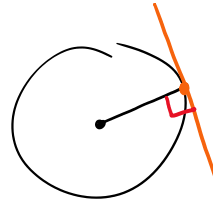


# Printout

June 16, 2023 8:46 AM



## Math 9 Circles Review

### Lesson 1: tangents

**Tangent-Radius Property:** a tangent to a circle is perpendicular to the radius at the point of tangency.

### Lesson 2: ~~Cords~~ Chords

The perpendicular bisector of any chord passes through the center of the circle.

The perpendicular from the centre of the circle to a chord bisects the cord.

### Lesson 3: Angles

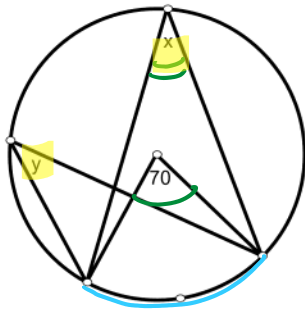
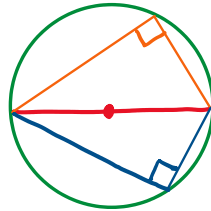
**Central and Inscribed Angle Prosperity:** The measure of a central angle is twice the measure of an inscribed angle subtended by the same arc.

**Angles in a Semicircle Property:** An angle inscribed on a semicircle is a Right angle.

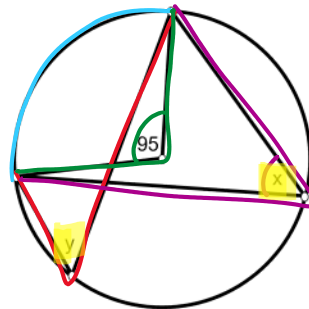
**Inscribed Angle Property:** Inscribed angles subtended by the same arc of a circle are equal.

Review Q

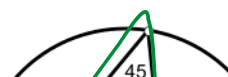
Pg 418 #1-10  
Pg 420 #1-4, 6

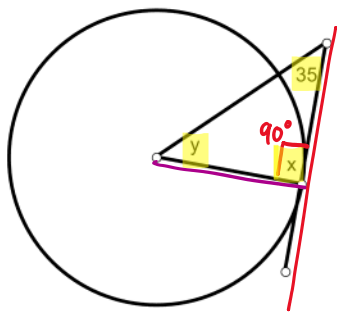


$x = 35^\circ$   
 $y = 35^\circ$



$x = 47.5^\circ$   
 $y = 47.5^\circ$

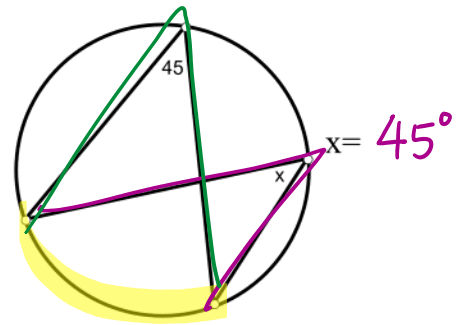




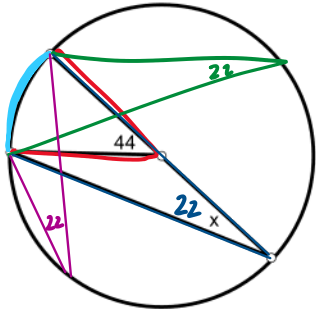
$$x = 90^\circ$$

$$y = 180 - 90 - 35^\circ$$

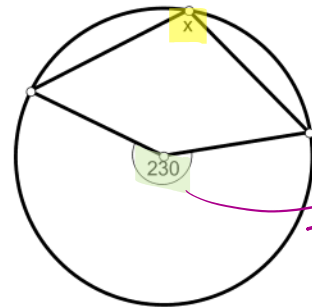
$$\angle y = 55^\circ$$



$$x = 45^\circ$$

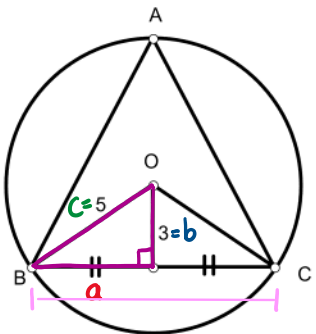


$$x = 22^\circ$$



$$x = 115^\circ$$

$\div 2$



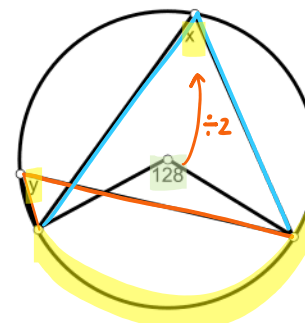
$$BC = 8$$

$$a^2 + b^2 = c^2$$

$$a^2 + 3^2 = 5^2$$

$$a^2 = 25 - 9$$

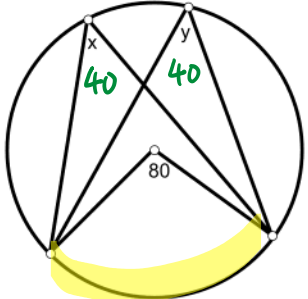
$$a^2 = 16 \quad a = 4$$



$$x = 64^\circ$$

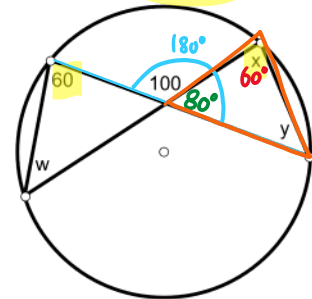
$$y = 64^\circ$$

$\div 2$



$$x = 40^\circ$$

$$y = 40^\circ$$

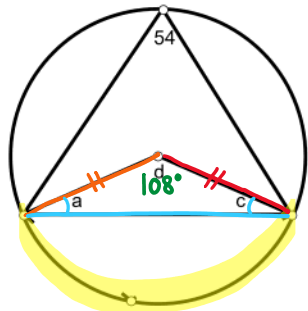


$$w = 40^\circ$$

$$x = 60^\circ$$

$$y = 180 - 80 - 60$$

$$\angle y = 40^\circ$$



$$a = 36^\circ$$

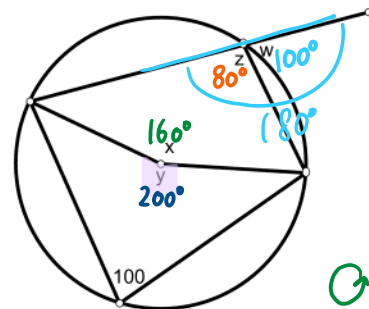
$$d = 108^\circ \leftarrow (54 \times 2)$$

$$c = 36^\circ$$

$$180^\circ - 108^\circ = 72^\circ$$

$$\frac{72}{2} = 36^\circ \angle a$$

$$\angle c$$



$$w = 100^\circ$$

$$x = 160^\circ$$

$$y = 200^\circ$$

$$z = 80^\circ$$

$\rightarrow 360^\circ$