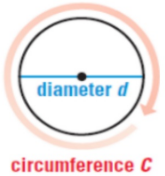
Circumference:

The circumference of a circle is the distance around the circle. For all circles, the ratio of the circumference to the diameter is the same. The ratio is known as π.

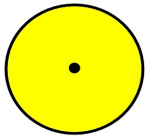


Circumference is calculated as follows:

$C = 2\pi r$ $C = \pi d$

Area of a Circle:

The area of a circle is the number of square units that covers the surface of the area.



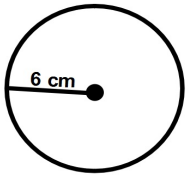
Area is calculated as follows:

$A = \pi r^2$

Examples:

$C = 2\pi r$
$C = \pi d$
$A = \pi r^2$

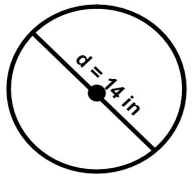
1.



a. Circumference =

b. Area =

2.



a. Circumference =

b. Area =

3. Find the circumference and area of a circle with a diameter of 10 feet.

a. Circumference =

b. Area =

4. Find the circumference and area of a circle with a radius of 12 meters.

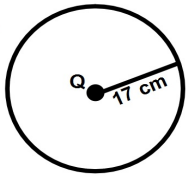
a. Circumference =

b. Area =

You Practice:

$C = 2\pi r$
$C = \pi d$
$A = \pi r^2$

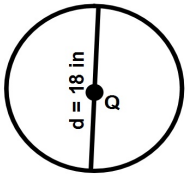
1.



a. Circumference =

b. Area =

2.



a. Circumference =

b. Area =

3. Find the circumference and area of a circle with a radius of 14 yards.

a. Circumference =

b. Area =

4. Find the circumference and area of a circle with a diameter of 16 feet.

a. Circumference =

b. Area =

Using Area and Circumference:

Use the given Area to find the requested information:

1. The Area is 104 in^2.
   What is the circle's radius?

2. The Area is 96 cm^2.
   What is the circle's diameter?

3. The Circumference is 31.4 m.
   What is the circle's Area?

4. The Area is 201 ft^2.
   What is the circle's circumference?