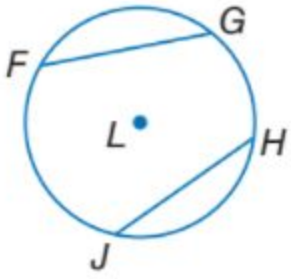
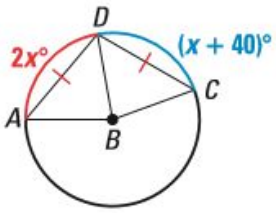
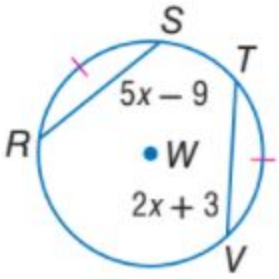
Recall: What is a chord of a circle?

Theorem 10.2	In the same circle, or in congruent circles, two minor arcs are congruent if and only if their corresponding chords are congruent.	

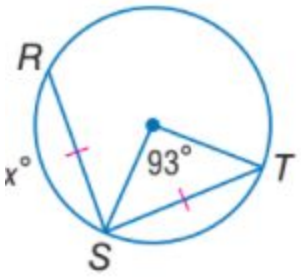
1. Find the measure of $\overset{\frown}{AD}$.



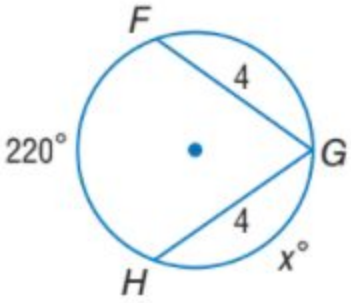
2. In $\odot W$, $\overset{\frown}{RS} \cong \overset{\frown}{TV}$. Find RS.



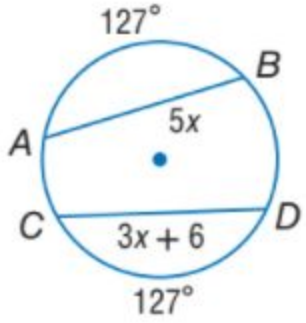
3. Find the value of x

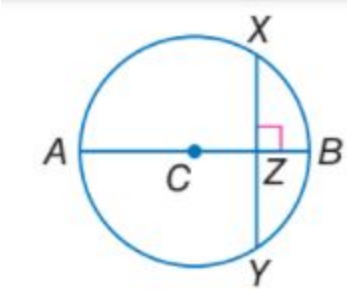
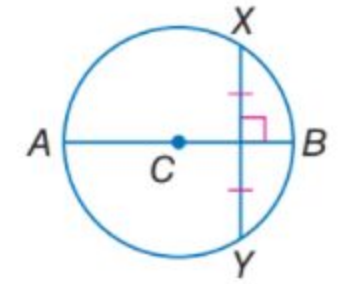


4. Find the value of x



5. Find the value of x

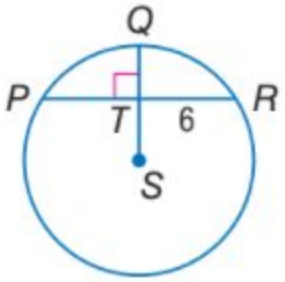


Theorem 10.3	If a diameter of a circle is perpendicular to a chord, then the diameter bisects the chord and its arc	
Theorem 10.4	If one chord is a perpendicular bisector of another chord, then the first chord is a diameter.	

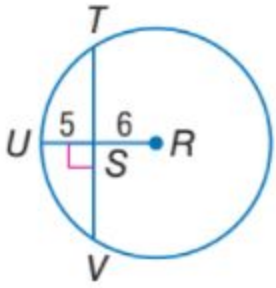
6. In $\odot S$:

   a. $m\overset{\frown}{PQR} = 98°$. Find $m\overset{\frown}{PQ}$.

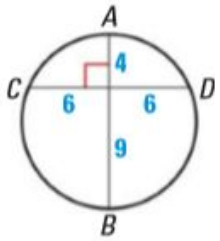
   b. Find PR

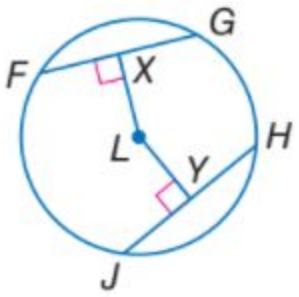


7. In $\odot R$, Find TV. Round to the nearest hundredth.

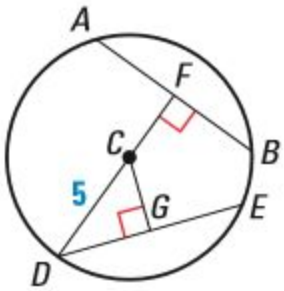


8. Determine whether $\overline{AB}$ is a diameter of the circle.



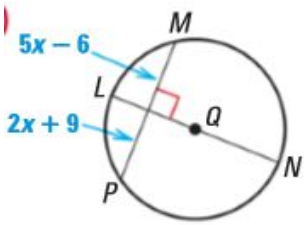
Theorem 10.5	In the same circle, or in congruent circles, two chords are congruent if and only if they are equidistant from the center.	

9. $AB = 8,\ DE = 8$, and $CD = 5$. Find CF

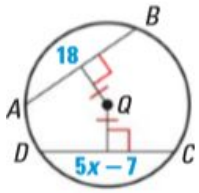


10. Find the value of x in $\odot Q$. Provide a theorem or postulate to justify your reasoning.

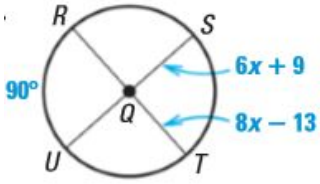
a.



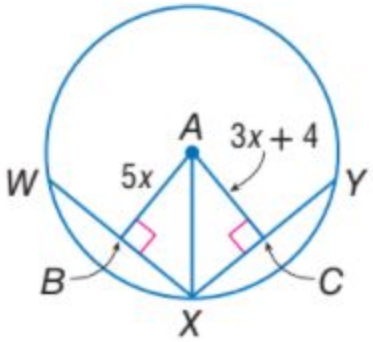
b.



c.

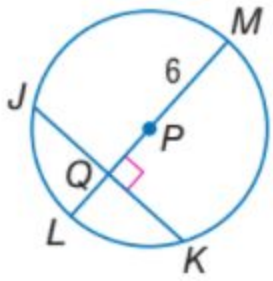


10. In $\odot A$, $WX = XY = 22$. Find AB



11. In $\odot P$, $JK = 10$ and $m\overset{\frown}{JLK} = 134$. Find each measure.

a. $m\overset{\frown}{JL}$



b. PQ