$\qquad$

| Inscribed Angles $m \angle A B C=\frac{1}{2} m \widehat{A C}$ | - An inscribed angle is an angle with its vertex $\qquad$ on the circle with two sides that are $\qquad$ chords . <br> - An intercepted arc is the arc that lies between the $\qquad$ endpoints of an inscribed angle. <br> - The degree of the inscribed angle is equal to $\qquad$ half the measure of its infercepted arc. |
| :---: | :---: |
| Intercepting a Diameter | If an inscribed angle intercepts a diameter, then then it is a right angle. $m \angle B A C=90^{\circ}$ |
| Overlapping ArcS | If two inscribed angles intercept the same arc, then the angles are $\qquad$ congruent $m \angle A B D=m \angle A C D$ |

Directions: Find the measures of the angles and arcs below.

7. Solve for x .

8. Solve for x .

9. Solve for x .

10. If $m \angle A B D=(6 x+26)^{\circ}$ and $m \angle A C D=(13 x-9)^{\circ}$, find $m \overparen{A D}$.


