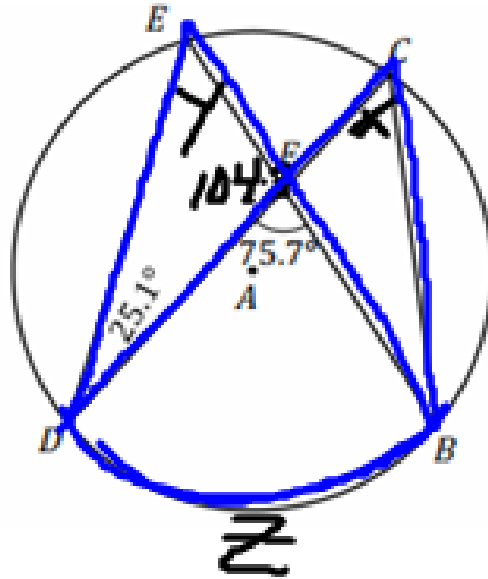


Your turn:

Consider circle A in the following figure, and find $m\angle BCF$, $m\angle BED$, & $m\widehat{DB}$.

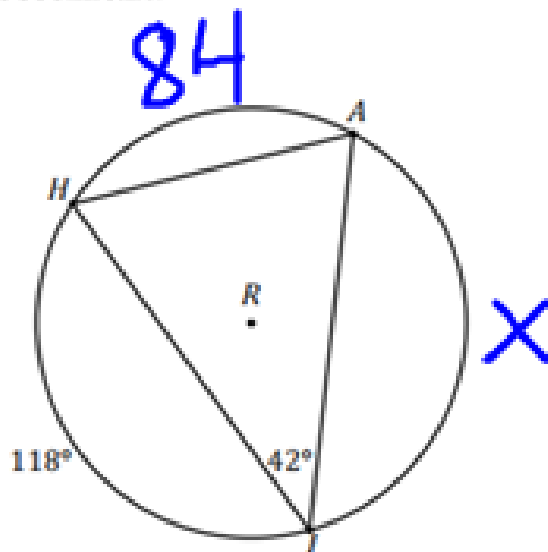


$$\begin{aligned} m\angle BED &= 50.6^\circ \\ m\angle BCF &= 50.6^\circ \\ m\widehat{DB} &= 101.2^\circ \end{aligned}$$

$$\begin{array}{r} 180 \\ - 75.7 \\ \hline 104.3 \\ + 25.1 \\ \hline 129.4 \\ 180 \\ - 129.4 \\ \hline 50.6 \end{array}$$

Informal Assessment:

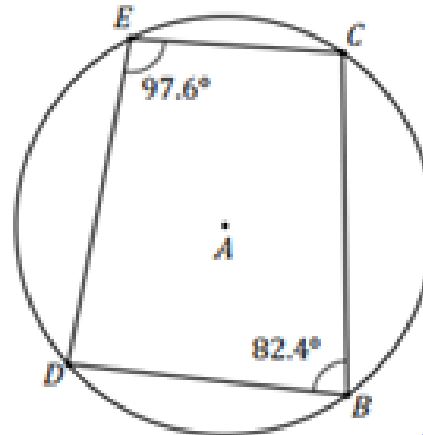
$$\begin{array}{r} 118 \\ 84 \\ \hline 202 \\ 360 \\ - 202 \\ \hline 158 \end{array}$$



Which of the following is the measure of \widehat{AT} ?

- (A) 118°
- (B) 158°
- (C) 160°
- (D) 202°

Consider the figure below that represents an inscribed polygon.



What figure is inscribed in the circle?

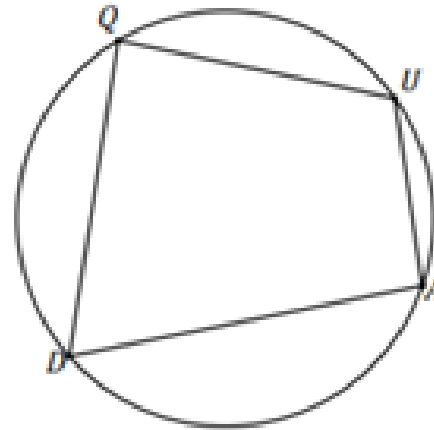
What do you notice about the angles?

quadrilateral
Supplementary

A polygon is inscribed in a circle when all vertices of the polygon lie on the circle. The circle is circumscribed about the polygon.

In an Inscribed quadrilateral every vertex is on the Circumference of a circle, and the opposite angles of the quadrilateral are Supplementary.

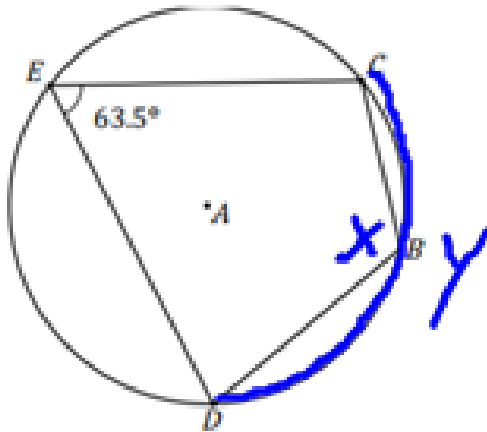
Which pair of angles are supplementary?



$$\angle D + \angle U = 180$$
$$\angle Q + \angle A = 180$$

Find $m\angle CBD$ & $m\widehat{CD}$

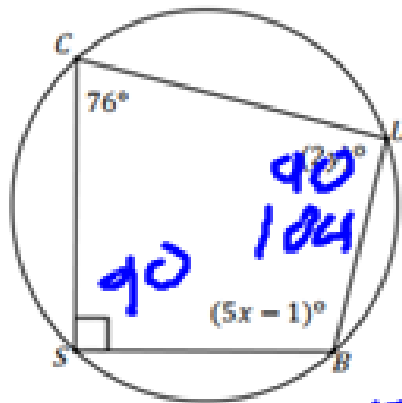
$$63.5(2) = 127^\circ = m\widehat{CD}$$



$$\begin{array}{r} 180 \\ - 63.5 \\ \hline 116.5 = m\angle CBD \end{array}$$

Your turn:

Find the value of each variable.

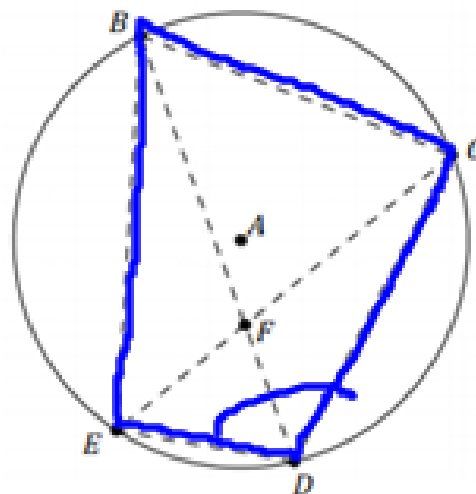


$$\begin{array}{r} 180 \\ - 90 \\ \hline 90 \end{array} \quad \begin{array}{r} 180 \\ - 76 \\ \hline 104 \end{array}$$

$$\begin{array}{l} 5(21) - 1 = 104 \\ 2(45) = 90 \end{array} \quad \begin{array}{l} x = 21 \\ y = 45 \end{array}$$

Informal Assessment:

Quadrilateral $BCDE$ is inscribed in circle A . Diagonals \overline{BD} and \overline{EC} intersect at point F .



Select the angles and value that would make the statement true about quadrilateral $BCDE$.

$m\angle$ EDC = 180 - $m\angle$ EBC

EBF EDC EDF CFB FED	90° 180°	EBC EBF EDF CFB FED
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