

Math 7 - Unit 5

Day 8 - Circumference

Lesson Objectives:

- I know the formula for the circumference of a circle.
- I can solve for the circumferences of circles.

Circumference of Circles

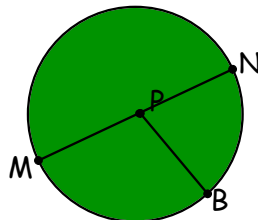
Story Time

Sir Cumference and the Round Table



A **circle** is the set of all points in a plane that are the same distance from a given point in the plane.

The given point is called the **center**. We name circles by their center.



The distance from the center to any point on the circle is called the **radius**.

The distance across the circle through its center is its **diameter**.

The **circumference** of a circle is the distance (perimeter) around the circle.

Move the radius and diameter to the circle.

#1a Find the diameter and circumference of each circular item in your group of 4.



#1b Find the ratio as a fraction and a decimal.



#1c Find the average (mean) of your ratios. Record your group's average on the SmartBoard. Then find the average (mean) for the class.



#1d Finish this side of the worksheet.



	Average		Average
Group #1	3.05	Group #8	2.87
Group #2	3.12	Group #9	3.25
Group #3	3.15	Group #10	3.20
Group #4	3.12	Group #11	3.11
Group #5	3.14	Group #12	3.13
Group #6	3.18	Group #13	2.89
Group #7	3.16	Group #14	

Class Average
3.11

Homework

Circumference WKS

* Individual Think Time *



What to do if you get stuck...

1. Reread the problem. Did you write it down correctly?
2. Reread your notes. Is there a problem similar that we did together in class?
3. Find a problem similar in your book. Try this one to see if it helps.
4. Skip the problem until the end of Individual Think Time. Then ask an "educated" question of a neighbor or Mrs. Call.

Today we're working by...



The ratio of the circumference of a circle to its diameter is the irrational number called π (pi). We often use 3.14 or $22/7$ as approximations.

If a circle has a radius of r units, then the formula to find the circumference is $C = 2\pi r$ units. You can also use the formula $C = \pi d$.

Find the circumference of each circle. Use the pi key on your calculator. Round each answer to the nearest hundredth.

