

Unit 5A:
intro to circles
stuff

circle = 360°

Minor Arc: two letters,
less than 180°
 \widehat{CB} , \widehat{AB}

Major Arc: three letters,
more than 180°
 \widehat{ACB}

Semicircle: $= 180^\circ$
the line goes through
the center
 \widehat{AC} \widehat{ABC}

Central Angle: 3 letters

- $\angle AEB$
- $\angle BEC$
- $\angle AEC$

* the center must
be the middle
letter

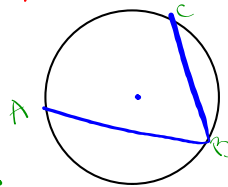
central angles are equal
to their corresponding arc

$$\angle AEB = \widehat{AB}$$

$$\angle AEB = 115^\circ \quad \widehat{AB} = 115^\circ$$

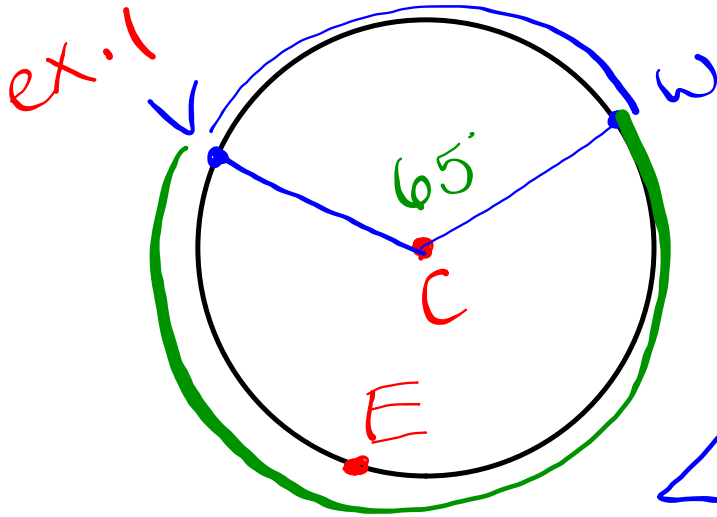
Inscribed
Angles : 3 letters.

an angle that touches
the outside



$$\angle ABC = \frac{1}{2} \widehat{AC}$$

$$2\angle ABC = \widehat{AC}$$



$$\angle VCW = 65^\circ$$

$$\widehat{VEW} =$$

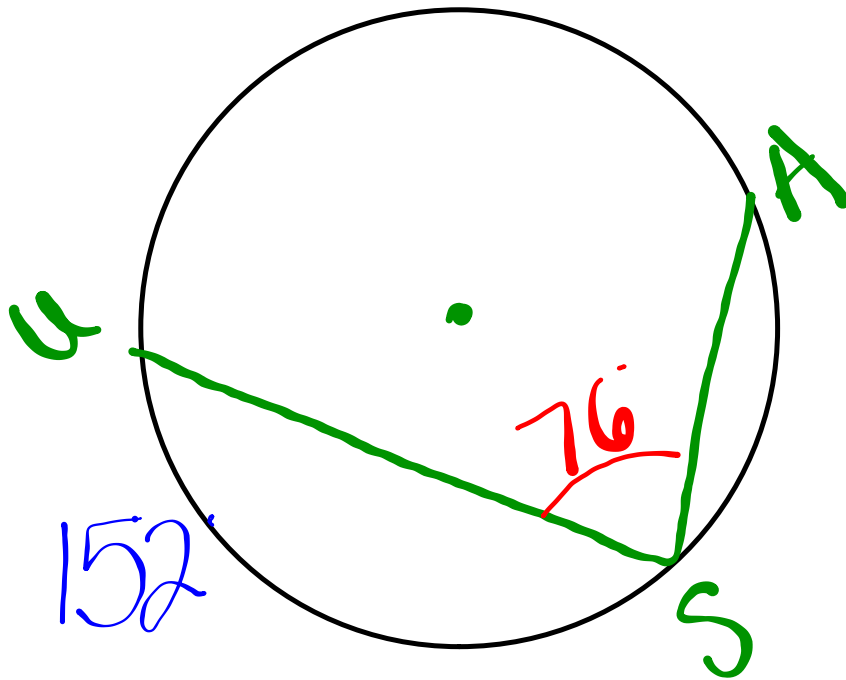
$$360 - 65 =$$

$$295^\circ$$

$$\widehat{VW} = 65^\circ$$

ex. 2

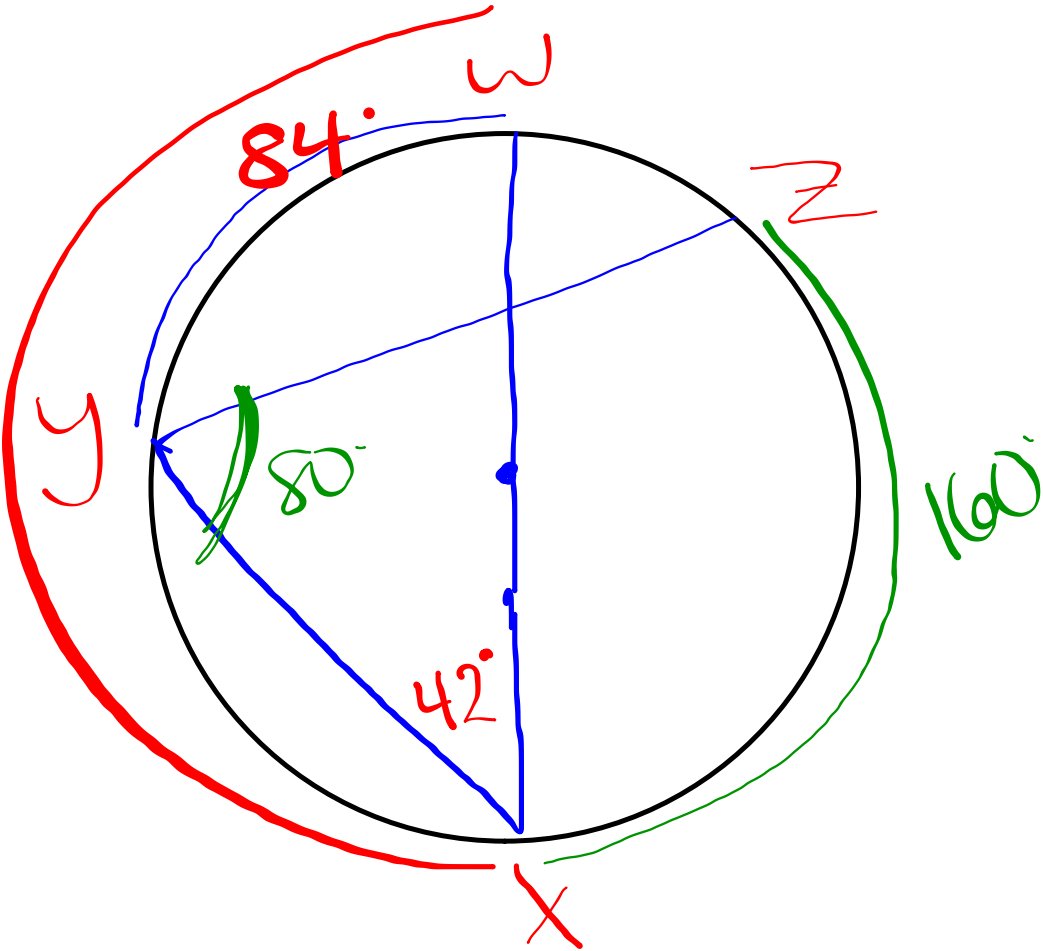
? angle < arc



$$\widehat{UA} = 152$$

$$\widehat{USA} = 360 - 152$$

$$208$$



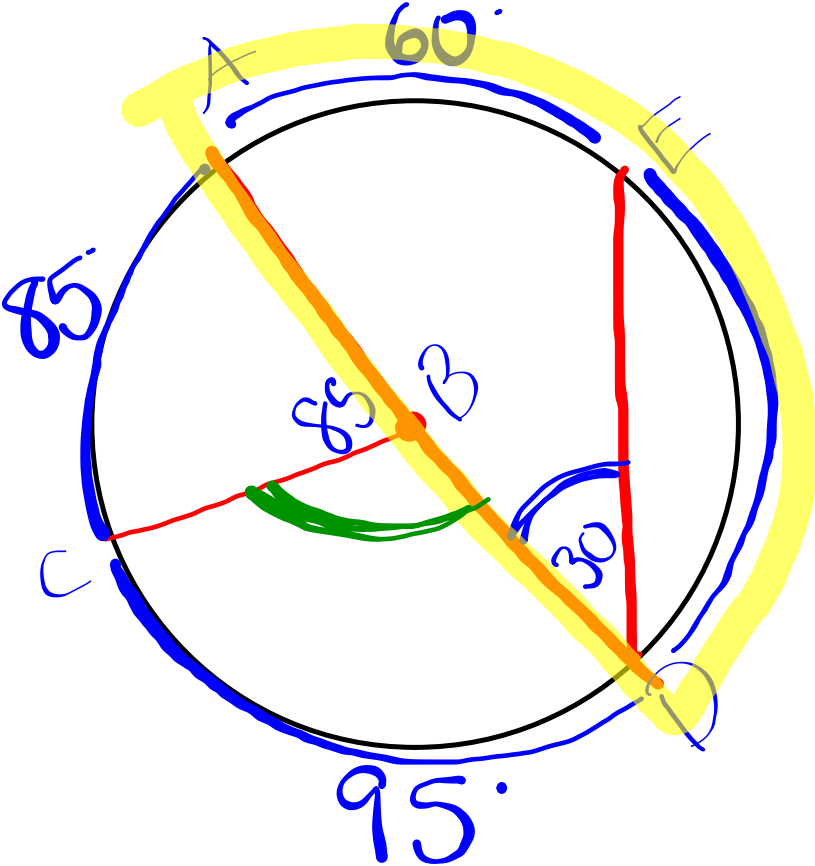
$$\widehat{wy} = 84^\circ$$

$$\widehat{yx} = 96^\circ$$

$$\widehat{xz} = 160^\circ$$

$$\angle wxy = 42^\circ$$

$$\angle xyz = \frac{160}{2} = 80$$



$$\widehat{AC} = 85^\circ$$

$$\widehat{CD} = 180 - 85 = 95$$

$$\widehat{AE} = 30 \cdot 2 = 60^\circ$$

$$\angle CBD = 95^\circ$$

$$\widehat{ED} = 180 - 60 = 120^\circ$$