Warm Up: Pre - Calc 1/13

Last winter I found myself locked out of my house because I couldn't remember the 5-digit code to open the garage door.

1. The second and third digits add up to 9.

2. The first digit is equal to the second digit cubed.

3. The sum of the third and fifth digits is the smallest number with exactly five divisors.

4. The fourth digit is equal to 6 times the second-to-last digit.

5. None of the digits repeat.

What was the code?

Feb 27-7:39 AM

W.A.L.T.: Day 1

Lay the foundation of understanding for understanding radian. (Another way of measuring rotation)

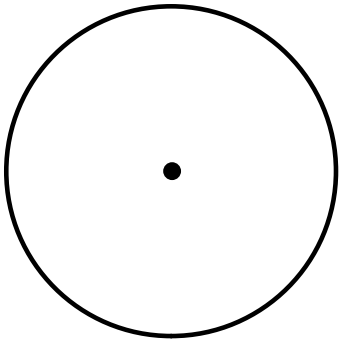
W.A.S.I:

We can understand the circumference of a circle and arc length....then we will use this understanding to help with radians.

Mar 7-9:45 AM

Notes!!! A circle

A *circle* is defined as all the points that are equidistant to a center point.



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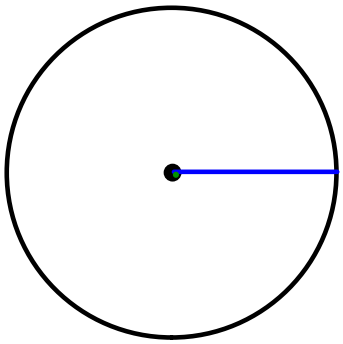
Notes!!! A circle

The distance between the center point is called the *radius*. There are an infinite number of radii in a circle...but they are all the same length.



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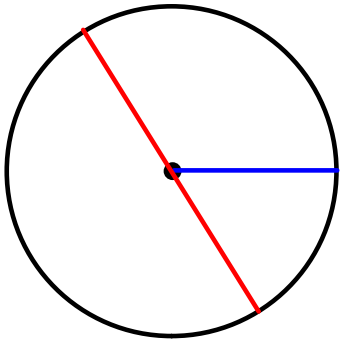
Notes!!! A circle

A line that passes through the center point is called the *diameter*. One diameter is the same as two radii.



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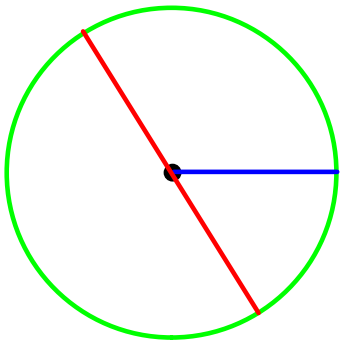
Notes!!! A circle

The circumference of a circle

$C = d\pi$

$C = 2\pi r$



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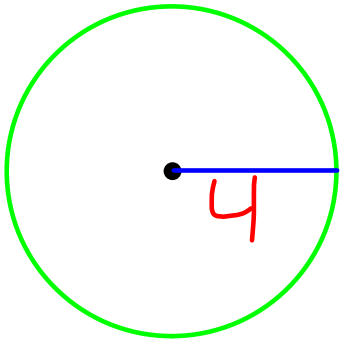
Notes!!! A circle

The circumference of a circle

$C = 2\pi r$

$C = 2\pi 4$

$C = 8\pi$



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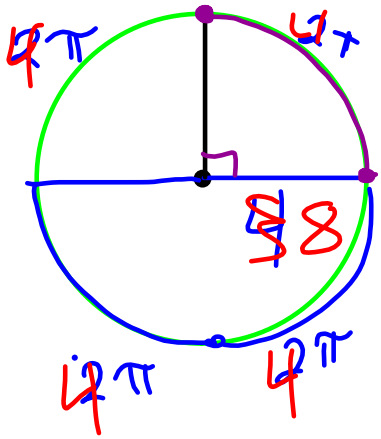
Notes!!! Arc Length

Sometimes we only want to know what part of the circumference is...we call this the *arc length*.

$\frac{90}{360} = \frac{1}{4} \cdot 8\pi$

$= 2\pi$



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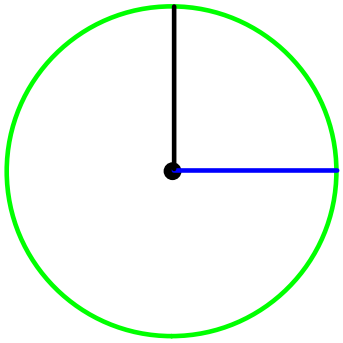
Notes!!! Arc Length

We need to know the proportion of the circumference we are using.



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Notes!!! Arc Length

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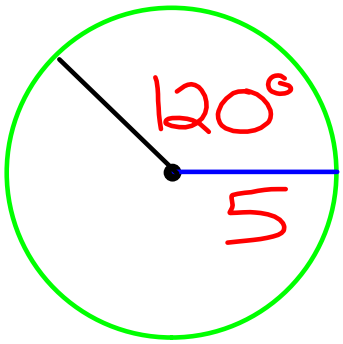

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Today's Activities:

- Notes Arc and Arc Length

P.W. for tonight:

- Worksheet - Understanding Circumference and Arc Length

Day 1

Feb 27-7:23 AM