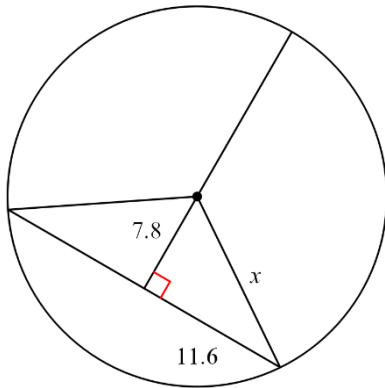


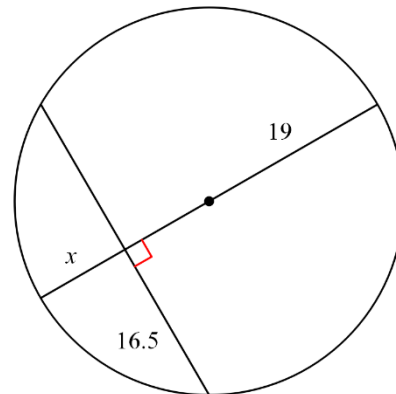
11.4 ~ Chords

Use the Diameter-Chord Theorem to find the value of x .

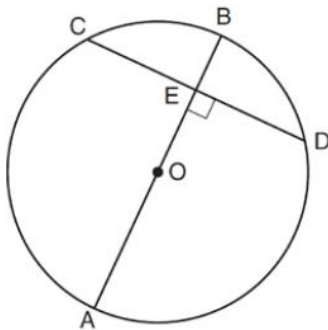
1.



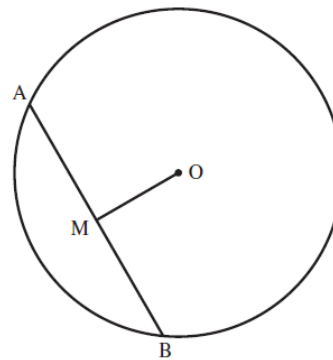
2.



3. In $\odot O$, $\overline{AB} \perp \overline{CD}$ at E . If $AO = 10$ & $BE = 4$, find the length of \overline{CE} .

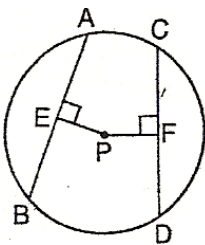


4. In $\odot O$, $AB = 34$. M is the midpoint of AB . $OM = 8$. Find the radius of $\odot O$.

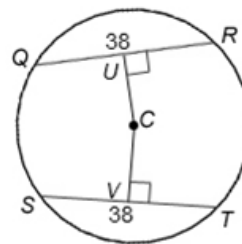


Use the Equidistant Chord Theorem to set up and solve an equation to find the value of x .

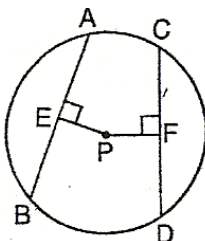
5. In $\odot P$, find CD if $\overline{PE} \cong \overline{PF}$, $AE = x + 4$, and $CD = 3x - 2$.



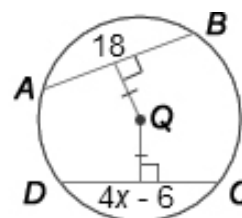
6. In the diagram of $\odot C$, $QR = ST = 38$, $CU = 4x$, & $CV = 8x - 16$. Find CU .



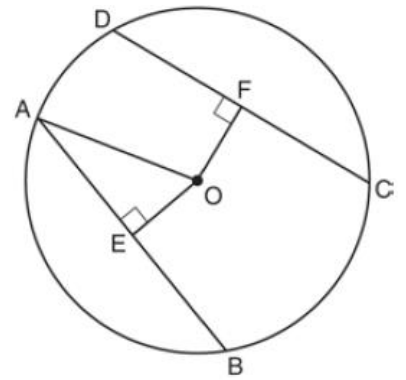
7. In $\odot P$, find CF if $\overline{PE} \cong \overline{PF}$, $AB = 7x + 13$, & $CD = 10x - 8$.



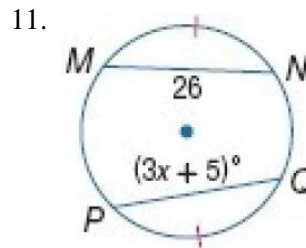
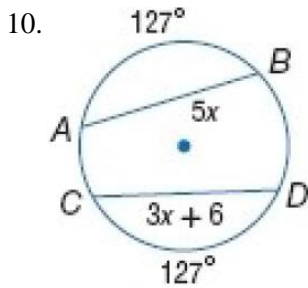
8. Find the value of x in $\odot Q$.



9. In $\odot O$, chords \overline{AB} & \overline{CD} and radius \overline{OA} are drawn, such that $\overline{AB} \cong \overline{CD}$, $\overline{OE} \perp \overline{AB}$, $\overline{OF} \perp \overline{CD}$, $OF = 16$, $CF = y + 10$, & $CD = 4y - 20$. Determine the length of \overline{DF} & \overline{OA} .



Use the Congruent Chord – Congruent Arc Theorem to set up and solve an equation to find the value of x .



Use the Segment-Chord Theorem to set up and solve equation to find the value of x .

