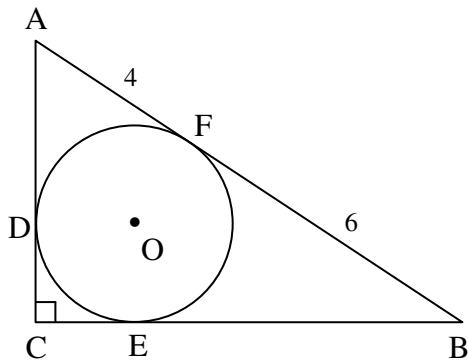
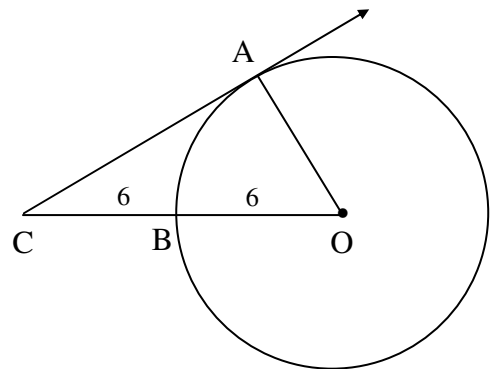


- (1) The circle with center O is inscribed in  $\triangle ABC$ .

$\overline{AC} \perp \overline{BC}$ . **Find:** AC \_\_\_\_\_, BC \_\_\_\_\_

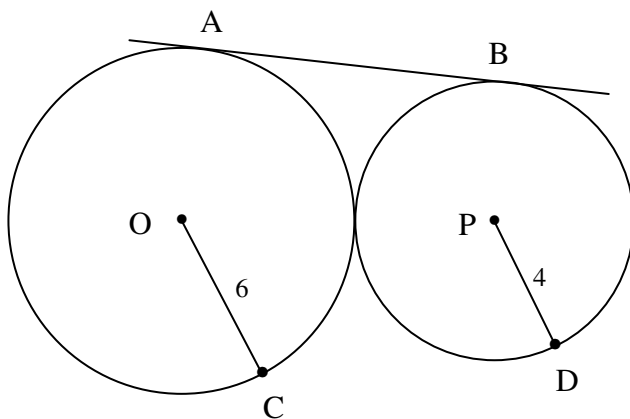


- (2)  $\overrightarrow{CA}$  is tangent to the circle at A, sides as marked. **Find:** AC \_\_\_\_\_



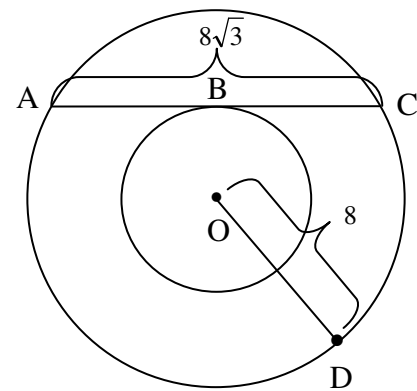
- (3)  $\overline{AB}$  is an external tangent segment. Points O and P are the centers of the circles.

**Find:** AB \_\_\_\_\_



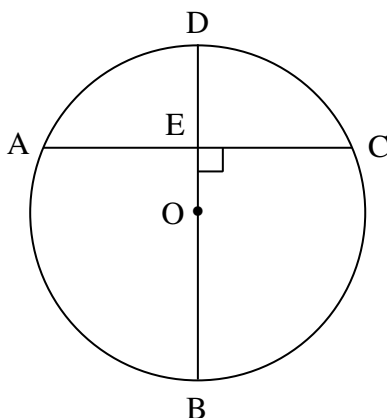
- (4) Concentric circles with center O,  $\overline{AC}$  is tangent to the inner circle, sides as marked.

**Find:** OB \_\_\_\_\_,  $m\widehat{ADC}$  \_\_\_\_\_



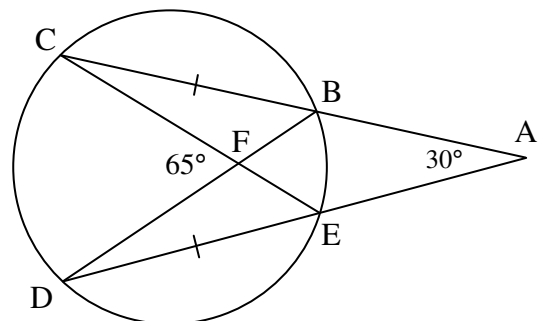
- (5) Given the figure below, point O is the center the circle,  $\overline{AC} \perp \overline{BD}$ ,  $BD = 26$ ,  $AC = 24$ .

**Find:** OE \_\_\_\_\_, DE \_\_\_\_\_, OC \_\_\_\_\_



- (6) Given the figure below,  $m\angle A = 30^\circ$ ,  $m\angle CFD = 65^\circ$ ,  $BC = DE$ .

**Find:**  $m\widehat{CD}$  \_\_\_\_\_,  $m\widehat{BE}$  \_\_\_\_\_,  $m\widehat{BC}$  \_\_\_\_\_

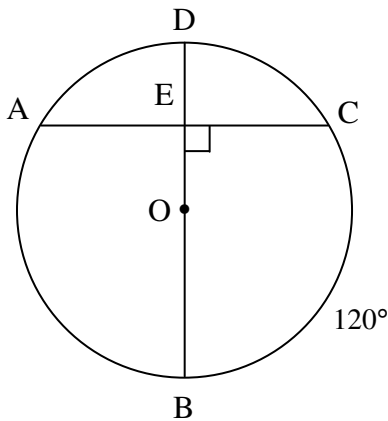


Geo 9

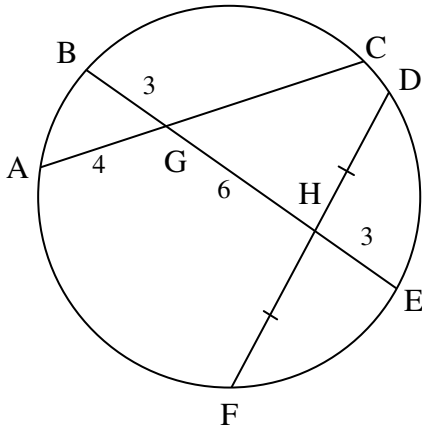
Ch 9 Circles

Review Problems

(7) The circle below with center O,  $AC = 12$  ,  
 $\overline{AC} \perp \overline{BD}$ .  
**Find:** OE\_\_\_\_\_ , OC\_\_\_\_\_DE\_\_\_\_\_



(8) Given the figure below,  $DH = HF$ , with  
sides as marked.  
**Find:** GC\_\_\_\_\_ , DH\_\_\_\_\_



Answers

- (1)  $AC = 6$  ,  $BC = 8$
- (2)  $AC = 6\sqrt{3}$
- (3)  $AB = 4\sqrt{6}$
- (4)  $OB = 4$  ,  $m\widehat{ADC} = 240^\circ$
- (5)  $OE = 5$  ,  $DE = 8$  ,  $OC = 13$

$$(6) \ m\widehat{CD} = 95^\circ, \ m\widehat{BE} = 35^\circ, \ m\widehat{BC} = 115^\circ$$

$$(7) \ OE = 2\sqrt{3}, \ OC = 4\sqrt{3}, \ DE = 2\sqrt{3}$$

$$(8) \ GC = \frac{27}{4}, \ DH = 3\sqrt{3}$$