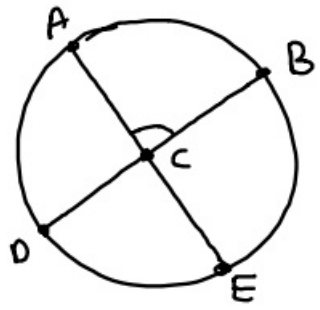
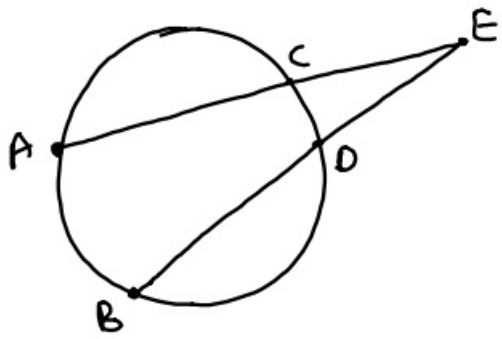
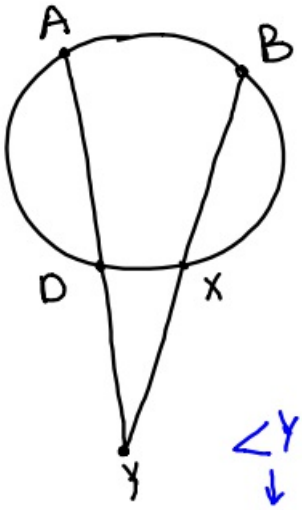
1-30-19 5th Geo



$\angle ACB = \frac{1}{2}(\overset{\frown}{AB} + \overset{\frown}{DE})$



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

① 

$\angle Y = 28^\circ$

$\overset{\frown}{AB} = 90^\circ$

$\overset{\frown}{DX} = ?$

$\angle Y = \frac{1}{2}(\overset{\frown}{AB} - \overset{\frown}{DX})$

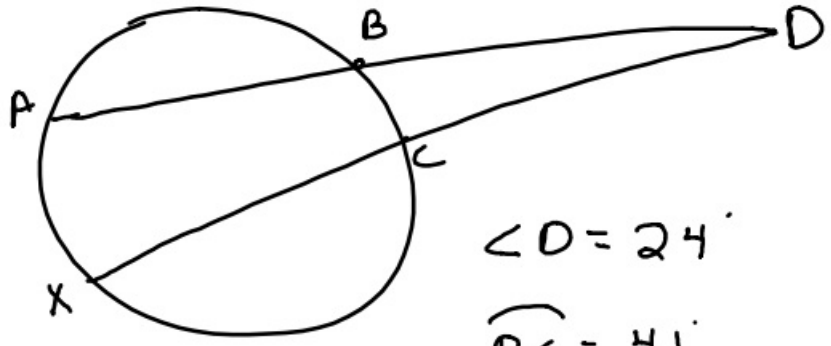
$2 \cdot 28^\circ = \frac{1}{2}(90^\circ - \overset{\frown}{DX})$

$56^\circ = 90^\circ - \overset{\frown}{DX}$

$-90 \quad -90$

$-34^\circ = -\overset{\frown}{DX}$

$\overset{\frown}{DX} = 34^\circ$

② 

$\angle D = 24^\circ$

$\overset{\frown}{BC} = 41^\circ$

$\overset{\frown}{Ax} = ?$

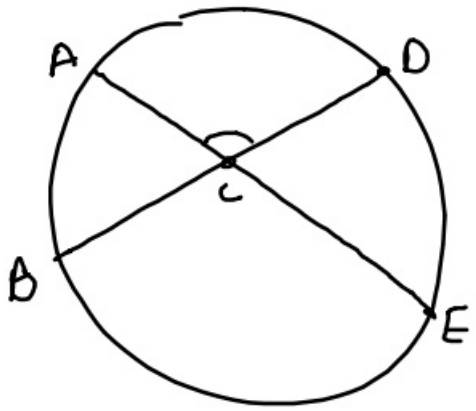
$\angle D = \frac{1}{2}(\overset{\frown}{Ax} - \overset{\frown}{BC})$

$2 \cdot 24 = 2 \cdot \frac{1}{2}(\overset{\frown}{Ax} - 41)$

$48^\circ = \overset{\frown}{Ax} - 41$

$+41 \qquad +41$

$89^\circ = \overset{\frown}{Ax}$

③ 

$\angle ACD = 101^\circ$

$\overset{\frown}{AD} = 80^\circ$

$\overset{\frown}{BE} = ?$

$\angle ACD = \frac{1}{2}(\overset{\frown}{AD} + \overset{\frown}{BE})$

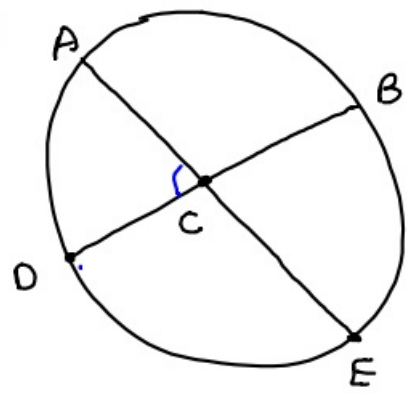
$2 \cdot 101 = 2 \cdot \frac{1}{2}(80 + \overset{\frown}{BE})$

$202 = 80 + \overset{\frown}{BE}$

$-80 \qquad -80$

$122 = \overset{\frown}{BE}$

(4)



$\overset{\frown}{AD} = 60^\circ$

$\angle ACD = 70^\circ$

$\overset{\frown}{BE} = ?$

$\angle ACD = \frac{1}{2}(\overset{\frown}{AD} + \overset{\frown}{BE})$

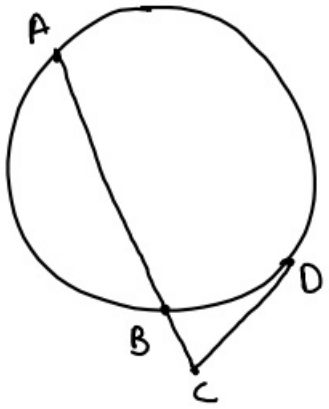
$2 \cdot 70 = 2 \cdot \frac{1}{2}(60 + \overset{\frown}{BE})$

$140 = 60 + \overset{\frown}{BE}$

$-60 \quad -60$

$80 = \overset{\frown}{BE}$

(5)



$\overset{\frown}{AD} = 150^\circ$

$\angle C = 52^\circ$

$\overset{\frown}{BD} = ?$

$\angle C = \frac{1}{2}(\overset{\frown}{AD} - \overset{\frown}{BD})$

$2 \cdot 52^\circ = 2 \cdot \frac{1}{2}(150 - \overset{\frown}{BD})$

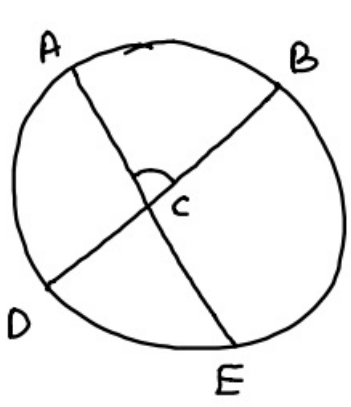
$104 = 150 - \overset{\frown}{BD}$

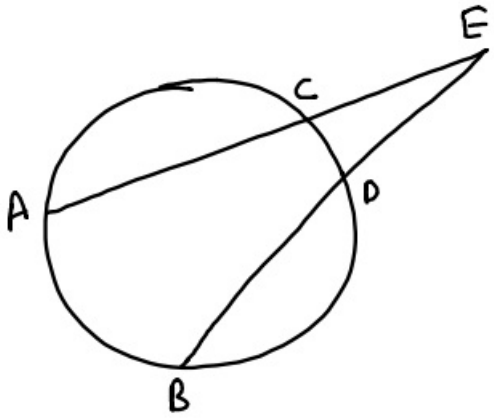
$-150 \quad -150$

$-46 = -\overset{\frown}{BD}$

$\overset{\frown}{BD} = 46^\circ$

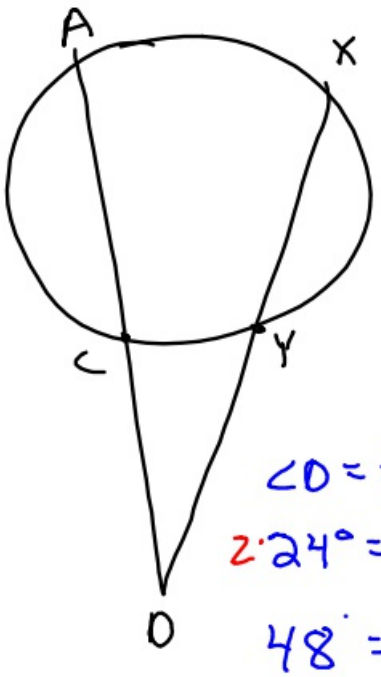
1-30-19 6th Geo





$\angle ACB = \frac{1}{2}(\overset{\frown}{AB} + \overset{\frown}{DE})$ $\angle E = \frac{1}{2}(\overset{\frown}{AB} - \overset{\frown}{CD})$

(1)



$\overset{\frown}{AX} = 82°$

$\angle D = 24°$

$\overset{\frown}{CY} = ?$

$\angle D = \frac{1}{2}(\overset{\frown}{AX} - \overset{\frown}{CY})$

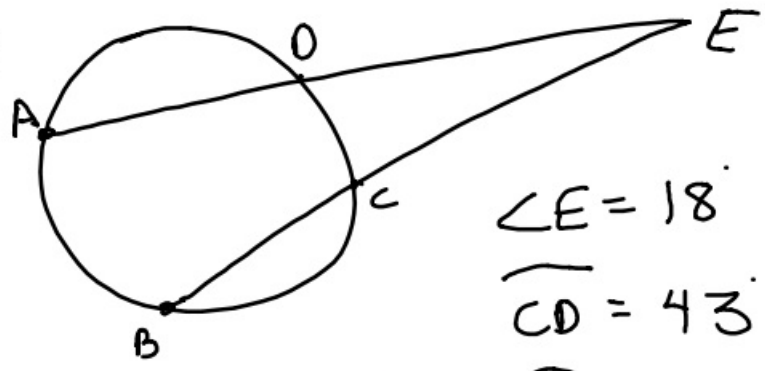
$2 \cdot 24° = \frac{1}{2} \cdot 2(82 - \overset{\frown}{CY})$

$48° = 82 - \overset{\frown}{CY}$

$-82 \quad -82$

$-34 = -\overset{\frown}{CY}$

$\overset{\frown}{CY} = 34°$

② 

$\angle E = 18^\circ$

$\overset{\frown}{CD} = 43^\circ$

$\overset{\frown}{AB} = ?$

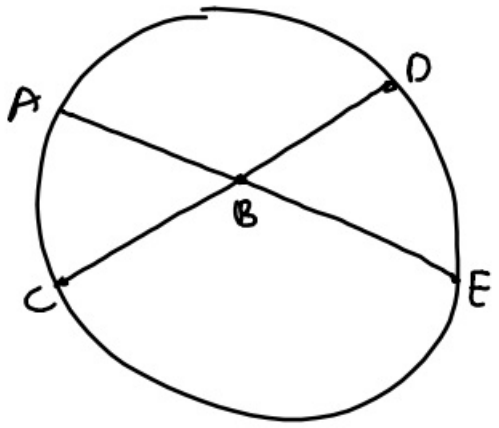
$\angle E = \frac{1}{2}(\overset{\frown}{AB} - \overset{\frown}{CD})$

$2 \cdot 18^\circ = 2 \cdot \frac{1}{2}(\overset{\frown}{AB} - 43)$

$36 = \overset{\frown}{AB} - 43$

$+43 \quad +43$

$79^\circ = \overset{\frown}{AB}$

③ 

$\angle ABD = 118^\circ$

$\overset{\frown}{AD} = 104^\circ$

$\overset{\frown}{CE} = ?$

$\angle ABD = \frac{1}{2}(\overset{\frown}{AD} + \overset{\frown}{CE})$

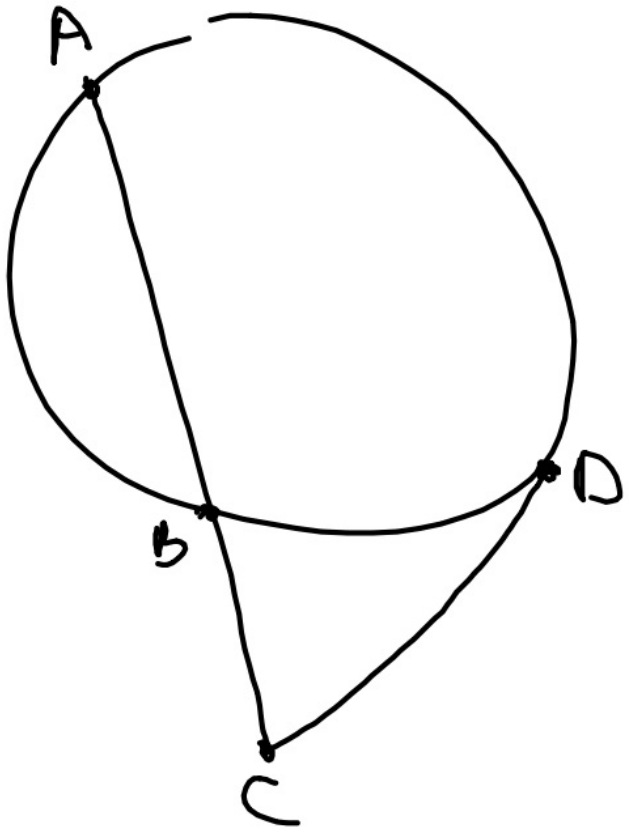
$2 \cdot 118 = 2 \cdot \frac{1}{2}(104 + \overset{\frown}{CE})$

$236 = 104 + \overset{\frown}{CE}$

$-104 \quad -104$

$132^\circ = \overset{\frown}{CE}$

(4)



$\angle C = 84^\circ$

$\overset{\frown}{AD} = 200^\circ$

$\overset{\frown}{BD} = ?$

$$\angle C = \frac{1}{2}\left(\overset{\frown}{AD} - \overset{\frown}{BD}\right)$$

$$2 \cdot 84 = 2 \cdot \frac{1}{2}\left(200 - \overset{\frown}{BD}\right)$$

$$168 = 200 - \overset{\frown}{BD}$$

$$-200 \quad -200$$

$$-32 = -\overset{\frown}{BD}$$

$$\overset{\frown}{BD} = 32^\circ$$