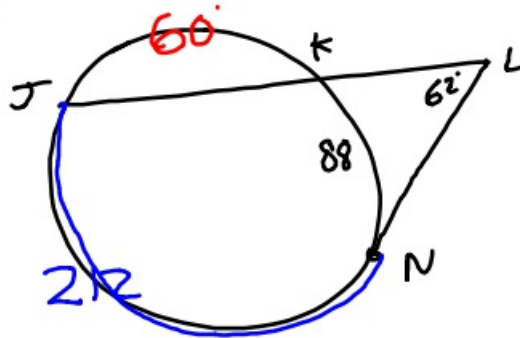


2-5-19 5th Geo

Ch. 9 PT 2

③



$$\angle KLN = 62^\circ$$

$$\widehat{KN} = 88$$

$$\widehat{JK} = ? \quad 60^\circ$$

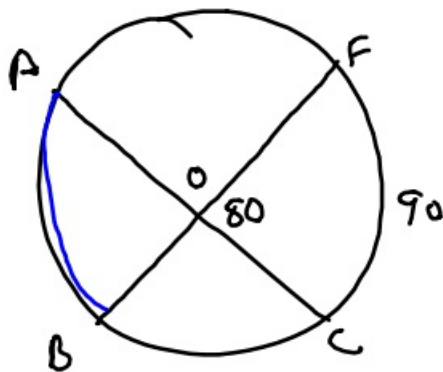
$$\angle KLN = \frac{1}{2}(\widehat{JN} - \widehat{KN})$$

$$2 \cdot 62 = \frac{1}{2}(\widehat{JN} - 88)$$

$$\begin{array}{r} 124 = \widehat{JN} - 88 \\ +88 \quad \quad +88 \\ \hline \end{array}$$

$$212 = \widehat{JN}$$

①



$$\angle FOC = 90^\circ$$

$$\widehat{FC} = 90$$

$$\widehat{AB} = ?$$

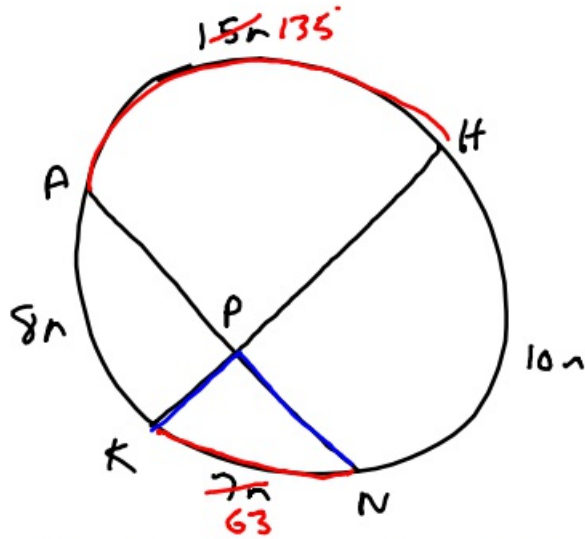
$$\angle FOC = \frac{1}{2}(\widehat{FC} + \widehat{AB})$$

$$2 \cdot 90 = \frac{1}{2}(90 + \widehat{AB})$$

$$\begin{array}{r} 180 = 90 + \widehat{AB} \\ -90 \quad -90 \\ \hline \end{array}$$

$$90 = \widehat{AB}$$

④



$$\angle KPN = ?$$

$$\frac{1}{2}(63 + 135)$$

$$\frac{1}{2}(198)$$

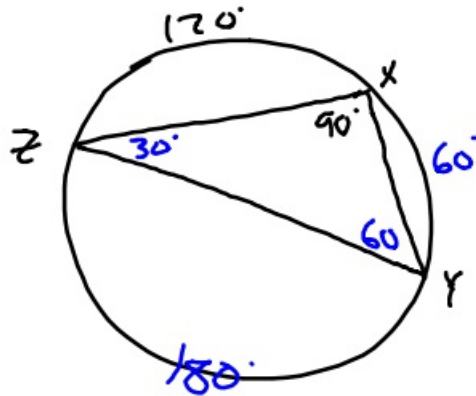
$$99$$

$$8n + 7n + 10n + 15n = 360$$

$$40n = 360$$

$$n = 9$$

⑧

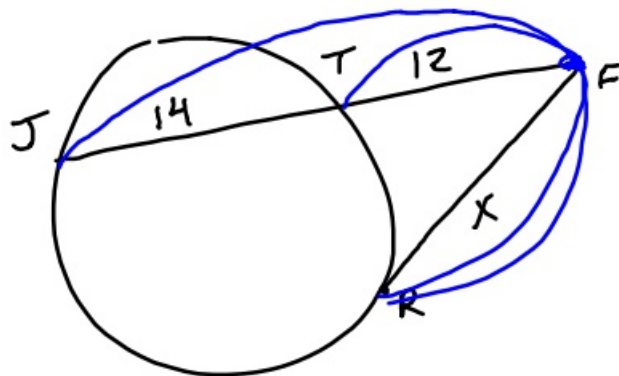


$$\widehat{XZ} = 120^\circ$$

$$\angle YXZ = 90^\circ$$

$$\angle XZY = ? \quad 30^\circ$$

⑥



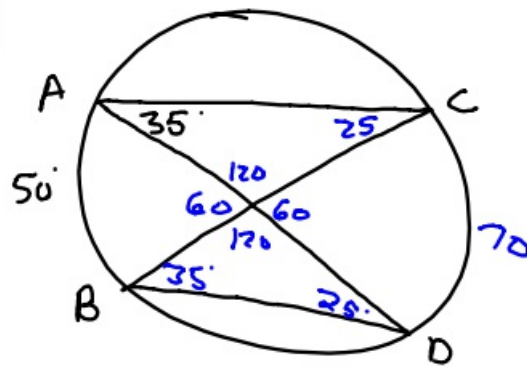
$$12 \cdot 26 = X \cdot X$$

$$\sqrt{X^2} = \sqrt{312}$$

$$X \approx 17$$

New Practice

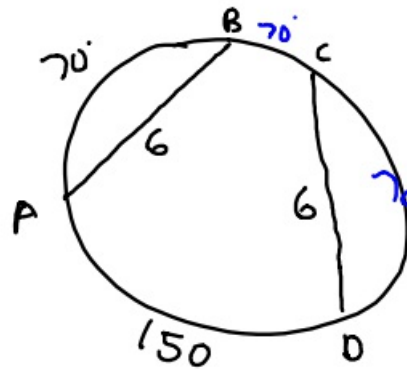
①



$$\angle CAD = 35^\circ$$

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

②

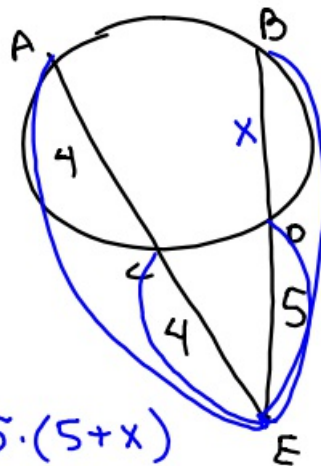


$$\widehat{AB} = 70^\circ$$

$$\widehat{AD} = 150^\circ$$

$$\widehat{BC} = ? \quad 70^\circ$$

③



$$EC = 4$$

$$ED = 5$$

$$AC = 4$$

$$BD = ?$$

$$4 \cdot 8 = 5 \cdot (5 + x)$$

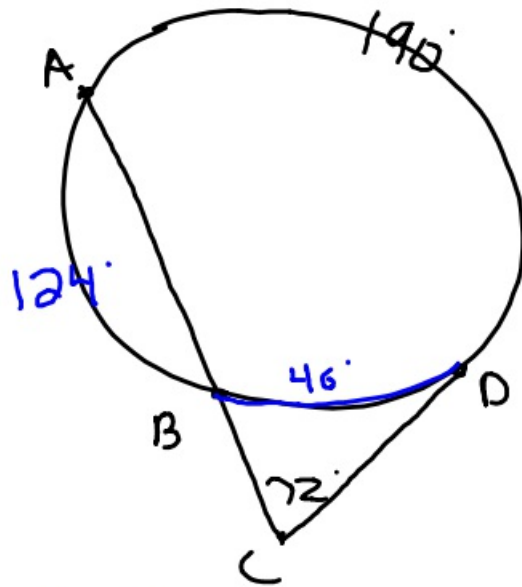
$$32 = 25 + 5x$$

$$\underline{-25 \quad -25}$$

$$7 = 5x$$

$$x = \frac{7}{5} (1.4)$$

④



$$\angle C = 72^\circ$$

$$\widehat{AD} = 190^\circ$$

$$\widehat{AB} = ?$$

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

$$2 \cdot 72 = \frac{1}{2} (190 - \widehat{BD})$$

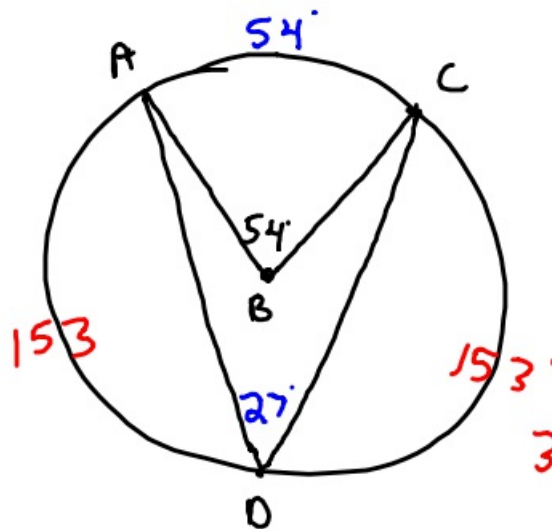
$$144 = 190 - \widehat{BD}$$

$$\begin{array}{r} -190 \\ -190 \end{array}$$

$$\hline -46 = -\widehat{BD}$$

$$\widehat{BD} = 46^\circ$$

⑤



OB

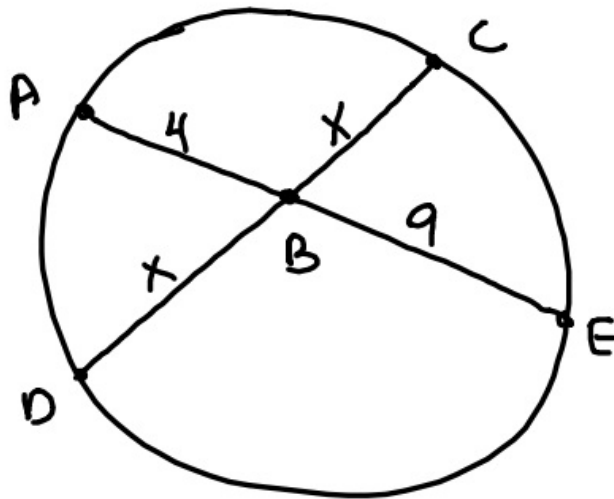
$$\angle ABC = 54^\circ$$

$$AD = CD$$

$$360 - 54 = \frac{306}{2}$$

$$153^\circ$$

6



B is midpoint of \overline{CD}

$$AB = 4$$

$$BE = 9$$

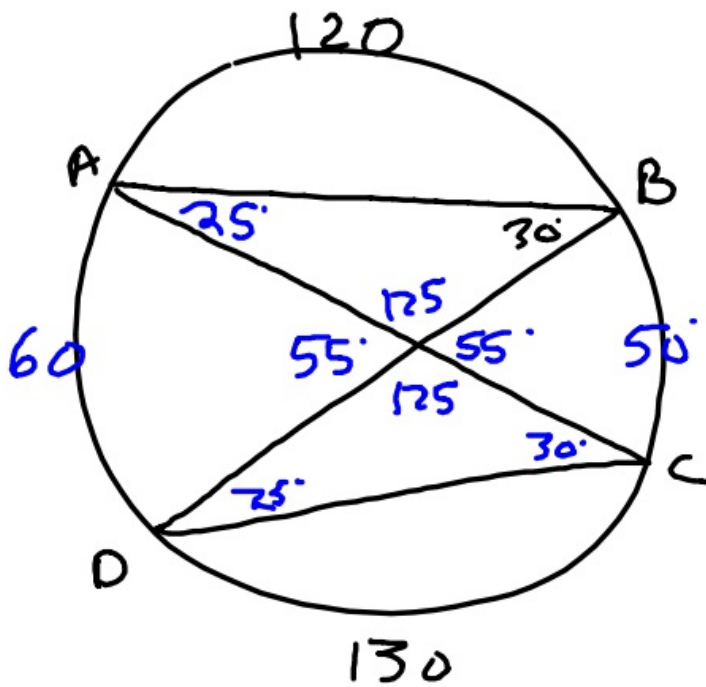
$$BD = ?$$

$$x \cdot x = 4 \cdot 9$$

$$x^2 = 36$$

$$x = 6$$

7



$$\widehat{AB} = 120^\circ$$

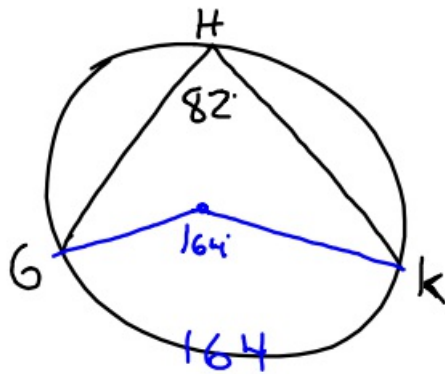
$$\widehat{DC} = 130^\circ$$

$$\angle ABD = 30^\circ$$

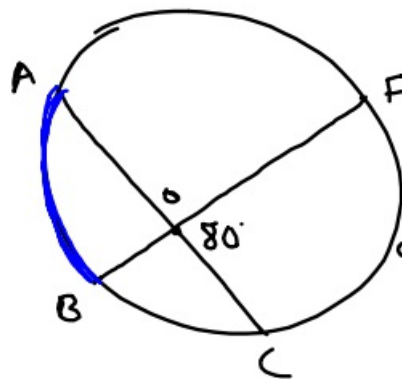
2-5-19 6th Geo

Ch 9 PT 2

②



①



$$\angle FOC = 80^\circ$$

$$\widehat{FC} = 90^\circ$$

$$\widehat{AB} = ?$$

$$\angle FOC = \frac{1}{2} (\widehat{FC} + \widehat{AB})$$

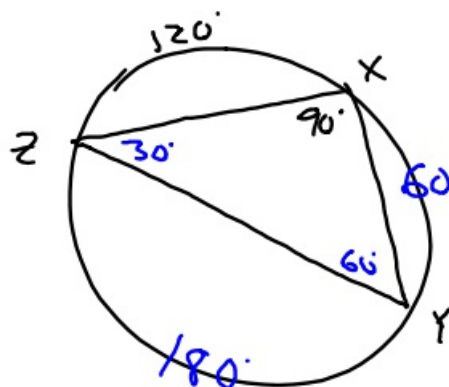
$$2 \cdot 80 = 2 \cdot \frac{1}{2} (90 + \widehat{AB})$$

$$160 = 90 + \widehat{AB}$$

$$\begin{array}{r} 160 = 90 + \widehat{AB} \\ -90 \quad -90 \\ \hline 70 = \widehat{AB} \end{array}$$

$$70 = \widehat{AB}$$

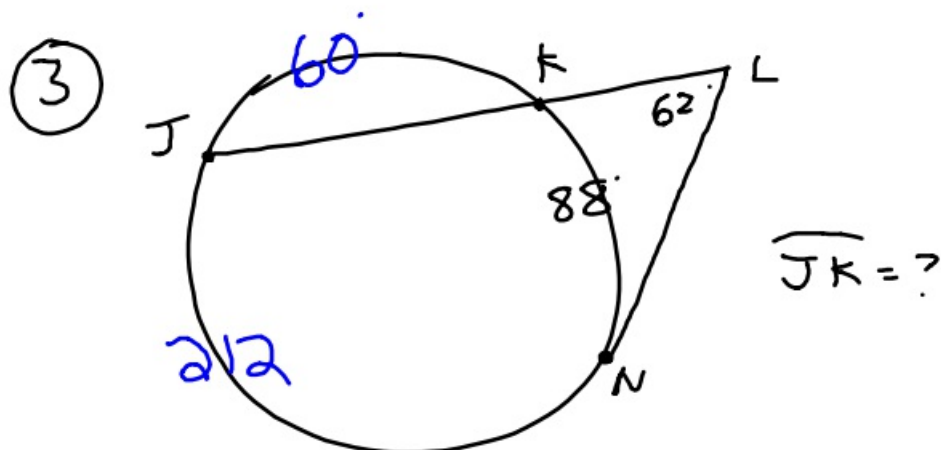
⑧



$$\widehat{XZ} = 120^\circ$$

$$\angle YXZ = 90^\circ$$

$$\angle XZY = ? \quad 30^\circ$$



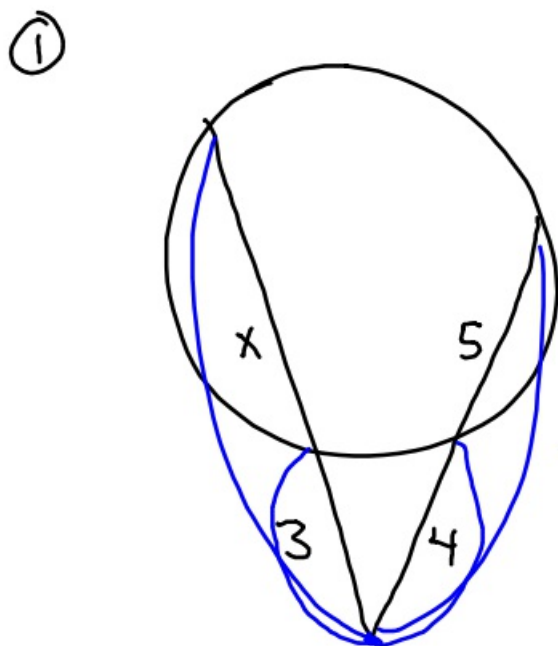
$$\angle KLN = \frac{1}{2}(\widehat{JN} - \widehat{KN})$$

$$2 \cdot 62 = \frac{1}{2}(\widehat{JN} - 88)$$

$$124 = \widehat{JN} - 88$$

$$\begin{array}{r} 124 \\ +88 \\ \hline 212 = \widehat{JN} \end{array}$$

New



$$3 \cdot (3+x) = 4 \cdot 9$$

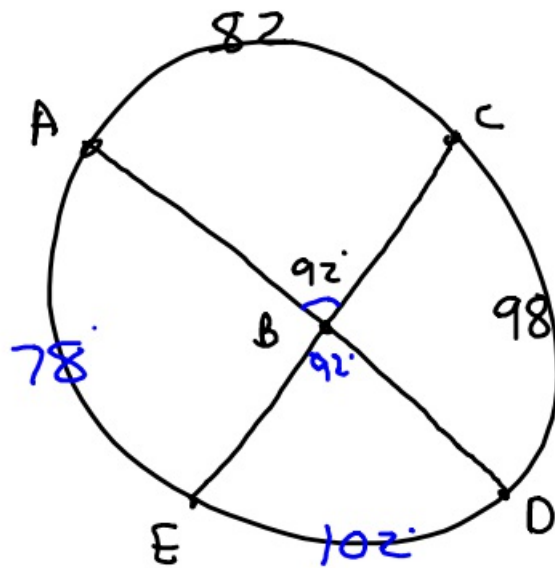
$$9 + 3x = 36$$

$$\begin{array}{r} 9 + 3x = 36 \\ -9 \quad -9 \\ \hline 3x = 27 \\ x = 9 \end{array}$$

$$3x = 27$$

$$x = 9$$

(2)



$$\widehat{AC} = 82^\circ$$

$$\widehat{CD} = 98^\circ$$

$$\angle ABC = 92^\circ$$

$$\widehat{AE} = ?$$

$$\angle ABC = \frac{1}{2} (\widehat{AC} + \widehat{ED})$$

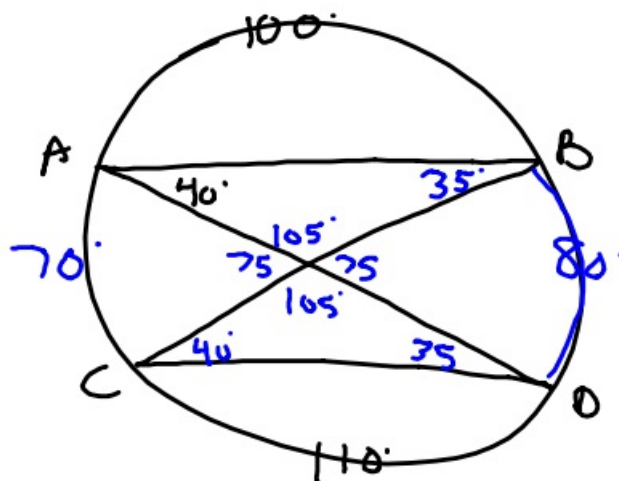
$$2 \cdot 92 = \frac{1}{2} (82 + \widehat{ED})$$

$$184 = 82 + \widehat{ED}$$

$$\underline{-82 \quad -82}$$

$$102 = \widehat{ED}$$

(3)

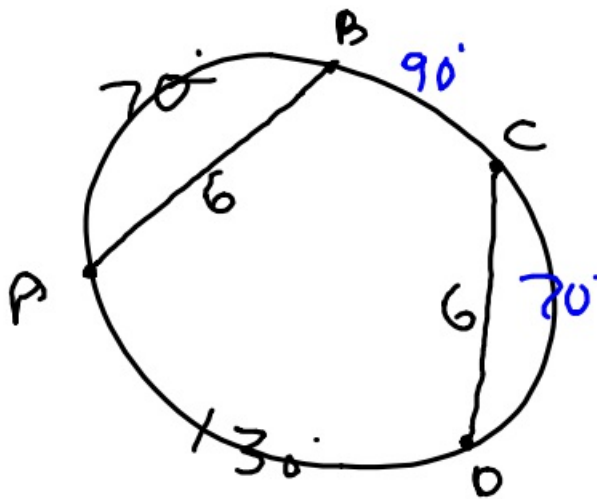


$$\widehat{AB} = 100^\circ$$

$$\angle BAO = 40^\circ$$

$$\widehat{CD} = 110^\circ$$

④

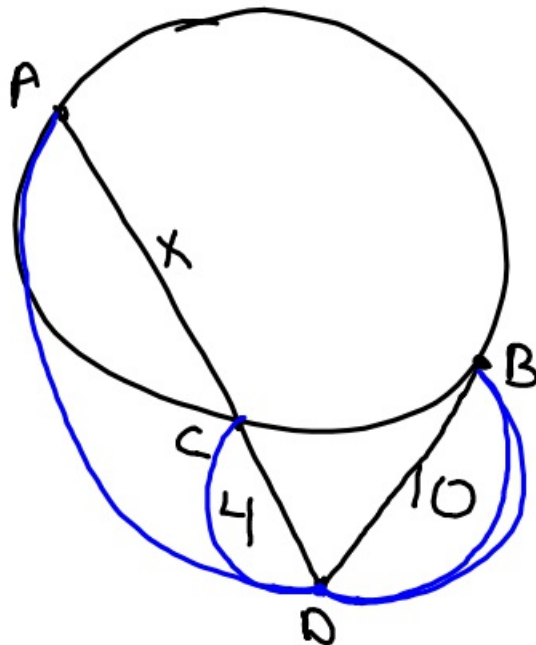


$$\widehat{AB} = 70^\circ$$

$$\widehat{AD} = 130^\circ$$

$$\widehat{BC} = ? \quad 90^\circ$$

⑤



$$BD = 10$$

$$CD = 4$$

$$AC = ?$$

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

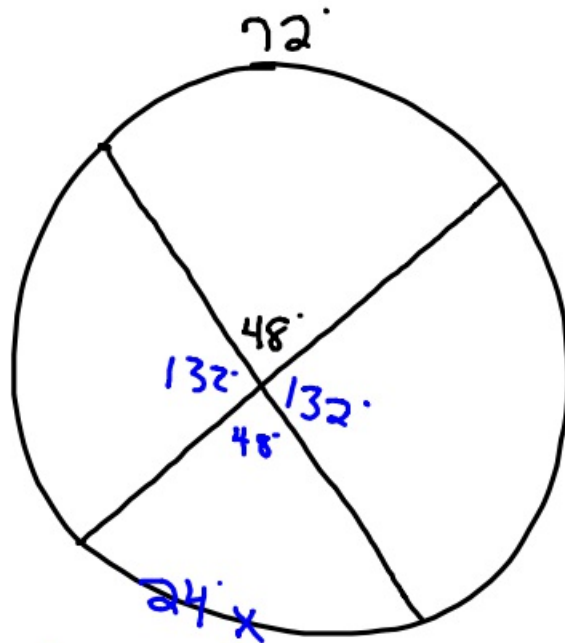
$$16 + 4x = 100$$

$$\begin{array}{r} -16 \\ 16 + 4x = 100 \\ \hline \end{array}$$

$$4x = 84$$

$$x = 21$$

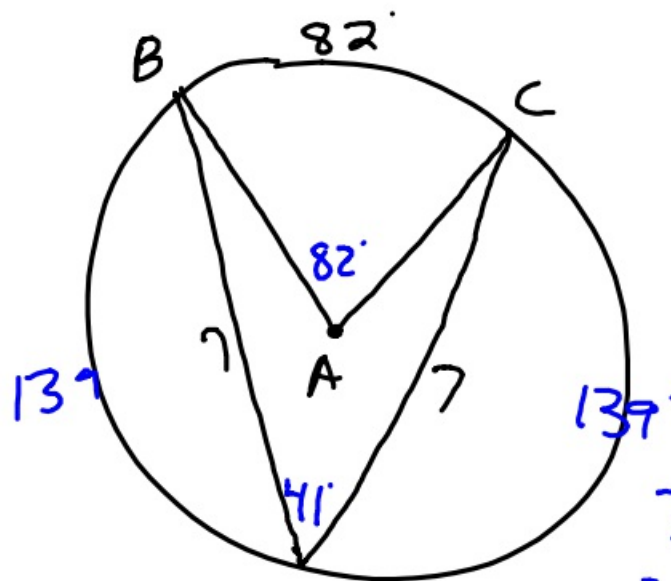
6



$$2 \cdot 48 = \frac{1}{2}(72 + x)$$

$$\begin{array}{r} 96 = 72 + x \\ -72 \quad -72 \\ \hline 24 = x \end{array}$$

7



⊙ A

$$\widehat{BC} = 82^\circ$$

$$\begin{array}{r} 360 \\ - 82 \\ \hline 278 \\ \hline 2} = 139^\circ \end{array}$$