## Inscribed Angle:

Intercepted Arc:


## Inscribed Angle vs. Central Angle!

Examples:

1. Find the measure of:
a. $\quad \angle T$
b. $\overparen{Q T}$

2. $m / A=$

3. $m / G=$

4. Find the measure of:
a. $\_\_P=$
b. $\overparen{P O}=$

5. Measure of $\overparen{V T}$

6. Find the measure of:
a. $\quad \_C=$
b. $\overparen{C F}=$


Theorem 10.9
If two inscribed angles of a circle intercept the same arc, then the angles are congruent

$\angle B$ and $\angle C$ both intercept $\overparen{A D}$. So, $\angle B \cong \angle C$.
7. Find $m \angle A C B, m \angle A D B, m \angle A E B$

8. Find the $m \_T$


| Theorem 10.8 | An inscribed angle of a triangle <br> intercepts a diameter or <br> semicircle if and only if the angle <br> is a right angle. |  |
| :---: | :---: | :---: |
| Theorem 10.9 | If a quadrilateral is inscribed in a <br> circle, then its opposite angles are <br> supplementary. |  |

9. Find the value of the variable:

10. Find $m / \_F$

11. Find the value of each variable:

12. Find the value of each variable:

13. Find the measure of $\angle C$ and $\angle D$

