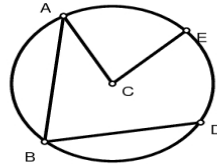


12-3 Study Guide – Inscribed Angles

- ❖ An angle is inscribed if its vertex is on the circle and its sides contain chords of the circle.

\angle _____ is an inscribed angle.

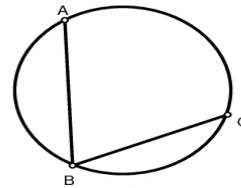


- ❖ If an angle is inscribed in a circle, then the measure of the angle equals one-half the measure of its intercepted arc.

$\angle ABC$ intercepts _____

If $m\widehat{AC} = 100^\circ$ then $m\angle ABC =$ _____.

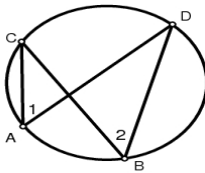
If $m\angle ABC = 70^\circ$, then $m\widehat{AC} =$ _____



- ❖ If two inscribed angles of a circle or congruent circles intercept congruent arcs or the same arc, then the angles are congruent.

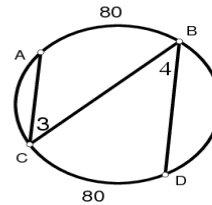
$\angle 1$ intercepts _____

$\angle 2$ intercepts _____ so _____

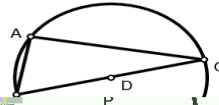


$\angle 3$ intercepts _____; $\angle 4$ intercepts _____

Since $m\widehat{AB} = m\widehat{CD}$, _____



- ❖ If an inscribed angle of a circle intercepts a semicircle, then the angle is a right angle.



	$-\$		$=$	
$\frac{60}{360} \pi 6^2$	$-$	$\frac{6^2 \sqrt{3}}{4}$	$=$	$6\pi - 9\sqrt{3} \text{ units}^2$