**Part 1: Exploring Inscribe Angles**

1. Draw central angle and measure it with a protractor.   
     
   What is the measure of the intercepted arc ?
2. Now draw 4 inscribed angles with vertices on the ***major arc*** , and endpoints at *A* and *B*    
     
   Measure these inscribed angles with a protractor.  
     
   What are the measurements of   
   these inscribed angles?  
     
     
     
     
   **Inscribed Angle Theorem:  
   The measure of an inscribed angle  
   is \_\_\_\_\_\_\_\_\_\_ the measure of   
   the intercepted arc.**
3. Draw diameter on circle *P*.
4. Inscribe two angles with endpoints at   
   *A*  and *B*.
5. Measure these angles with a protractor.  
   What is their measure?
6. Inscribe a quadrilateral in circle *Q.* (All endpoints should be on the circle.)
7. Measure all four angles with a protractor  
     
   What do you notice about the opposite   
   angles in the quadrilateral?

**Inscribed Angle Corollaries:**

1. Two inscribed angles that intercept the same arc are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. An angle inscribed in a semicircle is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
     
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3. The opposite angles of a quadrilateral inscribed in a circle are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part 2: Chord-Tangent Angles**

1. Use your protractor to draw a tangent line through point *C*.
2. Measure the acute angle   
   between the tangent line and .
3. Measure .
4. What is the measure of arc ?
5. How does the angle measure compare  
    to the arc measure?  
     
     
    **Theorem: The measure of an angle formed by a tangent and a chord is \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the measure of the intercepted arc.**