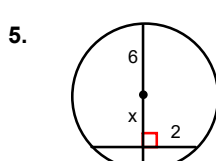
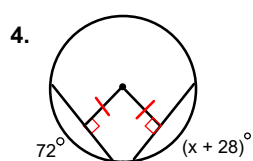
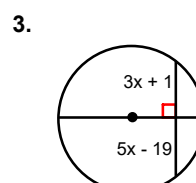
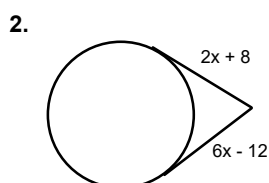
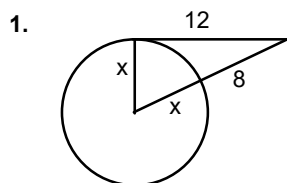
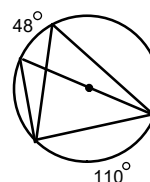


Bellwork



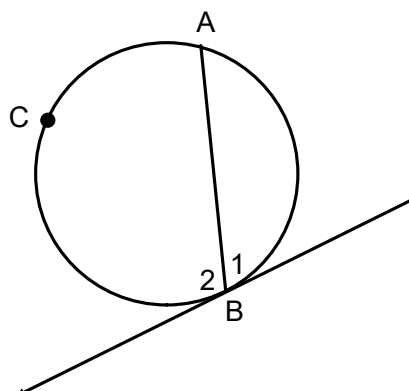
6. Find all missing angles and arcs.



* If a tangent and a chord intersect at a point on a circle, then the measure of each angle formed is one half the measure of its intercepted arc.

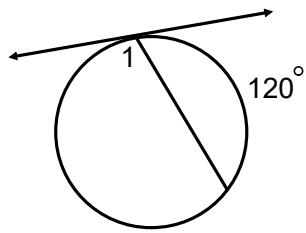
$$m\angle 1 = \frac{1}{2} m\widehat{AB}$$

$$m\angle 2 = \frac{1}{2} m\widehat{ACB}$$

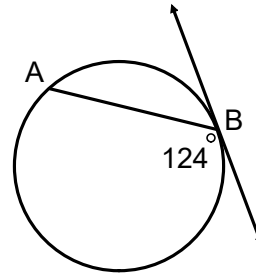


Ch 11 Day 5 angles

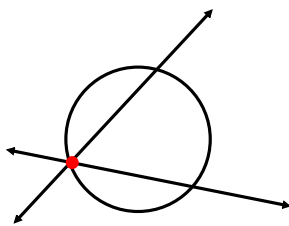
Find $m\angle 1$.



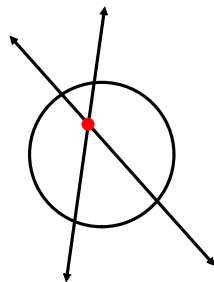
Find $m\widehat{AB}$



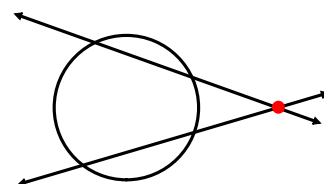
If two lines intersect a circle, there are three places where the lines can intersect.



on the circle



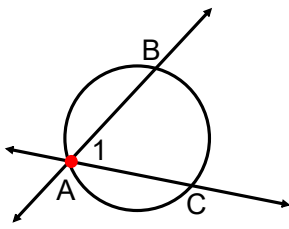
inside the circle



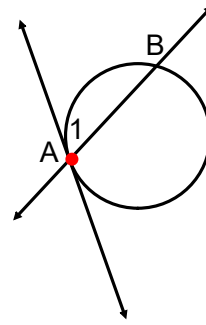
outside the circle

Ch 11 Day 5 angles

*If two lines intersect **on** the circle, then the measure of the angle formed is half its intercepted arc.

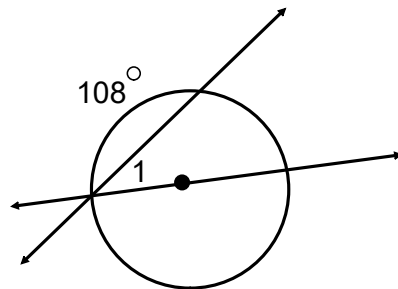


$$m\angle 1 = \frac{1}{2} m\widehat{BC}$$



$$m\angle 1 = \frac{1}{2} m\widehat{AB}$$

Find $m\angle 1$

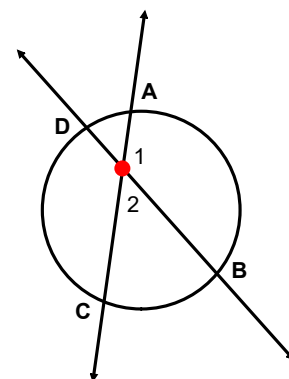


Ch 11 Day 5 angles

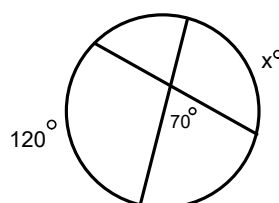
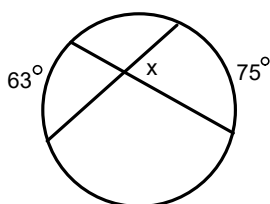
* If two chords intersect *inside* a circle, then the measure of each angle is one half the *sum* of the measures of the arcs, intercepted by the angle and its vertical angle.

$$m \angle 1 = \frac{1}{2} (m\widehat{AB} + m\widehat{CD})$$

$$m \angle 2 = \frac{1}{2} (m\widehat{BD} + m\widehat{CB})$$

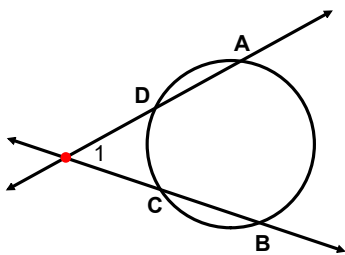


Find the value of x.

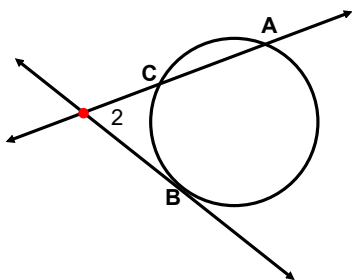


Ch 11 Day 5 angles

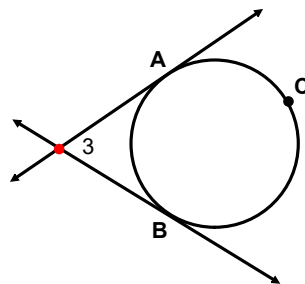
* If two lines intersect **outside** a circle, then the measure of the angle formed is one half the **difference** of the measures of the intercepted arcs.



$$m\angle 1 = \frac{1}{2}(m\widehat{AB} - m\widehat{CD})$$



$$m\angle 2 = \frac{1}{2}(m\widehat{AB} - m\widehat{BC})$$



$$m\angle 3 = \frac{1}{2}(m\widehat{ACB} - m\widehat{AB})$$

Find the value of x.

