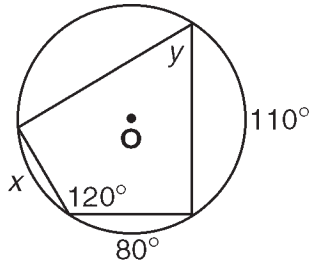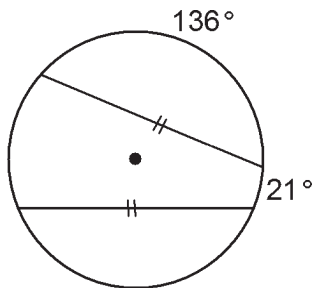Name: _____

CC Geometry Homework

More Work with Inscribed Angles
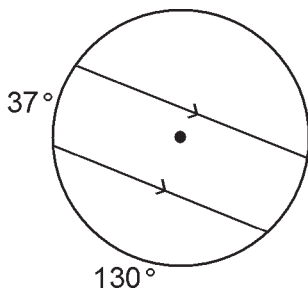
1) For the given circle, find the value of x and y.
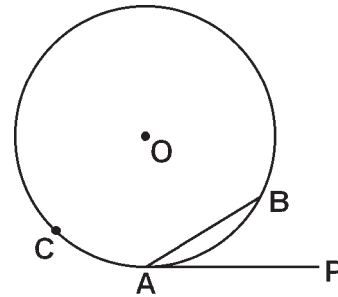   [*Show all work.*]

2) For the diagram below, solve for every unknown
    arc measure. [*Add these values to the diagram.*]
    [*Show all work.*]

3) For the diagram below, solve for every unknown
    arc measure. [*Add these values to the diagram.*]
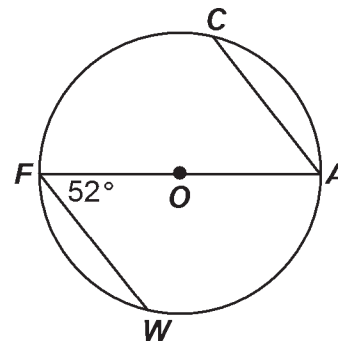   [*Show all work.*]

4) In the diagram below, $\overline{PA}$ is tangent to circle O, and
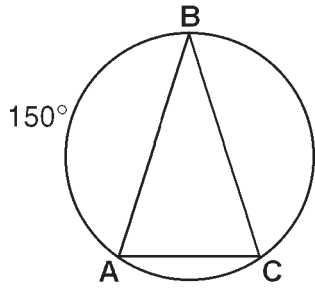 $\overline{AB}$ is a chord.

    If $m\overset{\frown}{ACB} = 300°$, find the measure of $\angle BAP$.

5) In the accompanying diagram of circle O,
    chords $\overline{AC}$ and $\overline{WF}$ are drawn, $\overline{AOF}$ is a diameter,
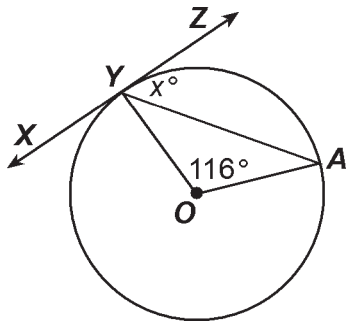 $\overline{AC} \parallel \overline{WF}$, and $\angle AFW = 52°$.

    What is $m\overset{\frown}{AC}$?

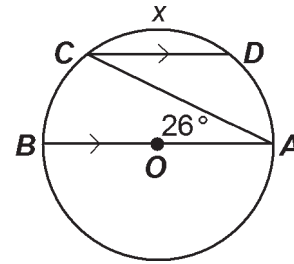6) In the accompanying diagram, isosceles △ABC is inscribed in the circle.

If $\overline{AB} \cong \overline{CB}$ and $m\overset{\frown}{AB} = 150°$, find m∠B. [*Show all work.*]

7) In the diagram below, $\overline{XZ}$ is tangent to circle O at point Y.
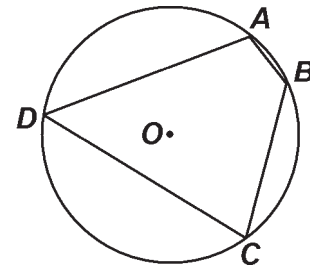
What is the measure of ∠x? [*Show all work and explain your reasoning.*]

8) For the given circle, find the value of x. [*Show all work.*]

9) Quadrilateral ABCD is inscribed in circle O.

If m∠A = 107° and m∠B = 126°, what are the measures of arcs $\overset{\frown}{BAD}$ and $\overset{\frown}{ABC}$?