

**MAY 19, 2017**

**UNIT 8: CIRCLE GEOMETRY**

**8.3: PROPERTIES OF  
ANGLES IN A  
CIRCLE**

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***MATH 9***



## **WHAT'S THE POINT OF TODAY'S LESSON?**

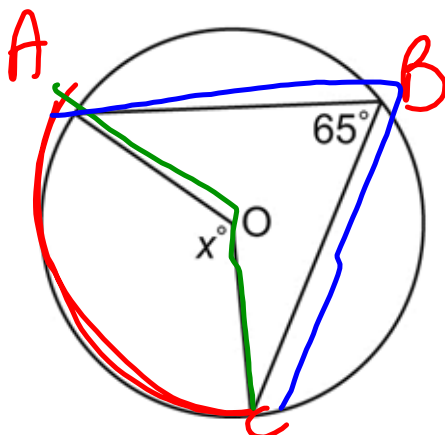
**We will continue working on the Math 9 Specific Curriculum Outcome (SCO) "Shape and Space 1" OR "SS1" which states:**

**"Solve problems and justify the solution strategy using circle properties, including:**

- \* the perpendicular from the centre of a circle to a chord bisects the chord;**
- \* the measure of the central angle is equal to twice the measure of the inscribed angle subtended by the same arc;**
- \* the inscribed angles subtended by the same arc are congruent;**
- \* a tangent to a circle is perpendicular to the radius at the point of tangency."**

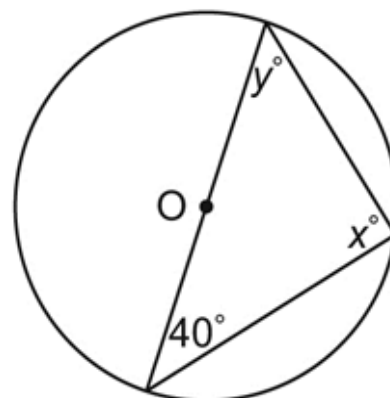
**WARM-UP: O is the centre of each circle.  
Determine the values of  $x^\circ$  and  $y^\circ$ . Justify your answers.**

a)



$x^\circ = 130^\circ$  (CIAP)

b)



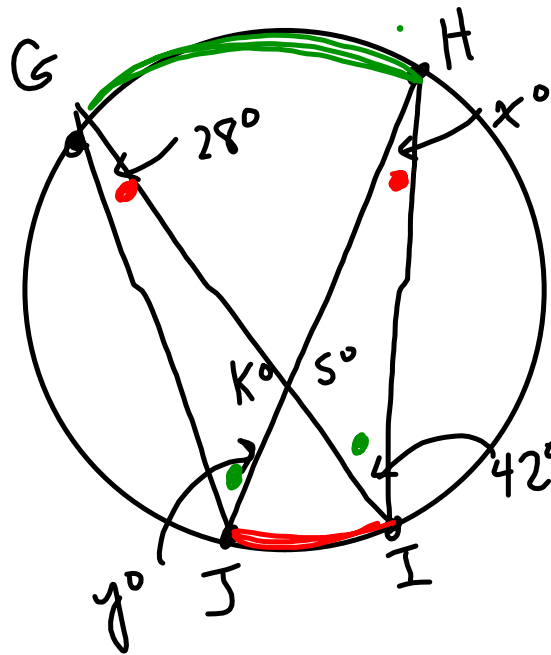
$x^\circ = 90^\circ$  (ASP)

$y^\circ = 50^\circ$  (SATT)

# HOMWORK QUESTIONS???

("8.3 Exercise - #9 and #10)

10. d)



def

$$\angle x^\circ = 28^\circ \text{ (IAP)}$$

$$\angle y = 42^\circ \text{ (IAP)}$$

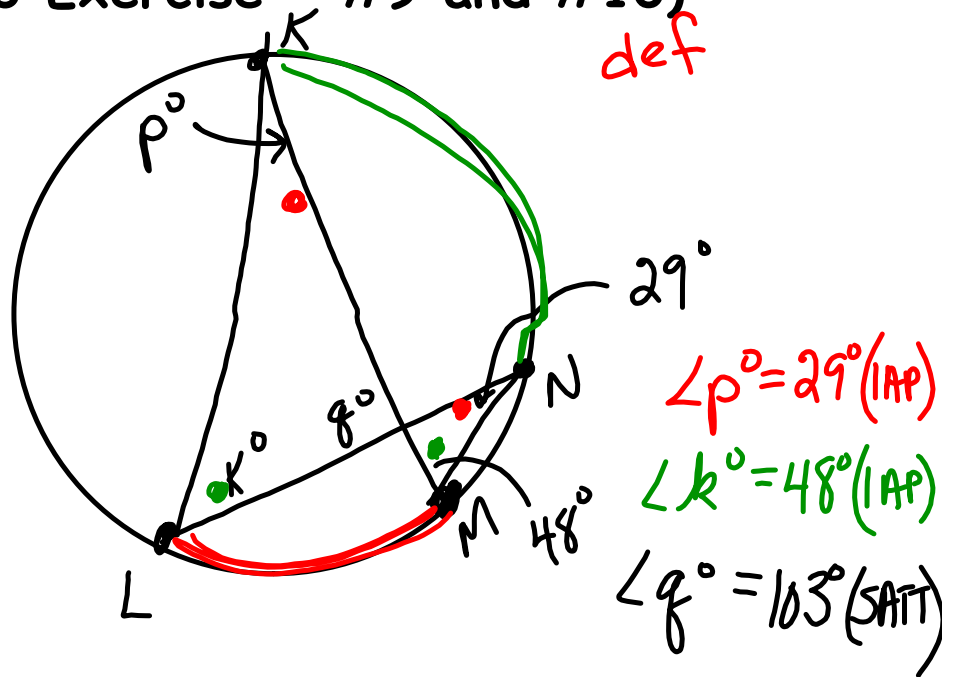
$$\angle s^\circ = 110^\circ \text{ (SATT)}$$

$$\angle k^\circ = 110^\circ \text{ (OAT)}$$

# HOMWORK QUESTIONS???

("8.3 Exercise - #9 and #10)

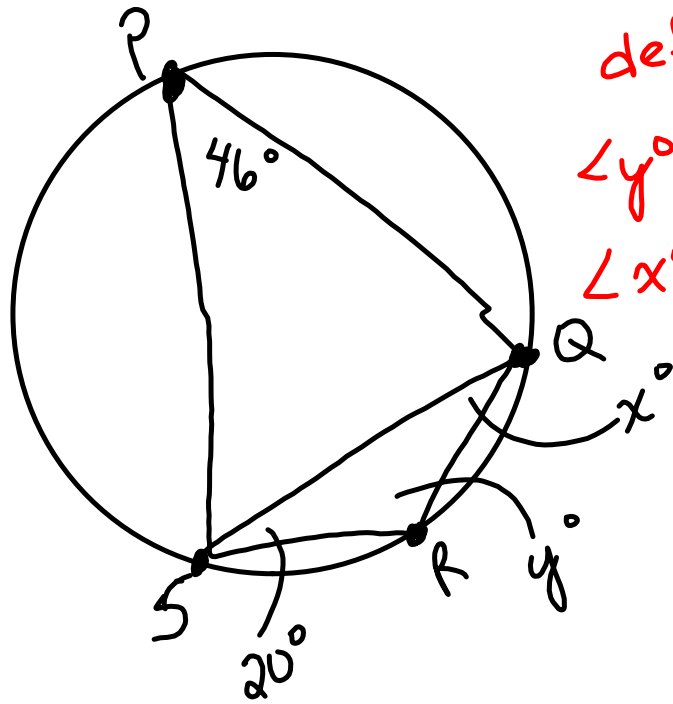
10. e)



# HOMWORK QUESTIONS???

("8.3 Exercise - #9 and #10)

10. f)



def  
 $\angle y^\circ = 134^\circ$  (CQP)  
 $\angle x^\circ = 26^\circ$  (SRT)

**CONCEPT REINFORCEMENT:**

**WORKSHEET:**

**"Circle Worksheet #1"**

## Attachments

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Worksheet - Angles in a Circle.doc