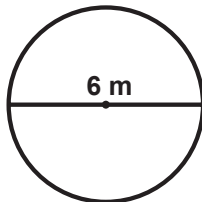


## Calculating Area

G-CCA 3

**Instructions:** Use the formula you learned in the video to calculate the area of each circle below. Use  $\pi = 3.14$  and round your answers to two decimal places. You can use a calculator.  
(Note: Sometimes the problem gives you the radius, but sometimes it gives you the diameter.)

1



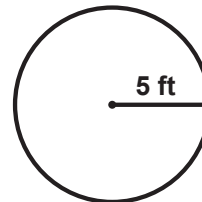
$$r = \frac{6}{2} = 3 \text{ m}$$

$$A = \pi \times r^2$$

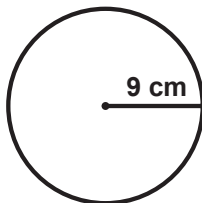
$$A = 3.14 \times (3 \times 3)$$

$$A = 28.26 \text{ m}^2$$

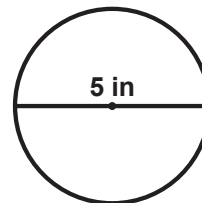
2



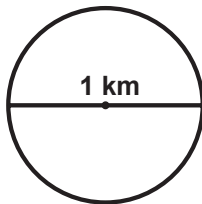
3



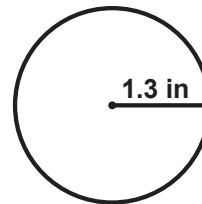
4



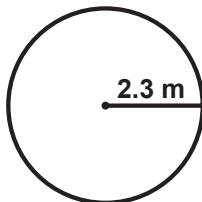
5



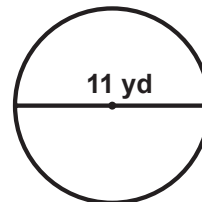
6



7



8



## Calculating Circumference and Area

G-CCA 4

**Instructions:** For the following problems, use  $\pi = 3.14$ . You may use a calculator. If necessary, round your answers to two decimal places.

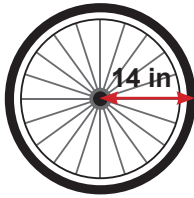
- 1 A circle has a radius of 1.5 meters.  
Find its circumference and area.
- 2 A circle has a diameter of 26 feet.  
Find its circumference and area.
- 3 A circle has a diameter of 40 miles.  
Find its circumference and area.
- 4 A circle has a radius of 3.5 centimeters.  
Find its circumference and area.
- 5 A circle has a diameter of 16 inches.  
Find its circumference and area.
- 6 A circle has a radius of 0.3 meters.  
Find its circumference and area.

## Circumference and Area - Word Problems

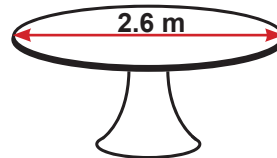
G-CCA 5

**Instructions:** For the following problems, use  $\pi = 3.14$ . You may use a calculator. If necessary, round your answers to two decimal places.

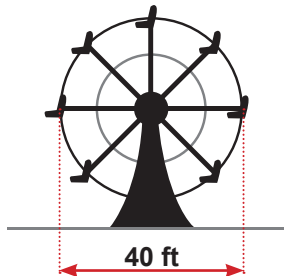
- 1 A bicycle tire has a radius of 14 inches. What is the circumference of the tire?



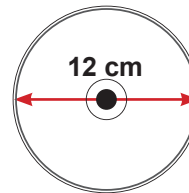
- 2 A round table top has a diameter of 2.6 meters. What is its surface area?



- 3 A Ferris-Wheel at an amusement park has a diameter of 40 feet. How far would you travel in one revolution? (In other words, find the circumference.)



- 4 A DVD disc has a diameter of 12 centimeters. What is the surface area of one side of the disc?



- 5 Which has the greatest surface area: two pizzas that have 14 inch diameters or one pizza that has a 20 inch diameter?

