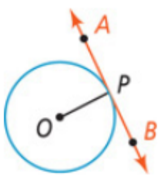
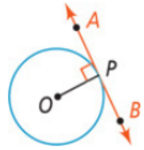
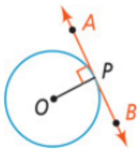
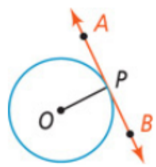
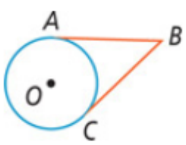
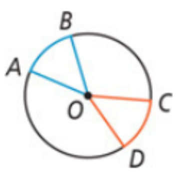
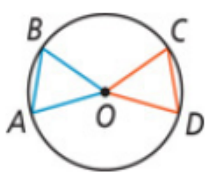
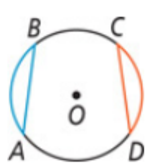
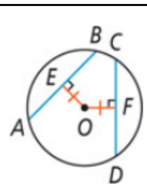
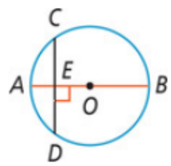
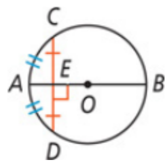
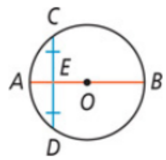
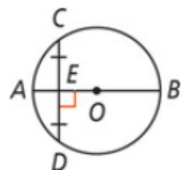
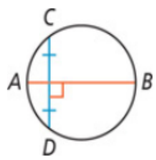
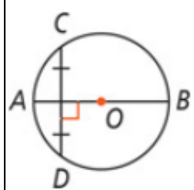
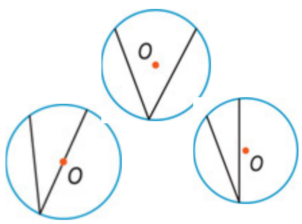
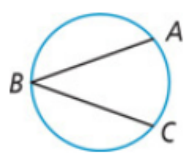
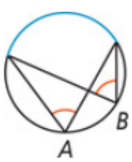
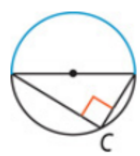
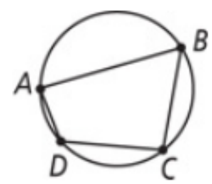
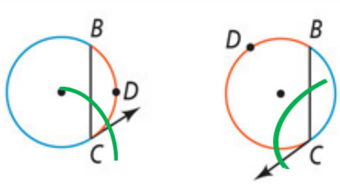
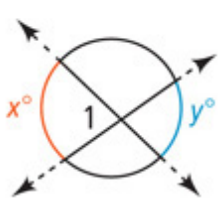
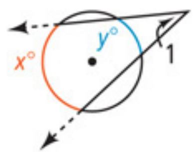
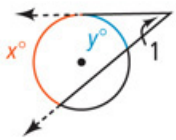
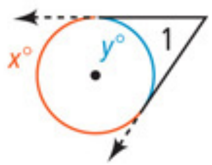
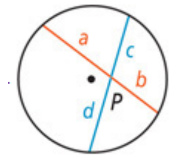
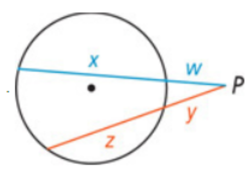
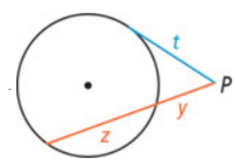
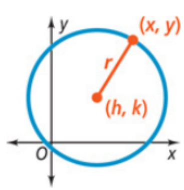
Circles' Chords, Angles, Arcs, Secants, and Segments.			
	If	then	Notes
12-1	$\overleftrightarrow{AB}$ is tangent to $\odot O$ at P 	$\overleftrightarrow{AB} \perp \overline{OP}$ 	
12-2	$\overleftrightarrow{AB} \perp \overline{OP}$ 	$\overleftrightarrow{AB}$ is tangent to $\odot O$ at P 	
12-3	$\overline{BA}$ and $\overline{BC}$ are tangent to $\odot O$ 	$\overline{BA} \cong \overline{BC}$	
12-4	$\angle AOB \cong \angle COD$,	$\overset{\frown}{AB} \cong \overset{\frown}{CD}$.	
12-5	$\angle AOB \cong \angle COD$,	$\overline{AB} \cong \overline{CD}$.	
12-6	$\overline{AB} \cong \overline{CD}$,	$\overset{\frown}{AB} \cong \overset{\frown}{CD}$.	
12-7	$OE = OF$,	$\overline{AB} \cong \overline{CD}$.	

12-8	$\overline{AB}$ is a diameter and $\overline{AB} \perp \overline{CD}$ 	$\overline{CE} \cong \overline{ED}$ and $\overset{\frown}{CA} \cong \overset{\frown}{AD}$ 	
12-9	$\overline{AB}$ is a diameter and $\overline{CE} \cong \overline{ED}$ 	$\overline{AB} \perp \overline{CD}$ 	
12-10	$\overline{AB}$ is the perpendicular bisector of chord $\overline{CD}$ 	$\overline{AB}$ contains the center of $\odot O$ 	
12-11		$m\angle B = \frac{1}{2} m\overset{\frown}{AC}$ 	
	Corollary 1	Corollary 2	Corollary 3
	 Two inscribed angles that intercept the same arc are congruent.	 An angle inscribed in a semicircle is a right angle.	 The opposite angles of a quadrilateral inscribed in a circle are supplementary.
12-12		$m\angle C = \frac{1}{2} m\overset{\frown}{BDC}$	
12-13		$m\angle 1 = \frac{1}{2}(x+y)$	

			
12-14		$m\angle 1 = \frac{1}{2}(x - y)$	
			
		$a \cdot b = c \cdot d$	
12-15		$(w+x)w = (y+z)y$	
		$(y+z)y = t^2$	
12-16	 center (h, k) and radius r	$(x-h)^2 + (y-k)^2 = r^2.$	