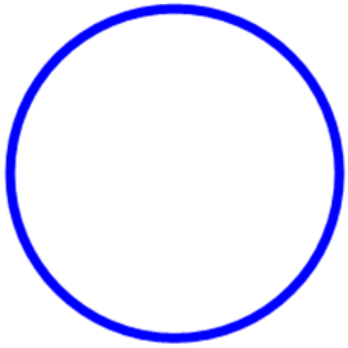
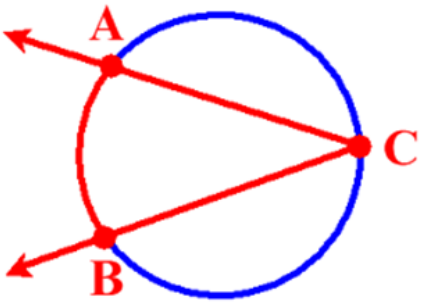
Def. Inscribed ∠

An ∠ is inscribed if its vertex is on the circle and its sides contain chords of the circle.



Def. Intercepted Arc

The INTERIOR arc that is formed by the intersection of the sides of an inscribed ∠ and the circle.



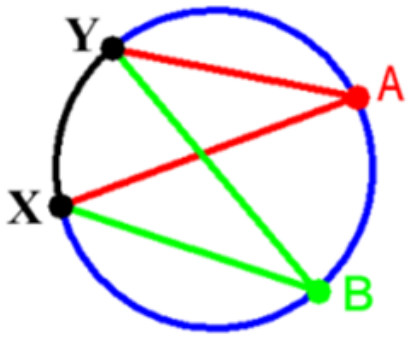
Th. 10.6

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

In other words, the intercepted arc is double the inscribed ∠.

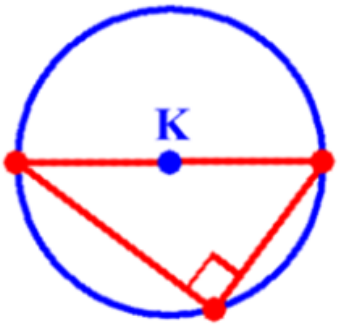
Th. 10.7

If 2 inscribed ∠'s of a circle or ≅ circles intercept the same arc or ≅ arcs, then the ∠'s are ≅.



Th. 10.8

If an inscribed ∠ of a circle intercepts a semicircle, then the ∠ is a right ∠.



Th. 10.9

If a quadrilateral is inscribed in a circle, then its opposite ∠'s are supplementary.