

**Warm Up**

- Solve for arc ABC
- Solve for x and y.

**Secant and Tangent Angles**

Vertex is **INSIDE** OR **OUTSIDE** the circle

**Vertex is INSIDE the Circle NOT at the Center**

ANGLE = AVERAGE OF ARCS

$ANGLE = \frac{Arc + Arc}{2}$

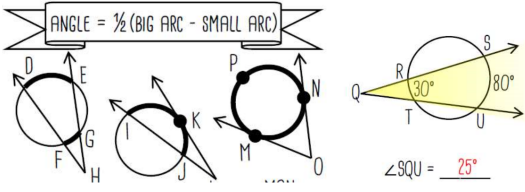
$\angle ZAC = 100^\circ$

Ex. 1 Solve for x

Ex. 2 Solve for x.

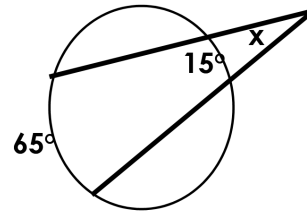
Find  $m\angle FEG$  how would we solve here?

### Vertex is OUTSide the Circle

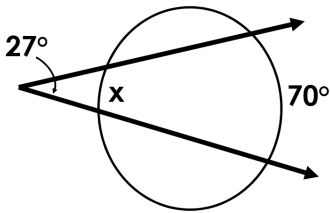


$$\text{ANGLE} = \frac{(\text{Large Arc}) - (\text{Small Arc})}{2}$$

Ex. 3 Solve for x.



Ex. 4 Solve for x.



Ex. 5 Solve for x.

