Circumference

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

<u>**Circumference**</u>:

- **Circumference** is the distance around a circle; it is like perimeter.

- The formula for circumference of a circle is: $C = 2\pi r$

  circumference   *radius*

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 <u>tenths</u> place.

What do you know?	What do you need to find?
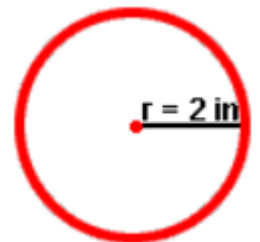
r = 2 in

Step 1: Write out the formula   F

Step 2: Substitute   S

Step 3: Do the math.   M

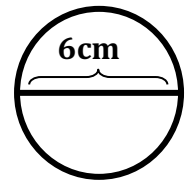**Step 4:** Round and label your answer   U

On your calculator: | **2** | **x** | **π** | **x** | **2** | **=** |

Try It!

Find the circumference of the circle to the right. Round your answer to the nearest <u>hundredths</u> place.

What do you know?	What do you need to find?

6cm

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 <u>hundredths</u> 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 = _____