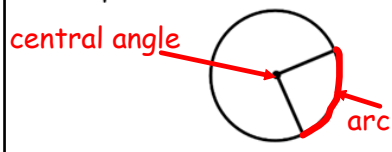
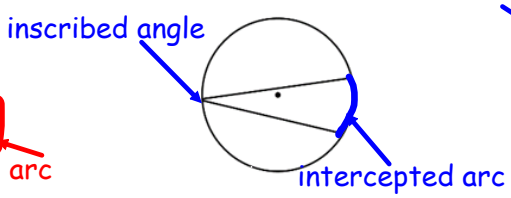
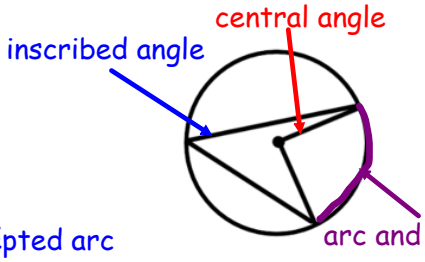
G7A-4 NOTES - Properties of angles in circles:

Intercepted arcs:

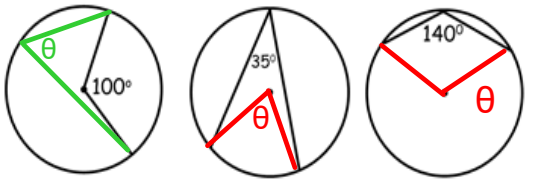






Property #1:

The measure of the INSCRIBED ANGLE is ALWAYS half the measure of the central angle with the same intercepted arc.



θ = 50° θ = 70° θ = 280°

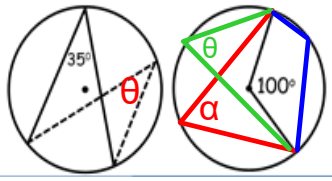
central angle --> inscribed angle (divide by 2)

inscribed angle --> central angle (times 2)

Hint: Use a highlighter to mark the intercepted arc.

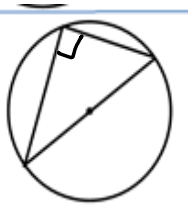
Property #2:

Inscribed angles that intercept the same arc are congruent.



$\theta = 35°$ $\theta = 50°$
$\alpha = 50°$

Hint: Use a highlighter to mark the intercepted arc.

Property #3:

Angles inscribed in a semicircle are right angles.
(See property #1)