

Arcs and Chords

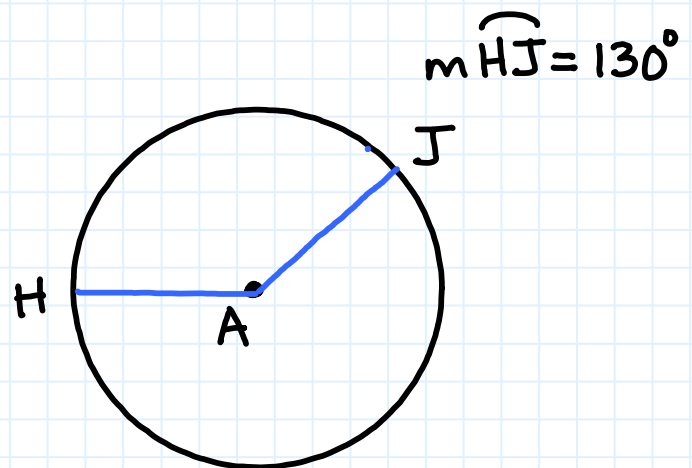
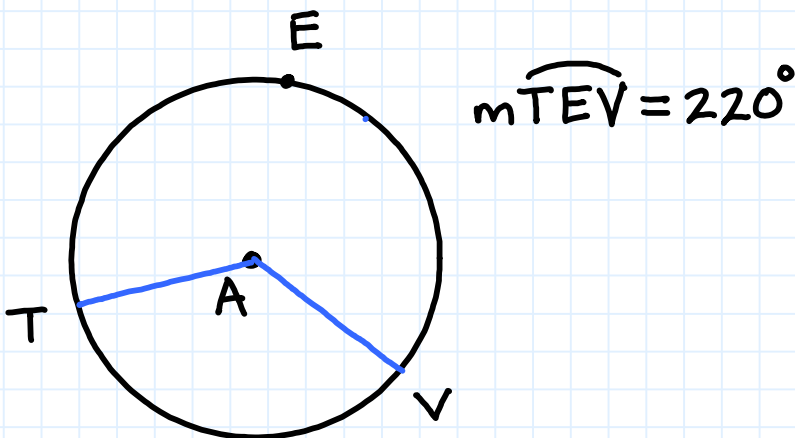
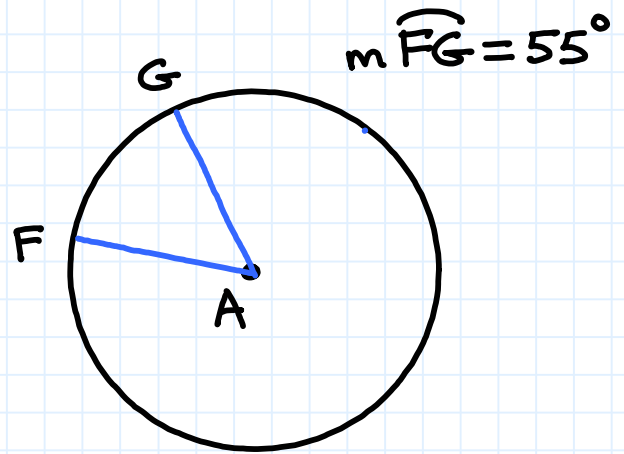
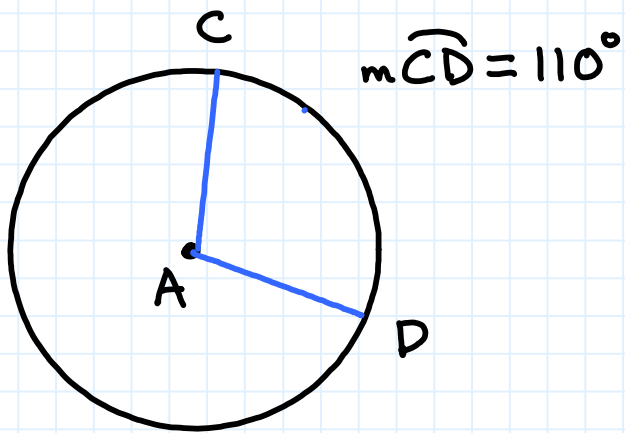


Overview of problems



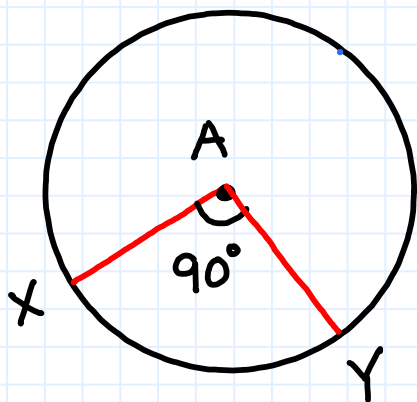
Example Set: A

Find the measure of the central angle

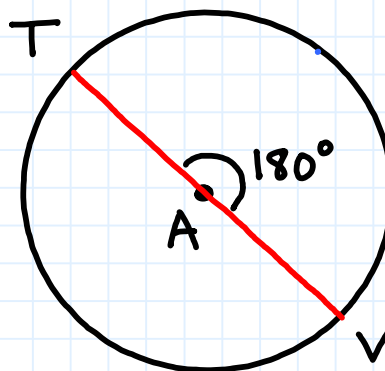


Find the measure of the arc

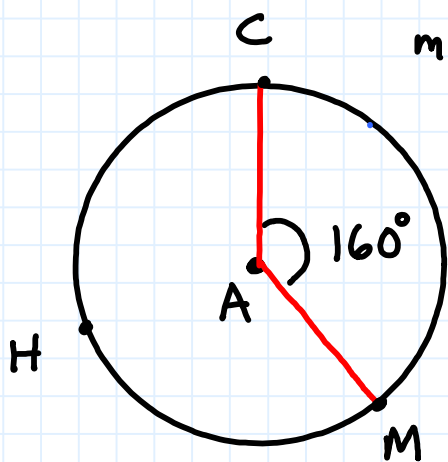
$$m\widehat{XY} =$$



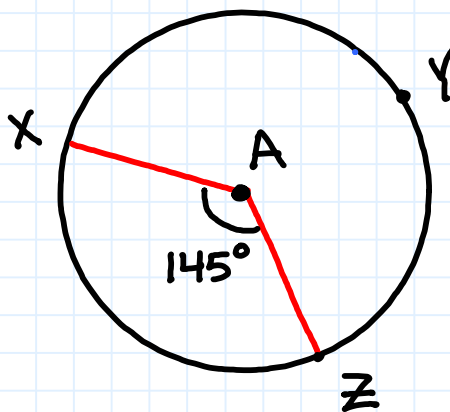
$$m\widehat{TV} =$$



$$m\widehat{CHM} =$$



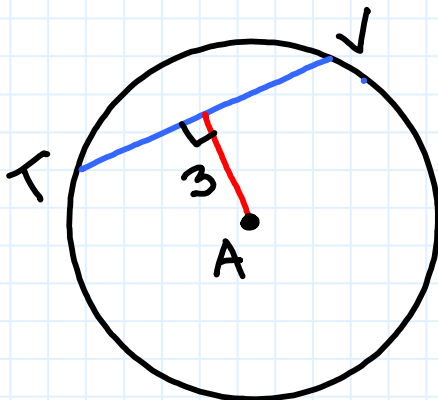
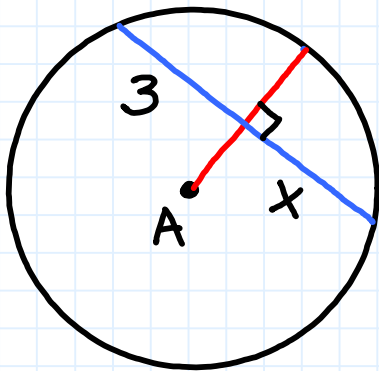
$$m\widehat{XYZ} =$$





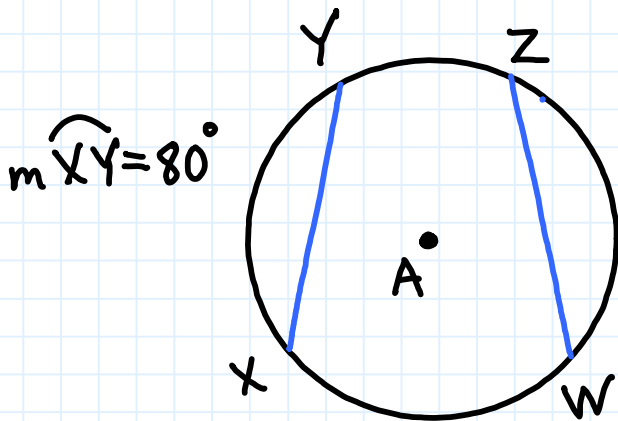
Example Set: B

Given that **A** is the center of the circle answer the following questions.



$$\overline{AV} =$$

$$\overline{TV} = 10$$



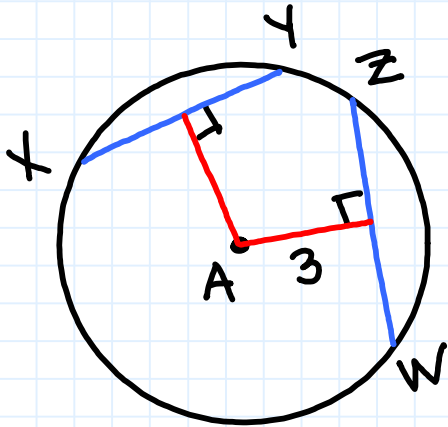
$$\overline{XY} = \overline{ZW}$$

$$m\widehat{ZW} =$$



Example Set: C

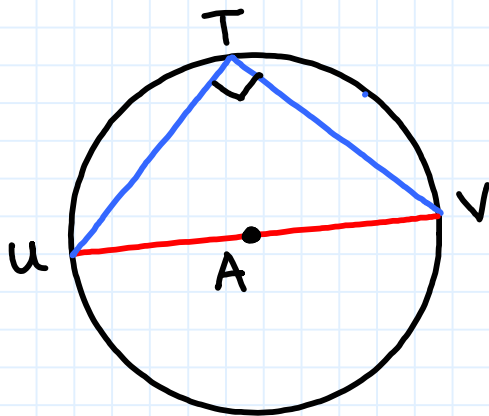
Given that **A** is the center of the circle answer the following questions.



$$\overline{AY} =$$

$$m\widehat{XY} = m\widehat{ZW},$$

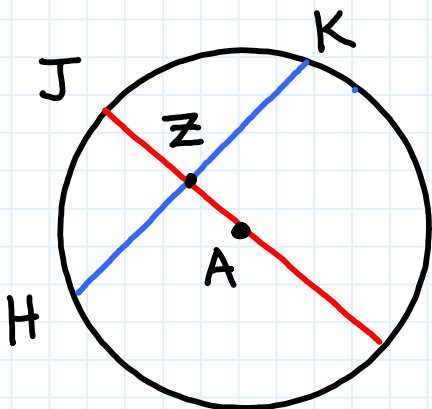
$$ZW = 8$$



$$\overline{UV} = 10, m\widehat{UT} = m\widehat{TV}$$

$$\angle TUA \cong \angle TVA,$$

$$TV =$$



$$\overline{AZ} = 2, m\widehat{HJ} = m\widehat{JK}$$

$$\overline{HZ} = 6$$

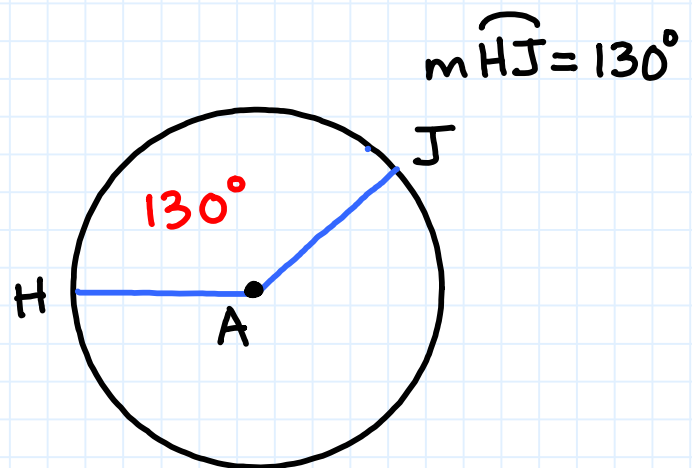
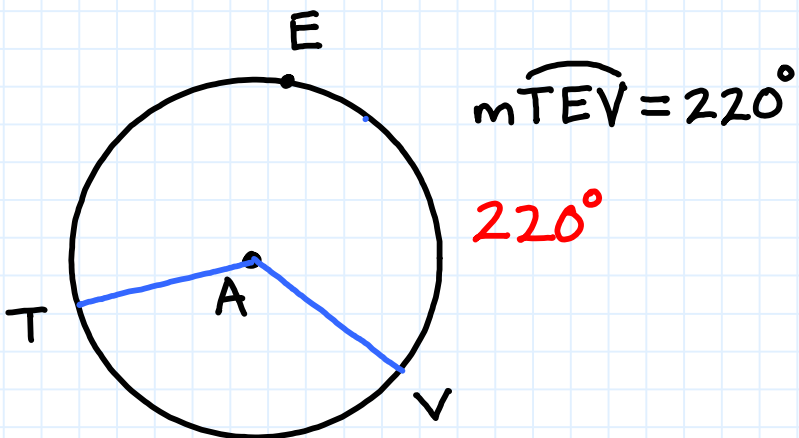
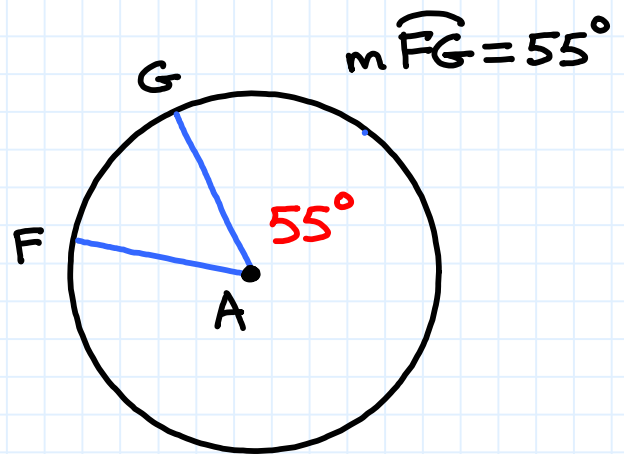
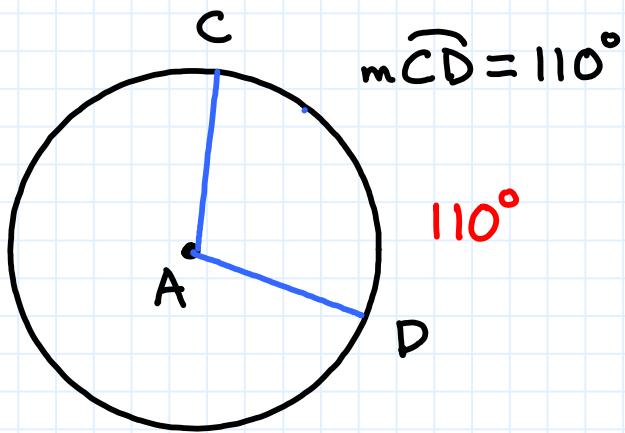
$$\overline{AK} =$$

Overview of problems- KEY



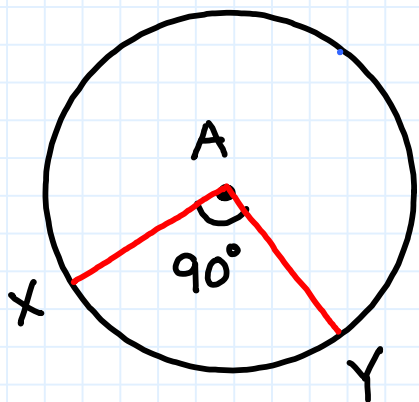
Example Set: A

Find the measure of the central angle

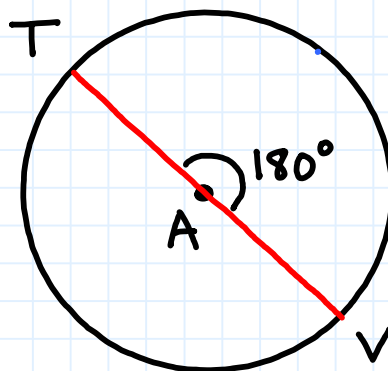


Find the measure of the arc

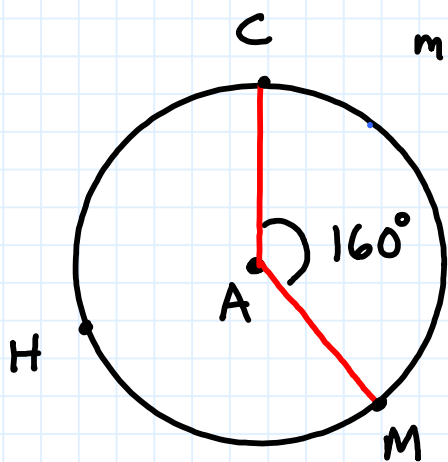
$$m\widehat{XY} = 90^\circ$$



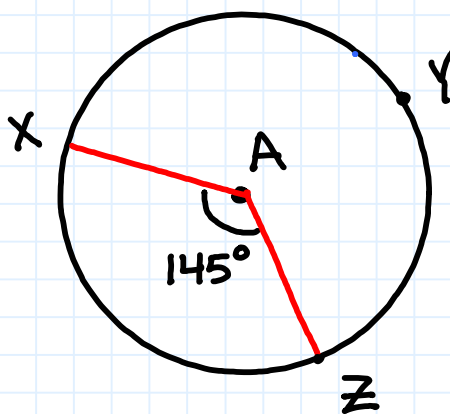
$$m\widehat{TV} = 180^\circ$$



$$m\widehat{CHM} = 200^\circ$$



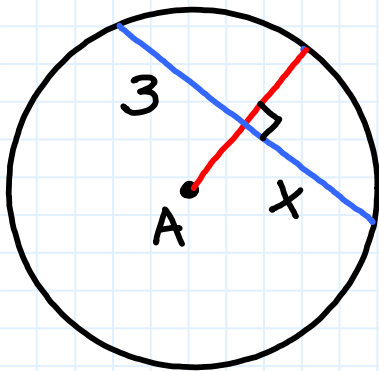
$$m\widehat{XYZ} = 215^\circ$$



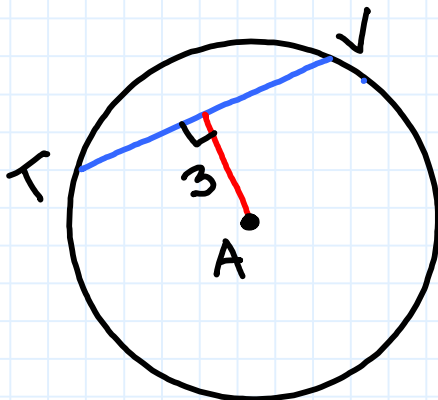


Example Set: B

Given that **A** is the center of the circle answer the following questions.

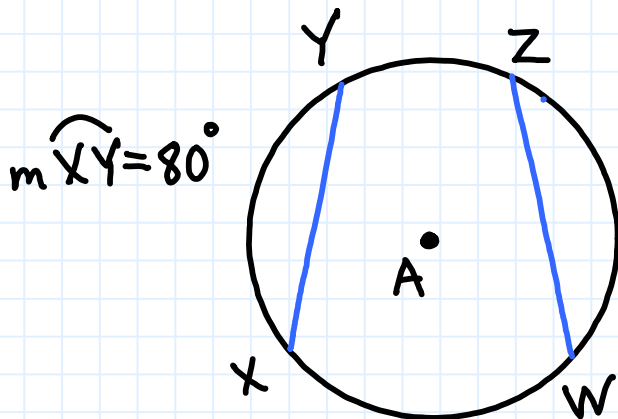


$$x=3$$



$$\overline{AV} = \sqrt{34}$$

$$\overline{TV} = 10$$



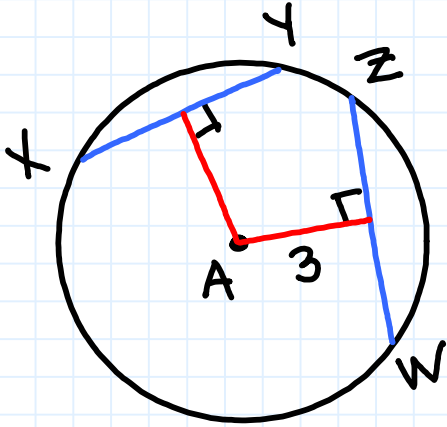
$$\overline{XY} = \overline{ZW}$$

$$m\widehat{ZW} = 80^\circ$$

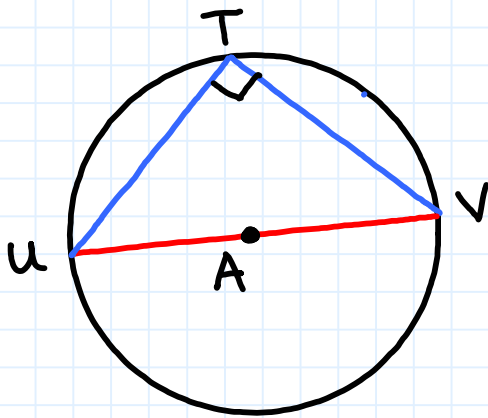


Example Set: C

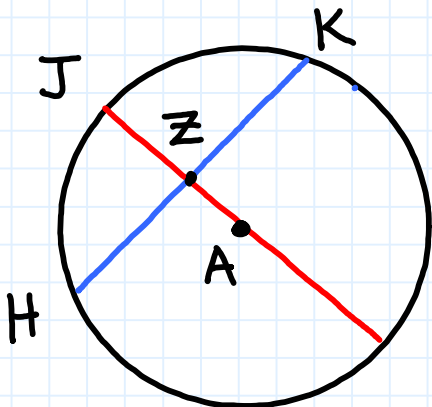
Given that **A** is the center of the circle answer the following questions.



$$\begin{aligned} \overline{AY} &= 5 \\ m\widehat{XY} &= m\widehat{ZW}, \\ \overline{ZW} &= 8 \end{aligned}$$



$$\begin{aligned} \overline{UV} &= 10, \quad m\widehat{UT} = m\widehat{TV} \\ \angle TUA &\cong \angle TVA, \\ \overline{TV} &= 5\sqrt{2} \end{aligned}$$



$$\begin{aligned} \overline{AZ} &= 2, \quad m\widehat{HJ} = m\widehat{JK} \\ \overline{HZ} &= 6 \\ \overline{AK} &= 2\sqrt{10} \end{aligned}$$