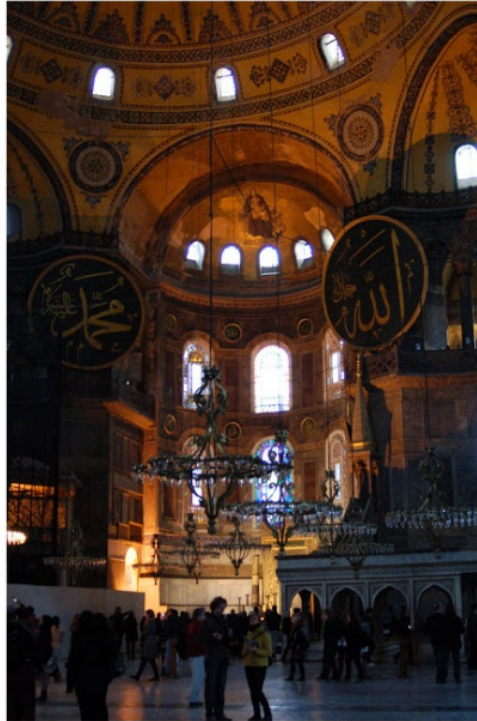




Pantheon



Chora Church,
11th century CE

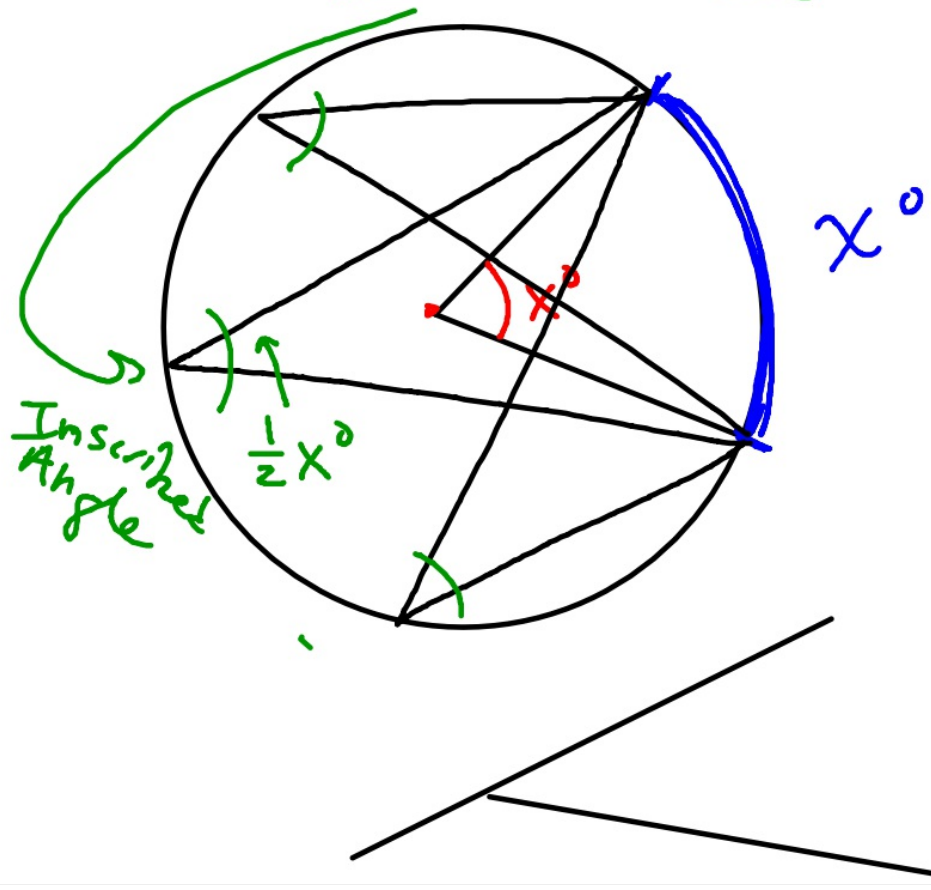


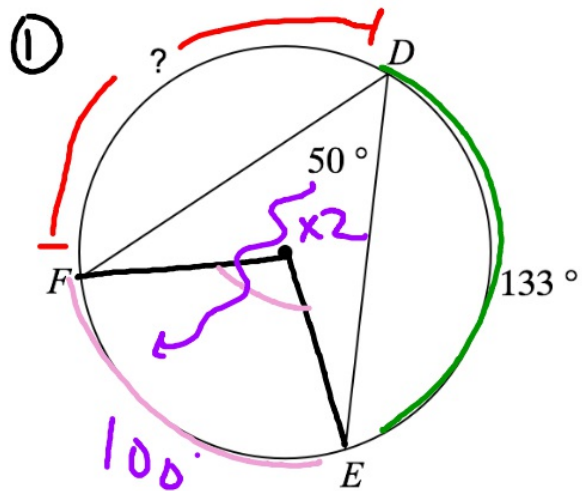
Haghia Sophia
537 CE



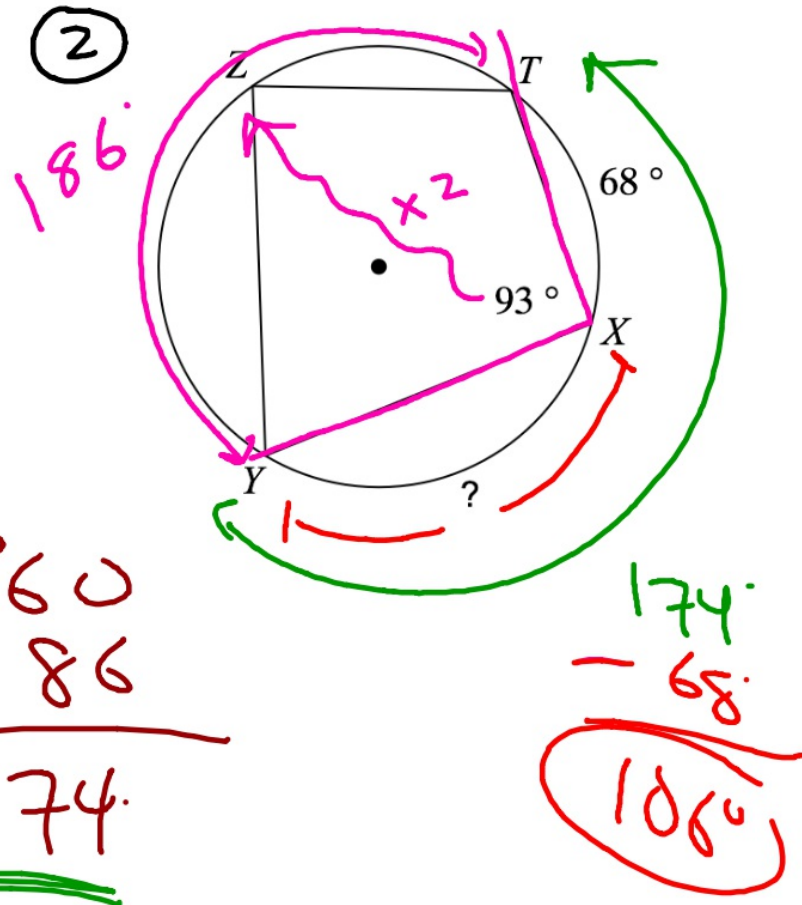
Suleymaniye Mosque
16th century CE

Central vs Inscribed Angle





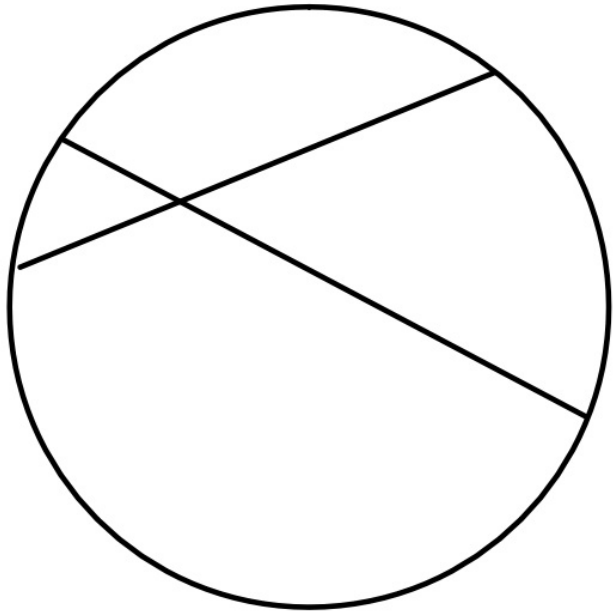
$$360^\circ - 133^\circ - 100^\circ = 127^\circ$$



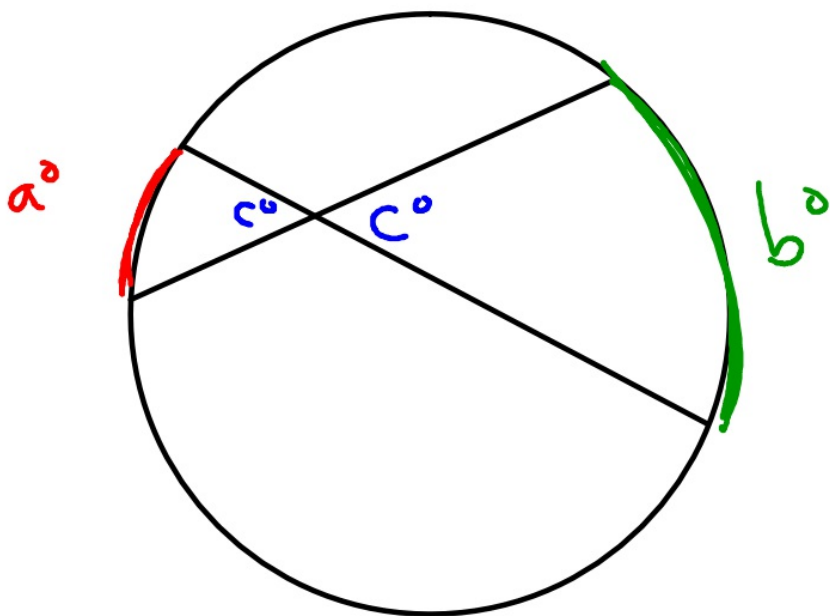
$$\begin{array}{r} 360 \\ - 186 \\ \hline 174 \end{array}$$

$$\begin{array}{r} 174^\circ \\ - 68^\circ \\ \hline 106^\circ \end{array}$$

Chord Theorems

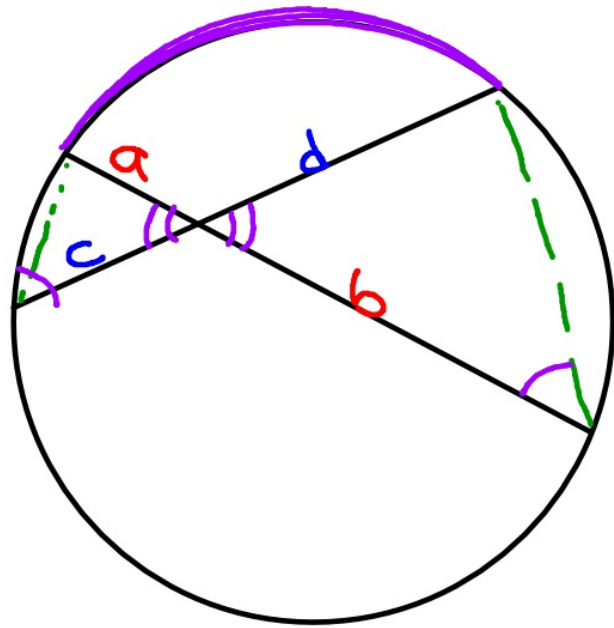


Angle/Arcs Formed by Chords



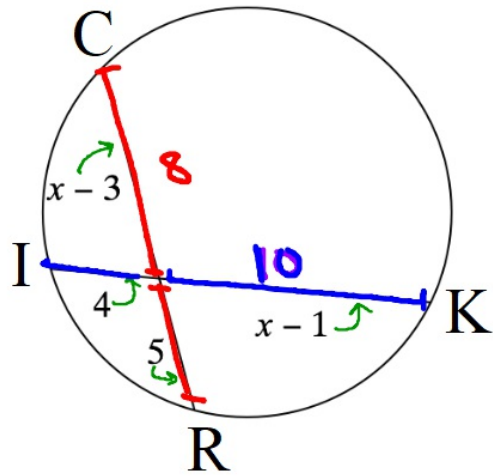
$$c^\circ = \frac{a^\circ + b^\circ}{2}$$

Lengths



$$\frac{a}{c} \neq \frac{d}{b}$$
$$a \cdot b = c \cdot d$$

Find the length of each chord.



$$CR = 13$$

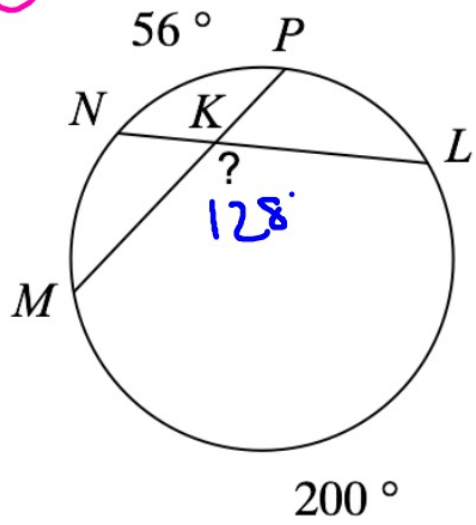
$$IK = 14$$

$$(x-3)(5) = 4(x-1)$$

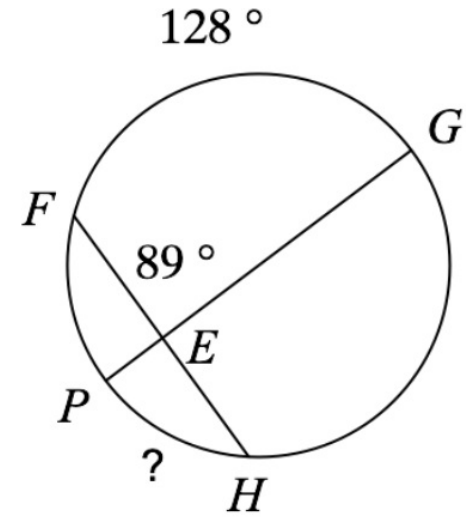
$$\begin{array}{r} 5x - 15 = 4x - 4 \\ \underline{-4x} \qquad \underline{-4x} \end{array}$$

$$\begin{array}{r} x - 15 = -4 \\ \underline{+15} \qquad \underline{+15} \\ x = 11 \end{array}$$

①



②



HW
1-12

HW
handout