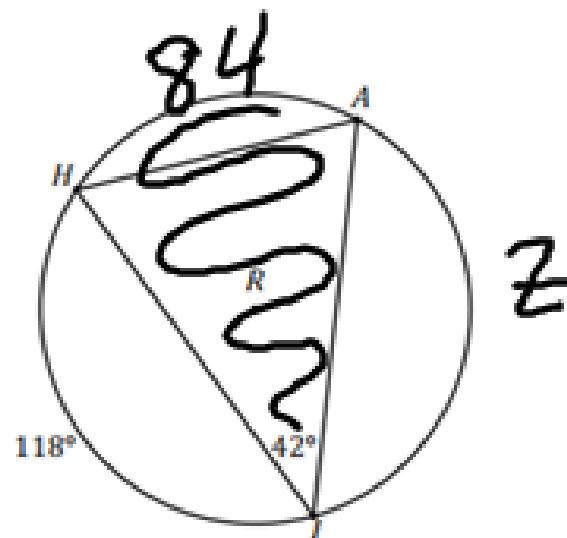


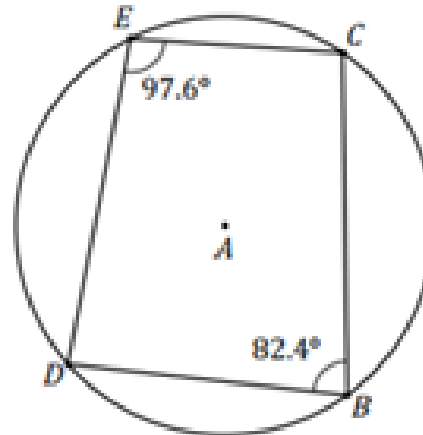
Informal Assessment:



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?

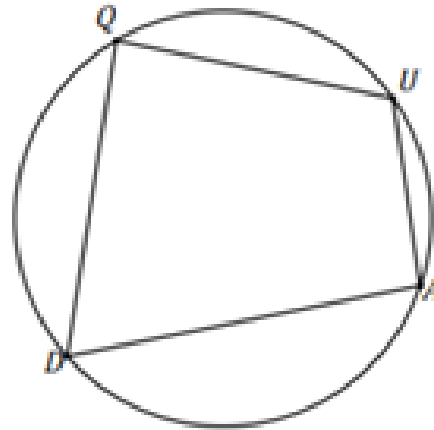
What do you notice about the angles?

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 quadrilateral.

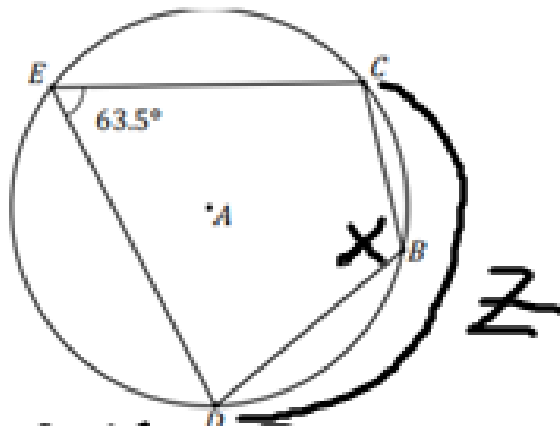
In an Inscribed quadrilateral every vertex is on the Circumference of a circle, and the opposite angles of the quadrilateral are Supplementary.

Which pair of angles are supplementary?



$\angle Q \hat{=} \angle A$
 $\angle U \hat{=} \angle D$

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



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

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

Your turn:

Find the value of each variable.

$$\begin{array}{r} 90 + 2y = 180 \\ - 40 \\ \hline 50 = 2y \\ \frac{50}{2} = \frac{2y}{2} \\ 25 = y \end{array}$$



$$\angle C + \angle B = 180$$

$$\angle S + \angle U = 180$$

$$76 + 5x - 1 = 180$$

$$\begin{array}{r} 5(21) - 1 = 104 \\ 105 - 1 = 104 \\ 104 = 104 \end{array} \quad \begin{array}{r} 76 + 5x = 180 \\ - 76 \\ \hline 5x = 104 \\ \frac{5x}{5} = \frac{104}{5} \\ x = 20.8 \end{array}$$