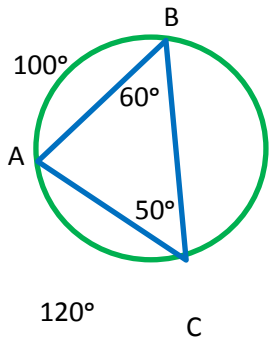


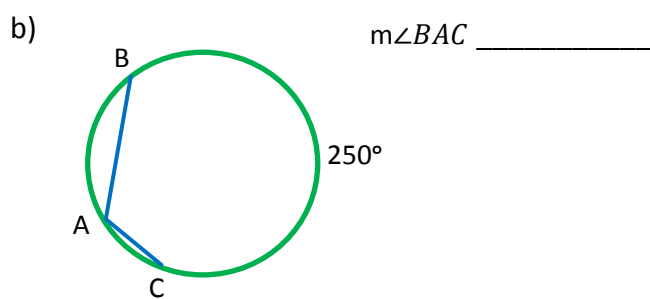
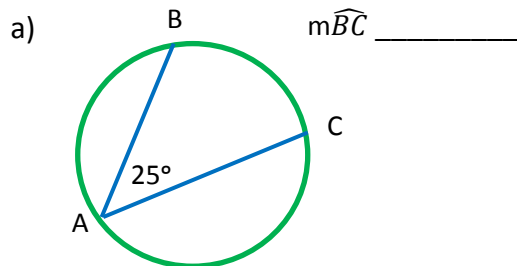
1. Given the triangle inscribed in the circle below and your previous knowledge of the sum of the angles in a triangle and the degrees in a circle, find:



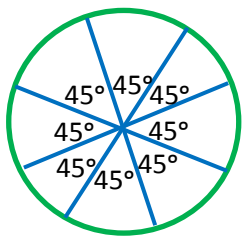
- a) $m\angle BAC$ _____
 b) $m\widehat{BC}$ _____
 c) What is the relationship between the two measurements in parts **a** and **b**?

 d) What is the relationship between $m\widehat{AB}$ and $m\angle BCA$?

2. Using your observations from above answer the following questions:



3. The angles labeled as 45° below are called central angles because they all have their vertex located at the center of the circle. Using those central angles, find the measure of each arc around the circle.



4. Using what you think is true about the relationship between central angles and arcs from #3, find $m\widehat{AB}$ in the diagram below. Assume that the vertex of the angle is at the center of the circle.

