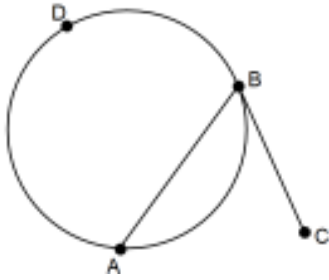


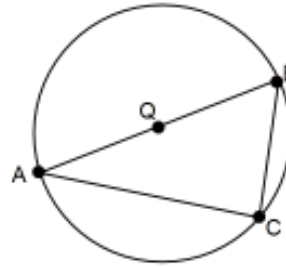
Round decimal answers to the nearest hundredth unless noted otherwise. Figures are not drawn to scale.

1. In the circle below $m\widehat{ADB} = 230^\circ$ and \overline{BC} is tangent. Find the measure of $\angle ABC$.



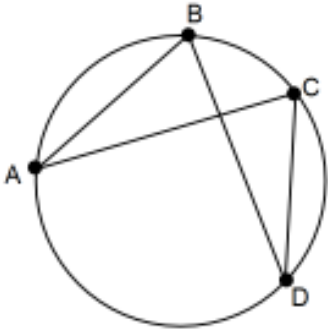
$$m\angle ABC =$$

2. \overline{AB} is a diameter in $\odot Q$ and $m\angle BAC = 32^\circ$. Find the measure of $\angle ABC$.



$$m\angle ABC =$$

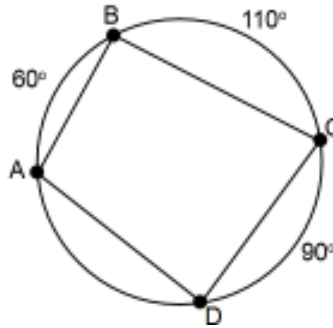
3. In the circle below $\overline{AB} \cong \overline{CD}$, $m\angle CDB = 22^\circ$, and $m\widehat{AB} = 95^\circ$. Find $m\angle A$ and $m\widehat{AD}$.



$$m\angle A =$$

$$m\widehat{AD} =$$

4. Quadrilateral ABCD is inscribed in the circle. Find the measures of all four angles.



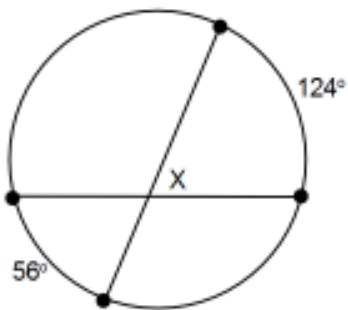
$$m\angle A =$$

$$m\angle B =$$

$$m\angle C =$$

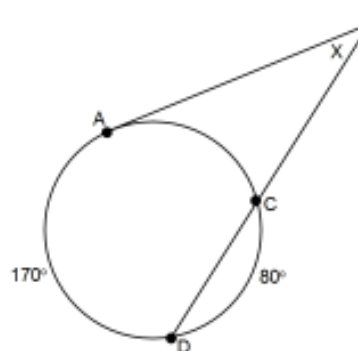
$$m\angle D =$$

5. Find the value of x .



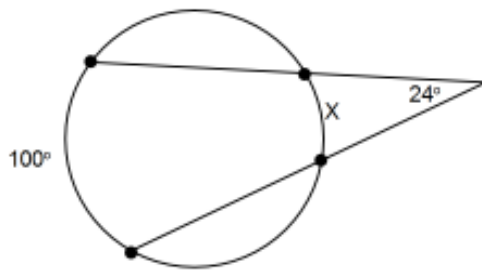
$$x =$$

6. \overline{AB} is tangent to the circle. Find the value of x .



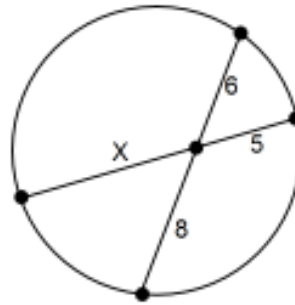
$$x =$$

7. Find the value of x .



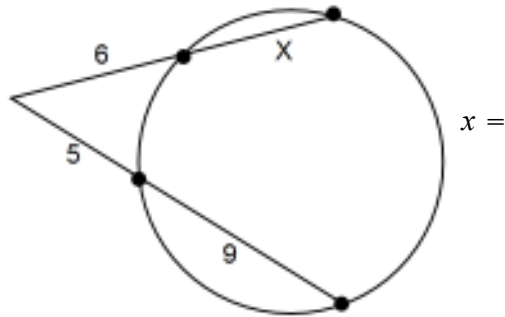
$x =$

8. Find the value of x .



$x =$

9. Find the value of x .



$x =$

10. Given the equation of the circle below state the length of the radius and the coordinates of the center.

$$(x - 9)^2 + (y + 2)^2 = 196$$

Center:

Radius =

11. Given the center of a circle $(-8, 1)$ and the point $(3, 4)$ is on the circle write the equation of this circle.

EQ: