

Name: _____
7R

Date: _____
Classwork 11.2

Circumference

Aim: How can we find the circumference of a circle given the radius or diameter?

Circumference:

- **Circumference** is the distance around a circle; it is like perimeter.
- The formula for circumference of a circle is:

$$\begin{array}{ccc} & \nearrow & \nwarrow \\ & \mathbf{C = 2\pi r} & \\ \text{circumference} & & \text{radius} \end{array}$$

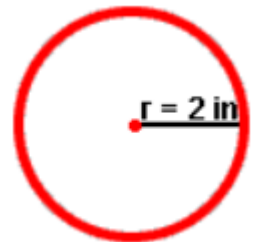
The question can say...

Round your answer	
Leave in terms of π	
Use 3.14 for π	

Example 1: "Using the Pi Button"

Find the circumference of the circle to the right. Round your answer to the nearest *tenths* place.

What do you know?	What do you need to find?
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Step 1: Write out the formula F

Step 2: Substitute S

Step 3: Do the math. M

Step 4: Round and label your answer U



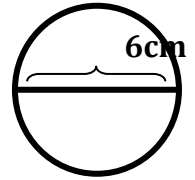
On your calculator:

2	x	π	x	2	=
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Try It!

Find the circumference of the circle to the right. Round your answer to the nearest hundredths place.

What do you know?	What do you need to find?
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Step 1: Write out the formula F

Step 2: Substitute S

Step 3: Do the math. M

Step 4: Round and label your answer U

Example 2: "Leaving in Terms of Pi"

Find the circumference of a circle whose radius is 10 yards. Leave your answer in terms of π .

F

S

M

U

Try It!

Find the circumference of a circle whose diameter is 8 inches. Leave your answer in terms of π .

Example 3: "Using 3.14 for Pi"

A round table has a diameter of 35 inches. Find the **circumference** of the table. Use 3.14 for π .

F

S

M

U

Try It!

A wheel has a diameter of 28 inches. What is the approximate distance around the outside of the wheel? Use 3.14 for π .

On your own: Answer the following questions. Show your work.

- 1) Mike purchases a round wall clock. The clock's radius is 10 inches. What is the circumference of the clock? **Round your answer to the nearest hundredths place.**

F

S

M

U

Circumference = _____

- 2) Lisa bought a cookie cake with a radius of 8 cm. What is the circumference of the cookie cake? **Leave your answer in terms of π .**

F

S

M

U

Circumference = _____

- 3) Megan bought round plates for her mom for Christmas. The diameter of the plates is 11 inches. What is the circumference of the clock? **Use 3.14 for π .**

F

S

M

U

Circumference = _____