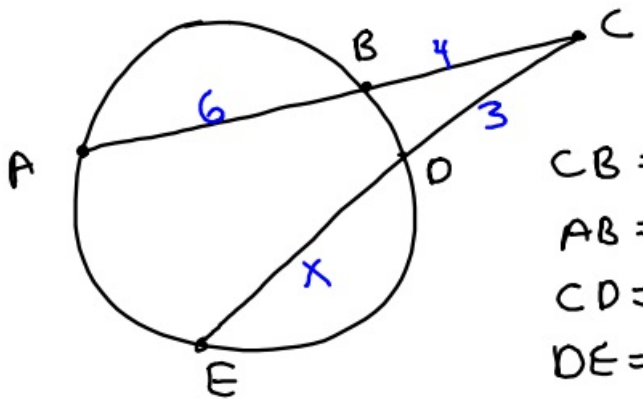
2-8-18 5th Geo

(1)



$CB = 4$
$AB = 6$
$CD = 3$
$DE = ?$

$4 \cdot 10 = 3 \cdot (3 + x)$

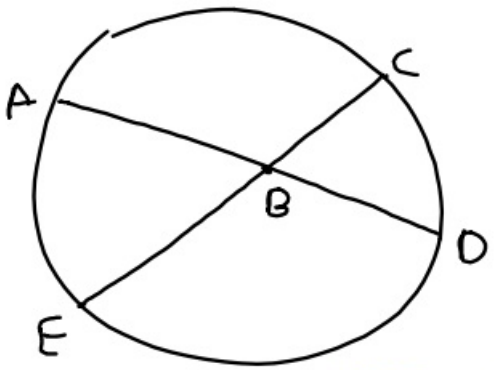
$40 = 9 + 3x$

$-9 \quad -9$

$\frac{31}{3} = \frac{3x}{3}$

$10\frac{1}{3} = x$

(2)



$\overset{\frown}{AE} = 62$
$\angle ABE = 64$
$\overset{\frown}{CD} = ?$

$\angle ABE = \frac{1}{2}(\overset{\frown}{AE} + \overset{\frown}{CD})$

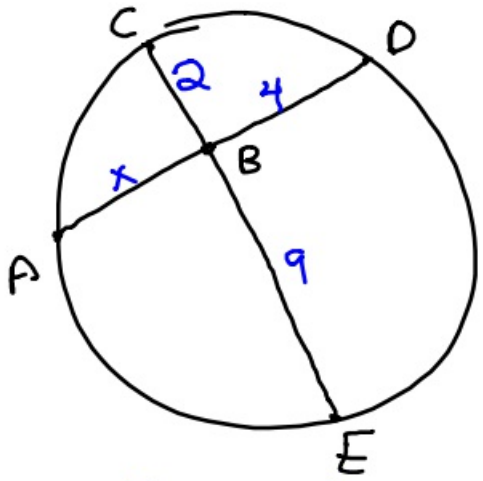
$2 \cdot 64 = 2 \cdot \frac{1}{2}(62 + \overset{\frown}{CD})$

$128 = 62 + \overset{\frown}{CD}$

$-62 \quad -62$

$66 = \overset{\frown}{CD}$

(3)



$CB = 2$

$BD = 4$

$AB = ?$

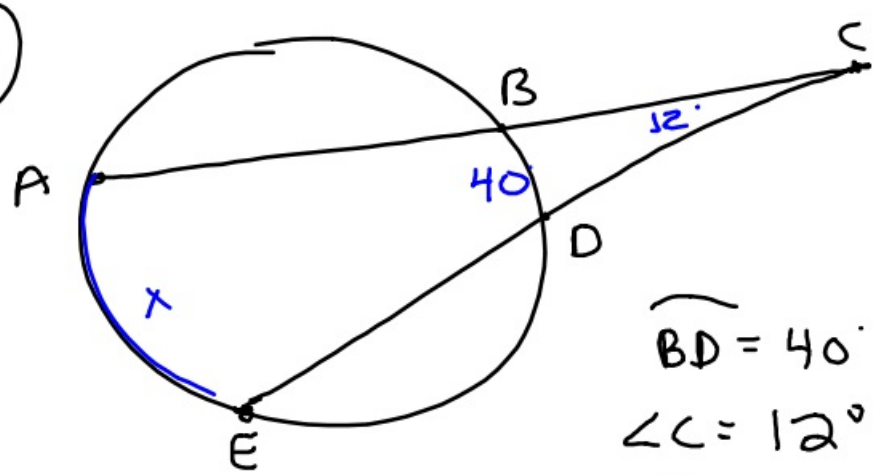
$BE = 9$

$4 \cdot x = 2 \cdot 9$

$4x = 18$

$x = 4\frac{1}{2}$

(4)



$\overset{\frown}{BD} = 40°$

$\angle C = 12°$

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

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

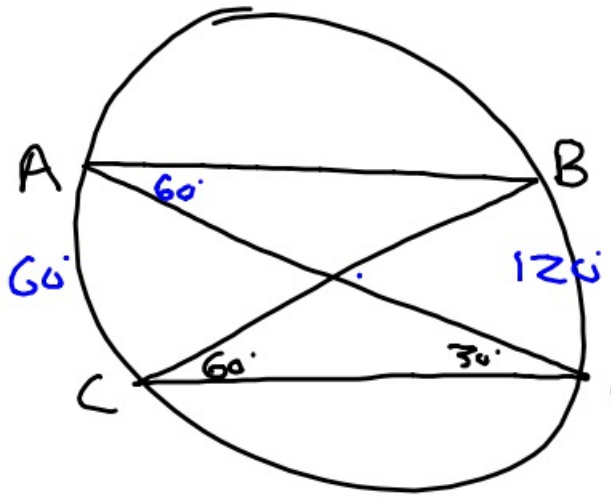
$2 \cdot 12° \overset{?}{=} \frac{1}{2}(\overset{\frown}{AE} - 40)$

$24 = \overset{\frown}{AE} - 40$

$+40 \qquad +40$

$64 = \overset{\frown}{AE}$

5



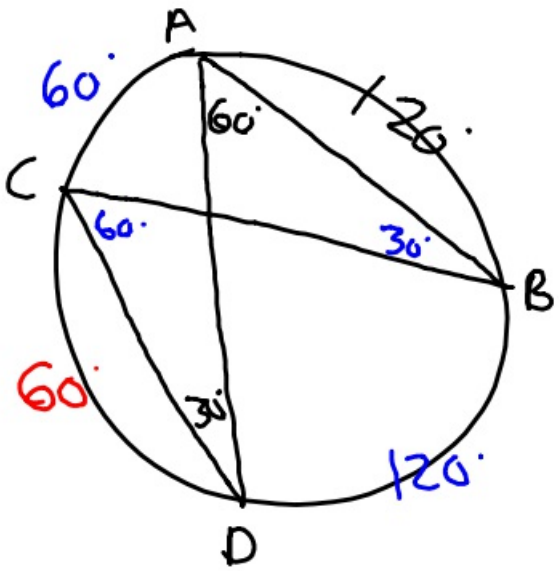
$\angle BCD = 60^\circ$

$\angle CDA = 30^\circ$

$\angle BAD = ?$

60°

6



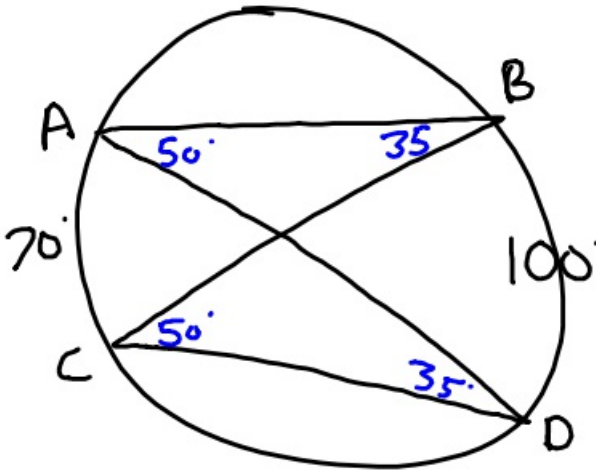
$\angle CDA = 30^\circ$

$\angle DAB = 60^\circ$

$\overset{\frown}{AB} = 120^\circ$

$\overset{\frown}{CD} = ? 60^\circ$

7



$\overset{\frown}{BD} = 100^\circ$

$\overset{\frown}{AC} = 70^\circ$

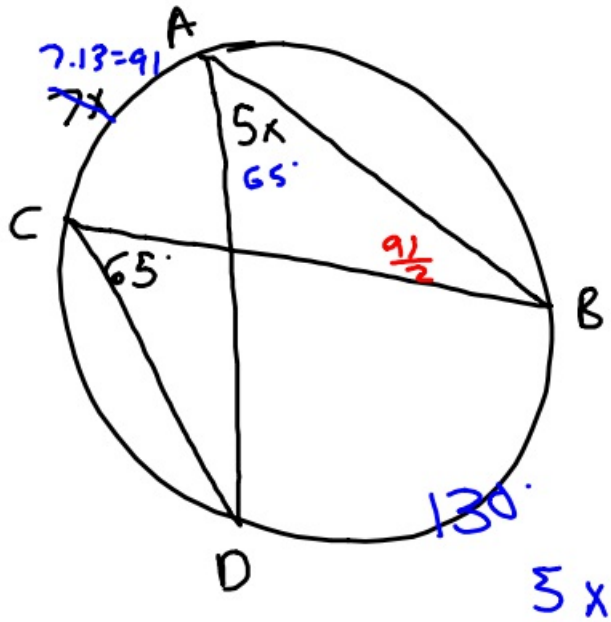
$\angle BAD = 2x = 50$

$x = 25$

$\angle ADC = ?$

35°

(8)



$\angle BAD = 5x$

$\overset{\frown}{AC} = 7x$

$\angle DCB = 65°$

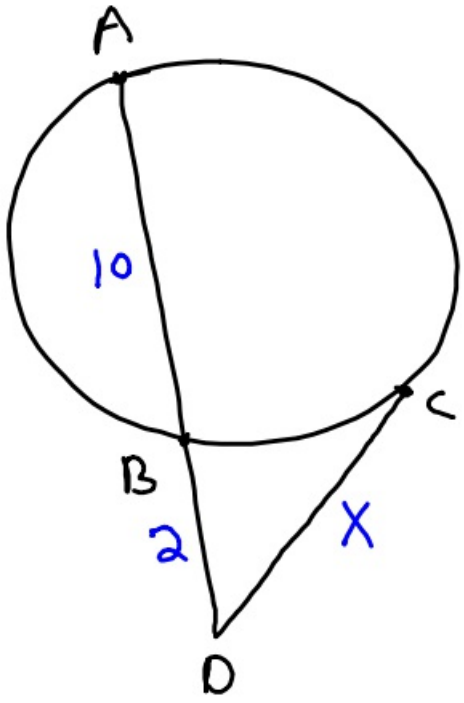
$\angle ABC = ?$

$45\frac{1}{2}$

$5x = 65$

$x = 13$

(9)



$DB = 2$

$AB = 10$

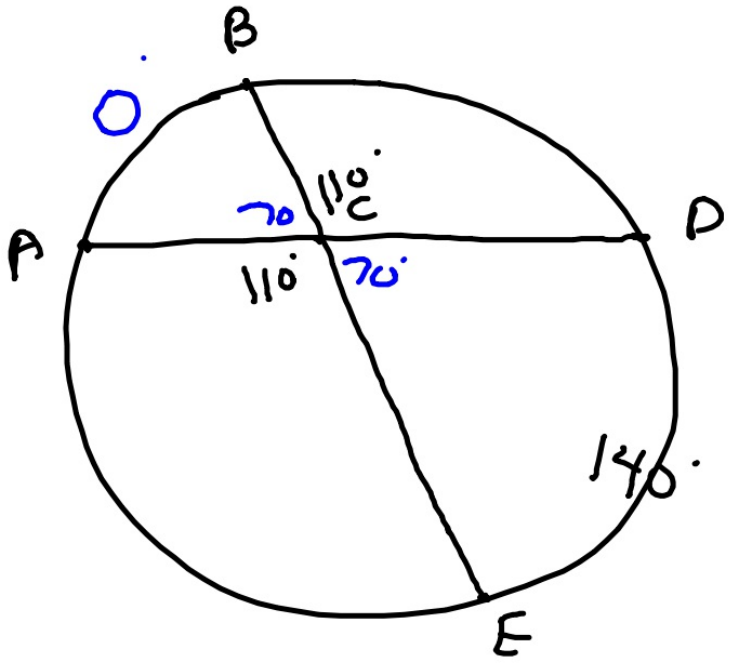
$DC = ?$

$2 \cdot 12 = x \cdot x$

$\sqrt{24} = \sqrt{x^2}$

$x \approx 4.9$

10



$\angle BCD = 110°$

$\overset{\frown}{DE} = 140°$

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

$$70° = \frac{1}{2}\left(\overset{\frown}{DE} + \overset{\frown}{AB}\right)$$

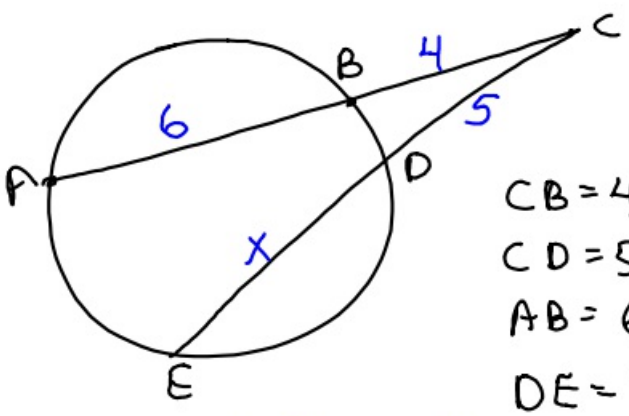
$$2 \cdot 70 = 2 \cdot \frac{1}{2}\left(140 + \overset{\frown}{AB}\right)$$

$$140 = 140 + \overset{\frown}{AB}$$

$$-140 \quad -140$$

$$0 = \overset{\frown}{AB}$$

2-8-18 6th Geo

① 

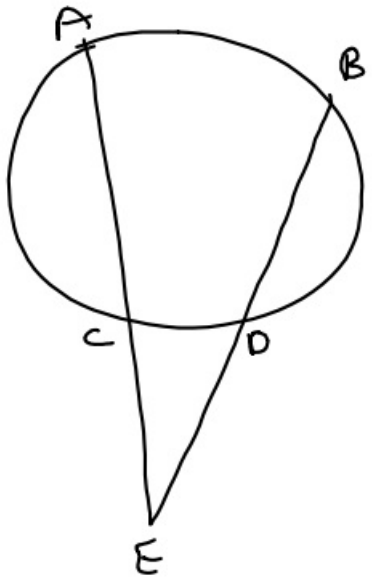
$CB = 4$
$CD = 5$
$AB = 6$
$DE = ?$

$4 \cdot 10 = 5 \cdot (5 + x)$

$40 = 25 + 5x$
$-25 \quad -25$

$15 = 5x$

$x = 3$

② 

$\angle E = 32$
$\overset{\frown}{CD} = 40$
$\overset{\frown}{AB} = ?$

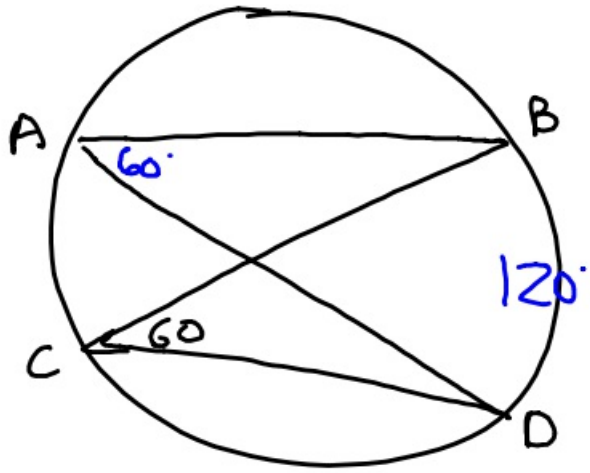
$\angle E = \frac{1}{2}(\overset{\frown}{AB} - \overset{\frown}{CD})$

$2 \cdot 32 = \frac{1}{2}(\overset{\frown}{AB} - 40)$

$64 = \overset{\frown}{AB} - 40$
$+40 \qquad +40$

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

(3)



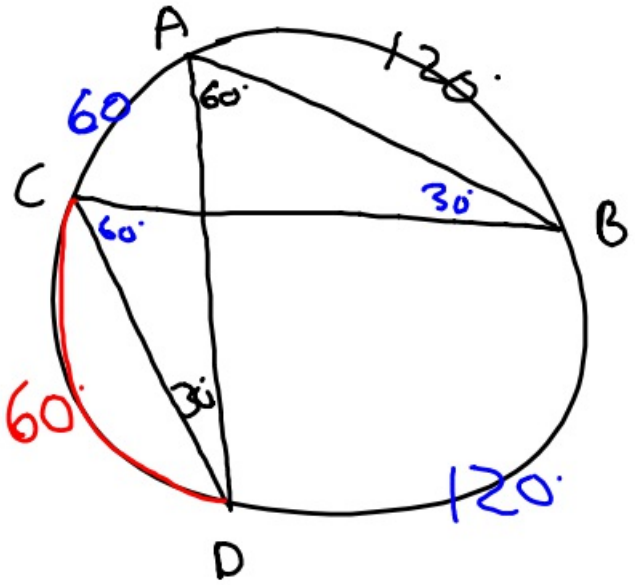
$\angle BCD = 60^\circ$

$\angle CDA = 30^\circ$

$\angle BAD = ?$

60°

(4)



$\angle CDA = 30^\circ$

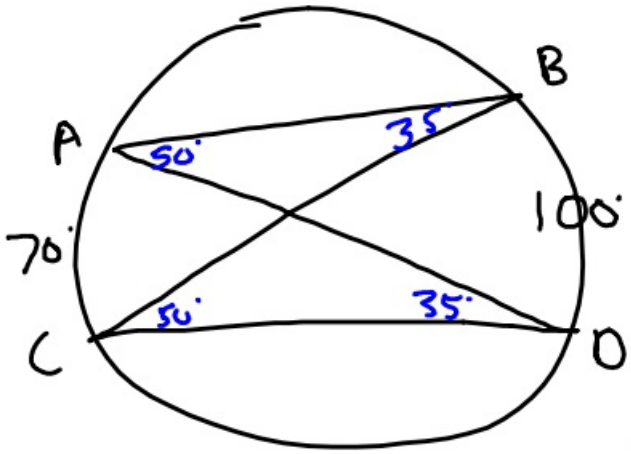
$\angle DAB = 60^\circ$

$\overset{\frown}{AB} = 120^\circ$

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

60°

(5)



$\overset{\frown}{BD} = 100^\circ$

$\overset{\frown}{AC} = 70^\circ$

$\angle BAD = 2x$

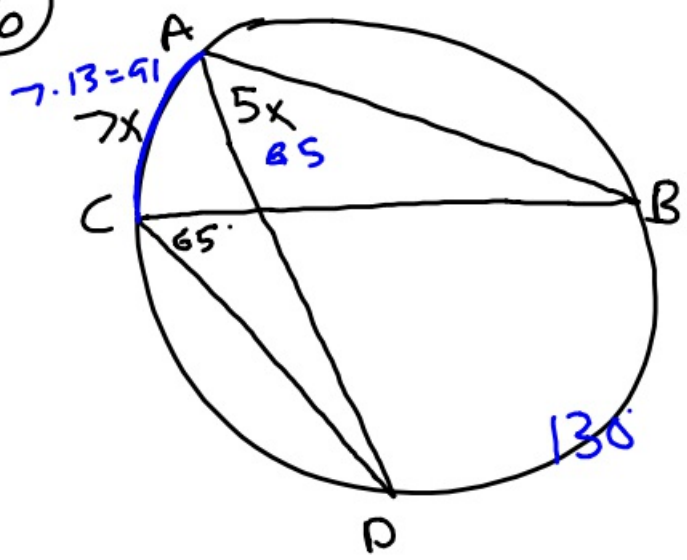
$2x = 50$

$x = 25$

$\angle ADC = ?$

35°

(6)



$\angle BAD = 5x$

$\overset{\frown}{AC} = 7x$

$\angle DCB = 65°$

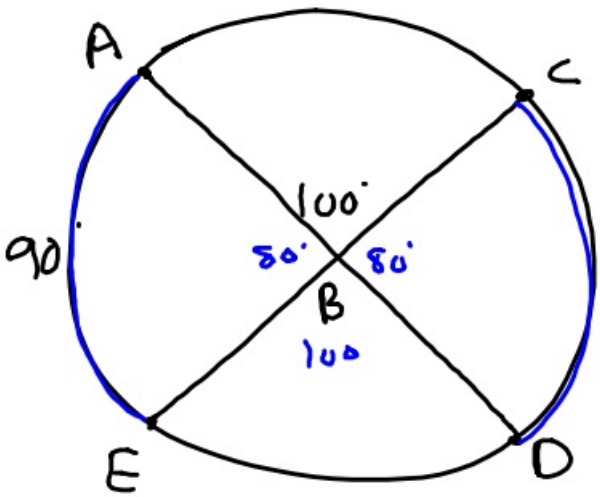
$\angle ABC = ?$

$\frac{1}{2} \cdot 91 = 45\frac{1}{2}$

$5x = 65$

$x = 13$

(7)



$\angle ABC = 100°$

$\overset{\frown}{AE} = 90°$

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

$80 = \frac{1}{2}(\overset{\frown}{AE} + \overset{\frown}{CD})$

$2 \cdot 80 = 2 \cdot \frac{1}{2}(90 + \overset{\frown}{CD})$

$160 = 90 + \overset{\frown}{CD}$

$-90 \quad -90$

$70 = \overset{\frown}{CD}$