| Angles in Circles |  |  |
| :---: | :---: | :---: |
| Angle Type | Formula | Picture |
| Central Angle | Angle $=$ Arc |  |
| Inscribed Angle | Given angle: 2 (angle) = arc <br> Given arc: $\frac{\text { arc }}{2}=\text { angle }$ |  |
| Angles formed by Two Chords (Inside the Circle) | $\frac{a r c+a r c}{2}=\text { angle }$ |  |
| Tangent Chord Angle | Given angle: 2 (angle) = arc <br> Given arc: $\frac{\text { arc }}{2}=\text { angle }$ |  |
| Two Tangents <br> Two Secants <br> Tangent \& Secant (OUTSIDE the Circle) <br> Same formula for all 3! | $\frac{\text { big arc-small arc }}{2}=\text { angle }$ |  |
| Things to check for if you get stuck: |  |  |
| - Is there a semicircle? (Semicircle $\left.=180^{\circ}\right)$ <br> - Can you use other arcs? (Circle = $360^{\circ}$ ) |  | - Is there a straight line? (Linear pair $=180^{\circ}$ ) <br> - Are there vertical angles? (Congruent = each other) |

