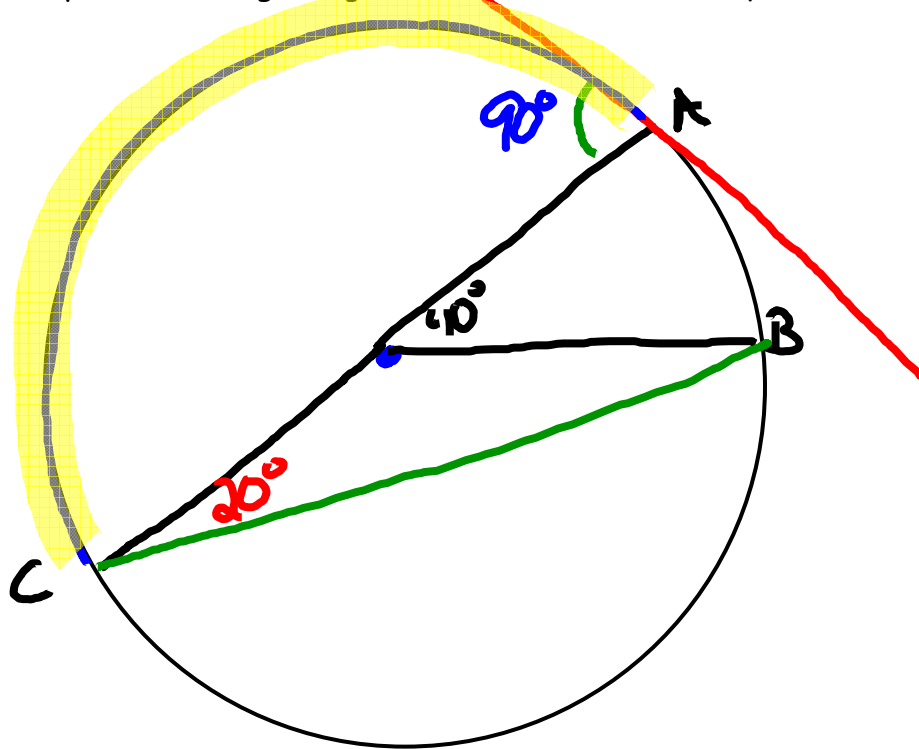


Lesson 9-5: Inscribed Angles

Follow the steps below using the given circle to answer the questions.



Step 1: Find the center of the circle and label it O

Step 2: Create a central angle that measures 40° and label the points on the circle A and B

Step 3: Draw a chord from A to the other side of the circle and label that point C

Step 4: Draw a chord from B to C

Step 5: Measure angle ACB

The angle you made at C is called an inscribed angle. What can you deduce about the measure of an inscribed angle compared to its intercepted arc measure?

$\frac{1}{2}$ measure of arc

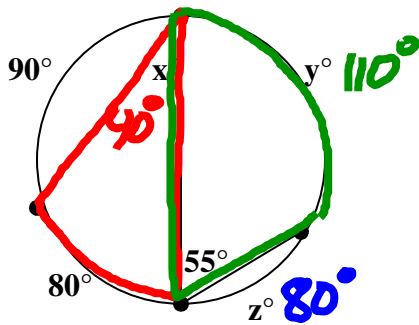
Step 6: Draw a tangent to point A

Step 7: Measure the angle you just made

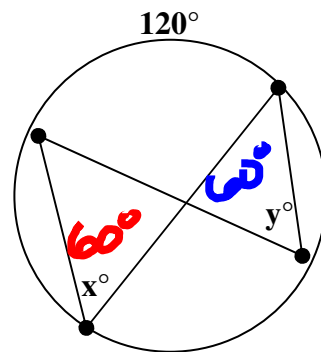
What can you deduce about the measure of an angle made by a chord and a tangent when compared to its intercepted arc?

$\frac{1}{2}$ measure of arc

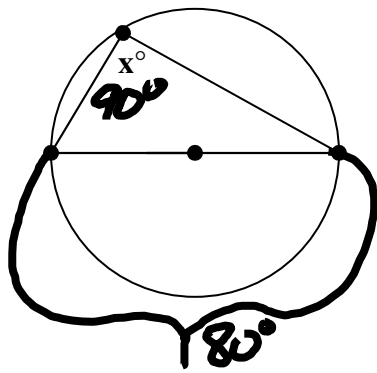
Ex. 1:



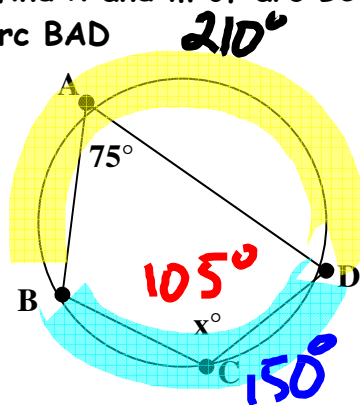
Ex 2:



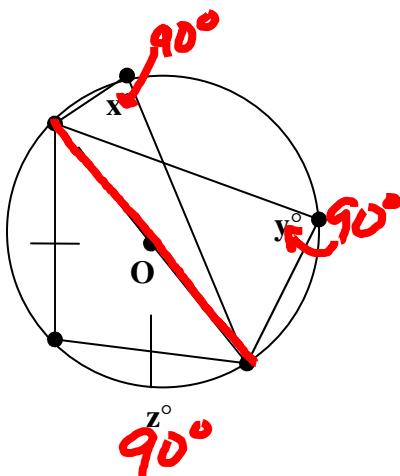
Ex 3:



Ex 4: find x and m of arc BCD and m of arc BAD



Ex 5:



Ex 6: Find $m\angle PRT$, $m\angle PRQ$, and $m\angle QRS$

