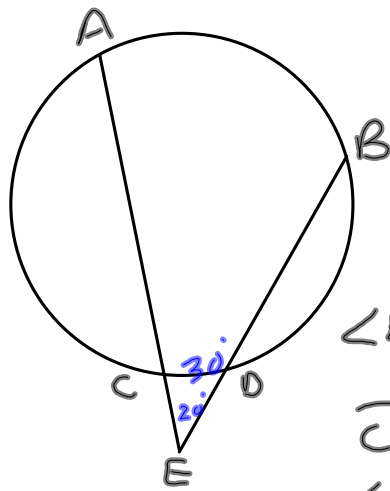


4-1-14  
1<sup>st</sup> Geo



$$\angle E = \frac{1}{2}(\widehat{AB} - \widehat{CD})$$

$$\widehat{CD} = 30^\circ$$

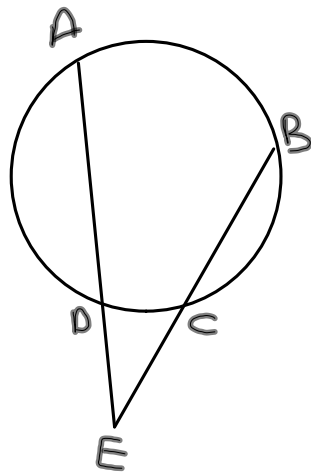
$$\angle E = 20$$

$$2 \cdot 20^\circ = 2 \cdot \frac{1}{2}(\widehat{AB} - 30)$$

$$40 = \widehat{AB} - 30$$

$$\begin{array}{r} +30 \\ \hline \end{array} \quad \begin{array}{r} +30 \\ \hline \end{array}$$

$$70 = \widehat{AB}$$



$$\angle E = 30^\circ$$

$$\widehat{DC} = 50^\circ$$

$$\widehat{AB} = ?$$

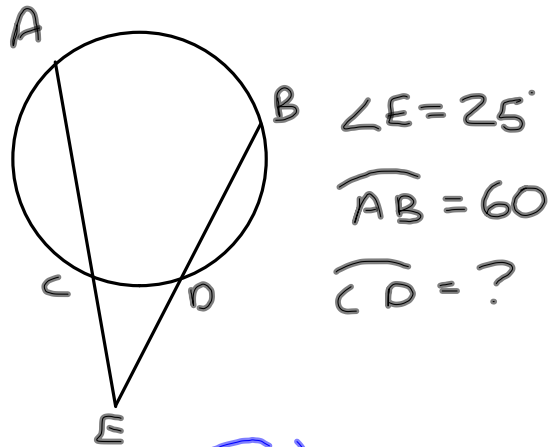
$$\angle E = \frac{1}{2}(\widehat{AB} - \widehat{CD})$$

$$2 \cdot 30 = 2 \cdot \frac{1}{2}(\widehat{AB} - 50)$$

$$60 = \widehat{AB} - 50$$

$$\begin{array}{r} +50 \\ \hline \end{array} \quad \begin{array}{r} +50 \\ \hline \end{array}$$

$$110 = \widehat{AB}$$



$$\angle E = 25^\circ$$

$$\widehat{AB} = 60$$

$$\widehat{CD} = ?$$

$$\angle E = \frac{1}{2} (\widehat{AB} - \widehat{CD})$$

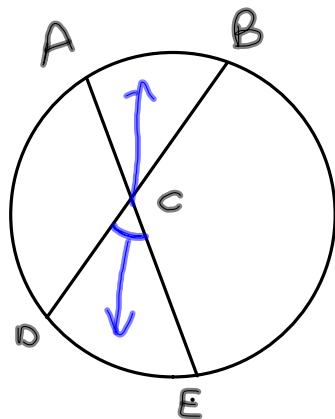
$$25^\circ = \frac{1}{2} (60 - \widehat{CD})$$

$$50 = 60 - \widehat{CD}$$

$$\begin{array}{r} -60 \\ \hline \end{array}$$

$$-10 = -\widehat{CD}$$

$$10 = \widehat{CD}$$



$$\angle DCE = 40^\circ$$

$$\widehat{AB} = 30$$

$$\widehat{DE} = ?$$

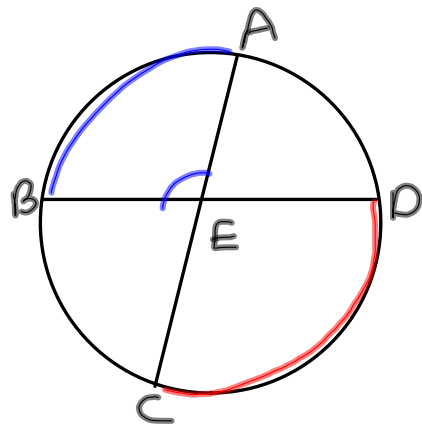
$$\angle DCE = \frac{1}{2} (\widehat{AB} + \widehat{DE})$$

$$2 \cdot 40^\circ = \frac{1}{2} (30 + \widehat{DE})$$

$$80 = 30 + \widehat{DE}$$

$$\begin{array}{r} -30 \\ \hline \end{array}$$

$$50 = \widehat{DE}$$



$$\angle AEB = 100$$

$$\widehat{AB} = 70^\circ$$

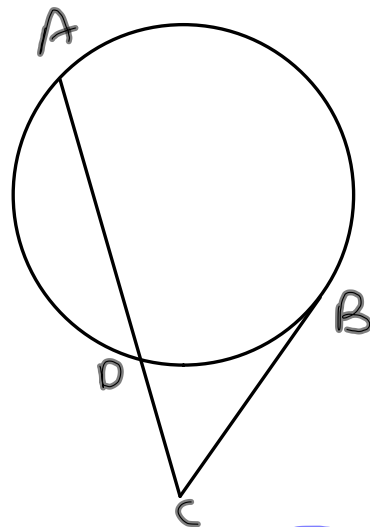
$$\widehat{CD} = ?$$

$$\angle AEB = \frac{1}{2}(\widehat{AB} + \widehat{CD})$$

$$2 \cdot 100 = 2 \cdot \frac{1}{2}(70 + \widehat{CD})$$

$$200 = 70 + \widehat{CD}$$

$$\begin{array}{r} - 70 \\ \hline 130 = \widehat{CD} \end{array}$$



$$\angle C = 30^\circ$$

$$\widehat{DB} = 80^\circ$$

$$\widehat{AB} = ?$$

$$\angle C = \frac{1}{2}(\widehat{AB} - \widehat{DB})$$

$$2 \cdot 30^\circ = 2 \cdot \frac{1}{2}(\widehat{AB} - 80)$$

$$60 = \widehat{AB} - 80$$

$$\begin{array}{r} + 80 \\ \hline 140 = \widehat{AB} \end{array}$$