

Math 7H - Unit 5

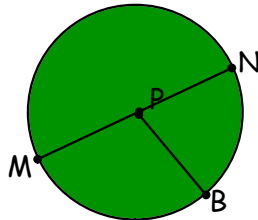
Day 7 - Circumference

Lesson Objectives:

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

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.

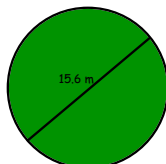
The circumference of a circle is the distance (perimeter) around the circle.

Move the radius and diameter to the circle.

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.



Circumference of Circles

Story Time

Sir Cumference and the Round Table



#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 groups average on the SmartBoard. Then find the average (mean) for the class.



#1d Finish this side of the worksheet.



| | Average | | Average |
|----------|---------|-----------|---------|
| Group #1 | 3.09 | Group #8 | 3.29 |
| Group #2 | 3.25 | Group #9 | 3.5 |
| Group #3 | 3.15 | Group #10 | 3.22 |
| Group #4 | 3.24 | Group #11 | |
| Group #5 | 3.28 | Group #12 | |
| Group #6 | 3.14 | Group #13 | |
| Group #7 | 3.27 | Group #14 | |

Class Average
3.2

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...

