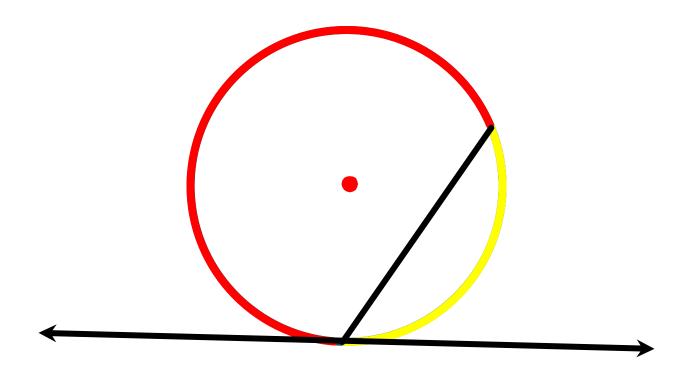
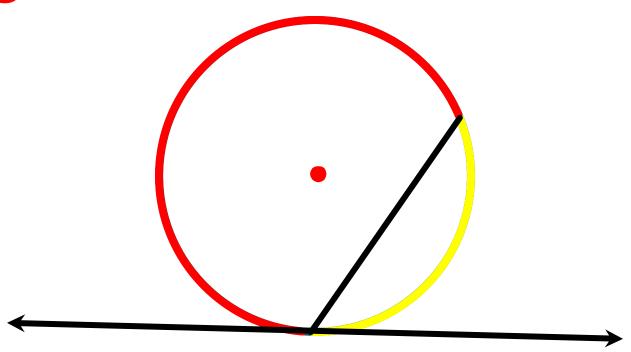
# 12.5

# Angles of Chords, Secants, and Tangents

## Tangent/Chord Theorem



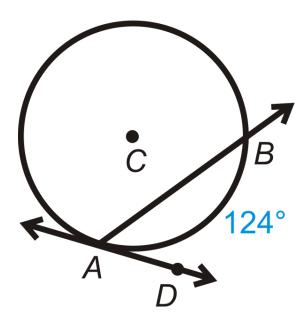
#### Tangent/Chord Theorem



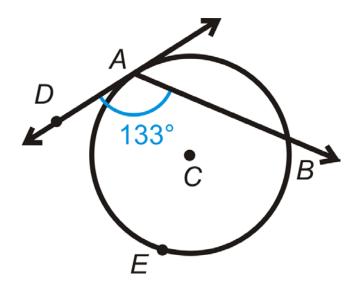
#### **Tangent/Chord Theorem**

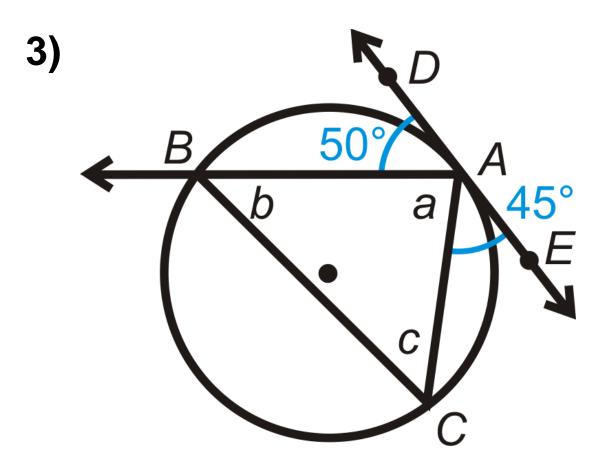
If a tangent and chord \_\_\_\_\_ at a point on a circle, then the measure of each angle formed is \_\_\_\_\_ the measure of the arc.

**1)** Find  $m \angle BAD$ 

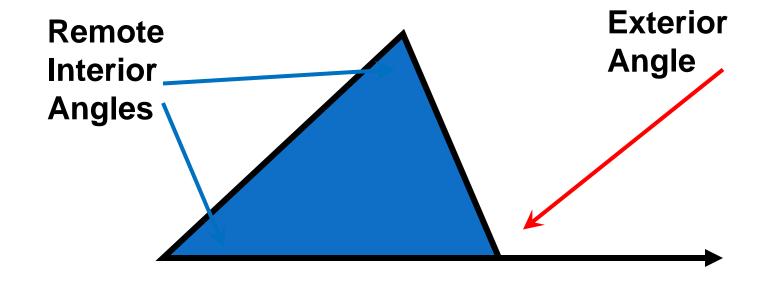


**2)** Find  $\widehat{mAEB}$ 





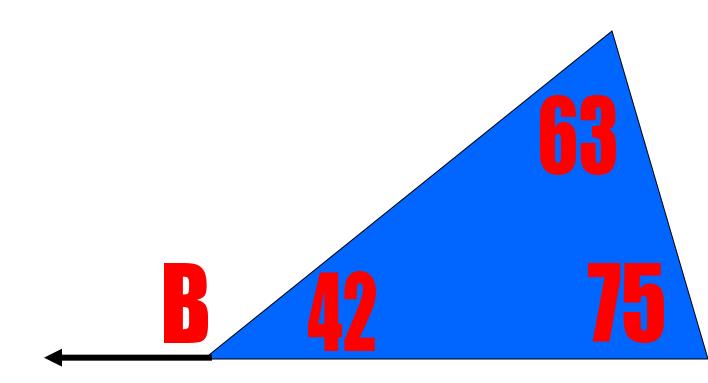
# **Exterior Angle**



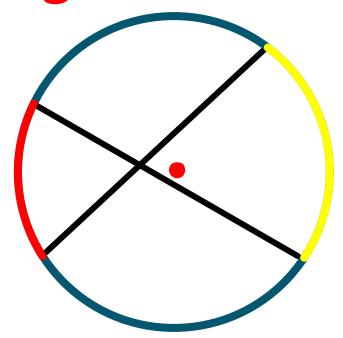
If you extend one side of a triangle from the vertex, you form an exterior angle.

# $m\angle A=?$

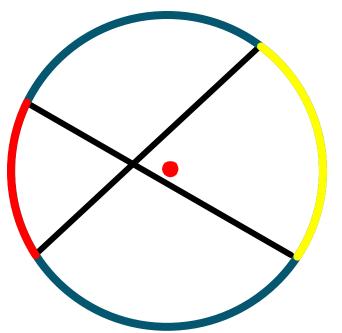
# $m\angle B=?$



# Angle/Chord Theorem

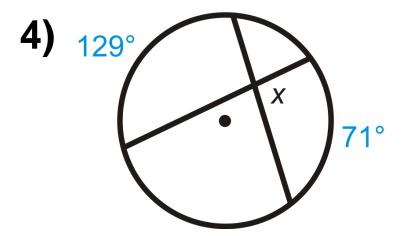


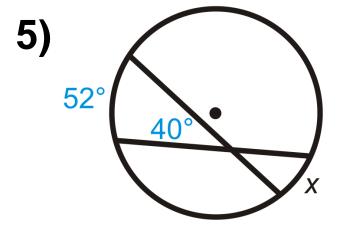
## Angle/Chord Theorem

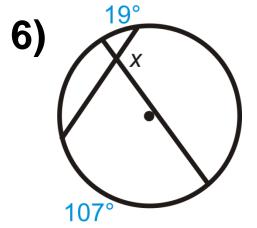


#### **Angle/Chord Theorem**

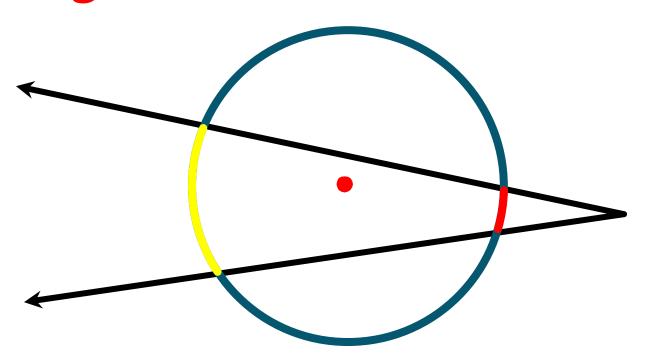
If two chords intersect \_\_\_\_\_ a circle, then the measure of each angle is \_\_\_\_\_ the sum of the intercepted arcs.



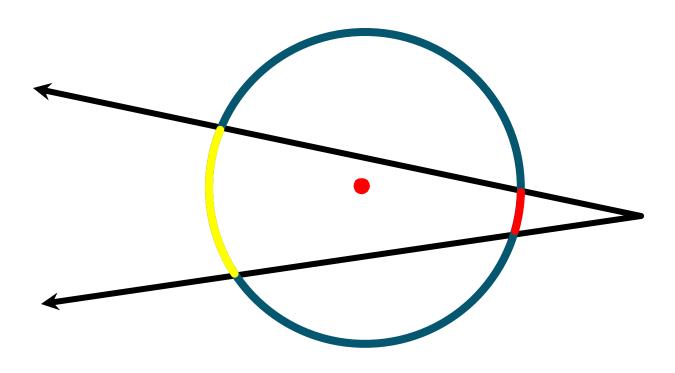




## Angle/Secant Theorem



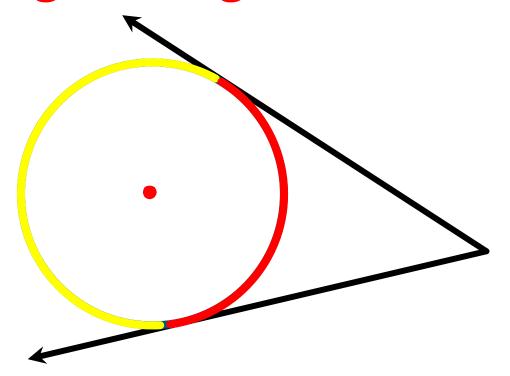
#### Angle/Secant Theorem



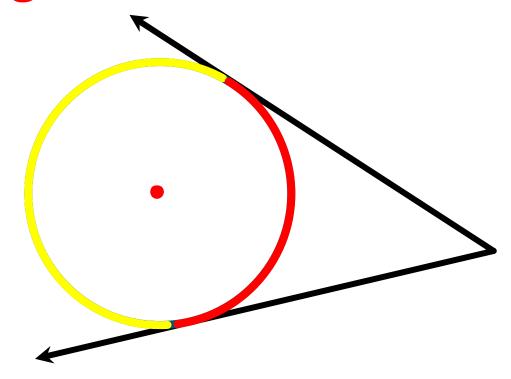
#### **Angle/Secant Theorem**

If secants intersect outside a circle, then the measure of the angle formed outside the circle is \_\_\_\_\_ the \_\_\_\_ of the intercepted arcs

## Angle/Tangents Theorem



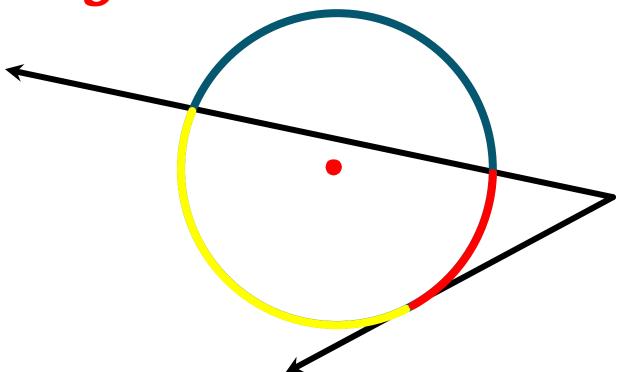
#### Angle/Tangents Theorem



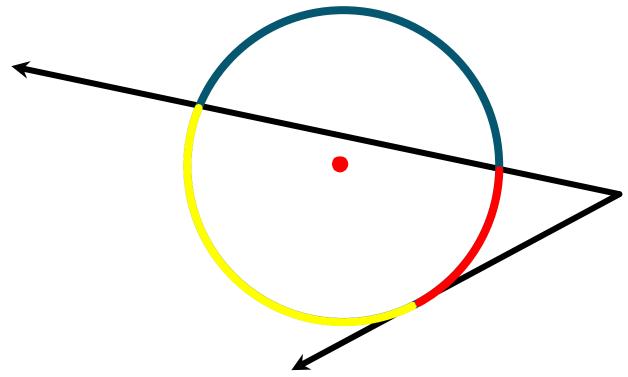
#### **Angle/Tangents Theorem**

If tangents intersect outside a circle, then the measure of the angle formed outside the circle is \_\_\_\_ the difference of the intercepted arcs

## Tangent/Secant Theorem



#### Tangent/Secant Theorem



#### **Tangent/Secant Theorem**

If tangents or secants intersect outside a circle, then the measure of the angle formed outside the circle is \_\_\_\_\_ the difference of the intercepted arcs

