

## **Math Virtual Learning**

# **Geometry/Honors Geometry**

May 7, 2020



### Geometry Lesson: May 7, 2020

### Objective/Learning Target: Find arc measures



### Bell Ringer: Find the measure of the indicated arc.





### Bell Ringer Answer: The measure of the arc is 105 degrees.

## Let's Get Started: Go through the following slides and try the example problems.



If two inscribed angles of a circle intercept the same arc, then the angles are congruent.



 $\angle D \cong \angle C$ 



A right triangle is inscribed in a circle iff the hypotenuse is a diameter of the circle.



 $\angle B$  is a right angle because it inscribes a semicircle.



A quadrilateral can be inscribed in a circle iff its opposite angles are supplementary.



 $m \angle D + m \angle F = 180^{\circ}$ 

 $m \angle E + m \angle G = 180^{\circ}$ 



Example Problem: Find the measure of angle C.

Answer:

 $m \angle C = \frac{80}{2} = 40^{\circ}$ 





Try the next practice problems on your own! Find the indicated measure.





#### Answer Key: Here you will find the answers to the previous four questions. Check your answers below.

- 1) Angle A = 40 degrees; Angle C = 32 degrees
- 2) Arc QP = 62 degrees
- 3) x = 108; y = 72



### **Additional Resources:**

#### Click on the link below to practice and to check your understanding!

### Arc Measures Extra Practice