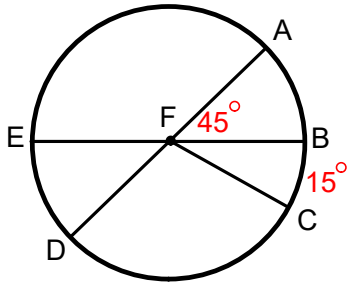
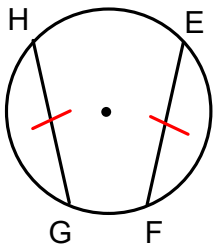
Bellwork

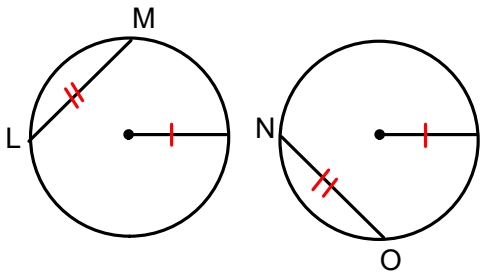
1. What is the name of the circle?
2. Name a diameter.
3. Name a radius.
4. Name 2 congruent arcs.
5. Name a minor arc.
6. Name a major arc.
7. Name a semicircle.
8. Find the measure of all arcs.



* Two arcs are congruent arcs if their corresponding chords are congruent and they are arcs of the same circle or congruent circles.

Name two congruent arcs in each figure.



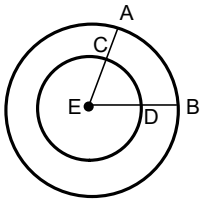


Ch 11 Day 3 Chords

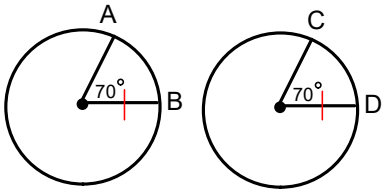
In each problem tell whether: a) $\overset{\frown}{AB} \cong \overset{\frown}{CD}$

b) $m\overset{\frown}{AB} = m\overset{\frown}{CD}$

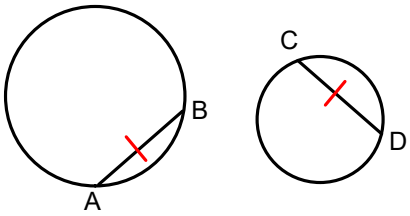
1.



2.

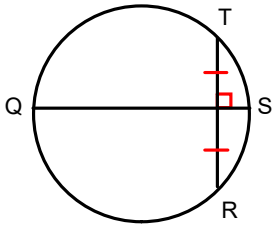


3.

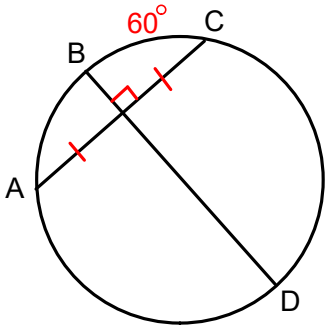


* **If one chord is a perpendicular bisector of another chord, then the first chord is a diameter.**

If $\overline{QS}$ is a perpendicular bisector of $\overline{TR}$, then $\overline{QS}$ is a diameter of the circle.

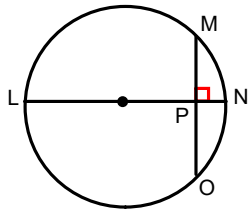


1. Find the measure of each arc.

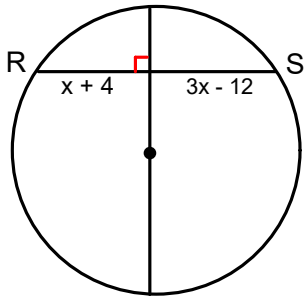


* **If a diameter of a circle is perpendicular to a chord, then the diameter bisects the chord and its arc.**

If $\overline{LN} \perp \overline{MO}$, then $\overline{PM}$ $\overline{PO}$ and $\overset{\frown}{MN}$ $\overset{\frown}{NO}$

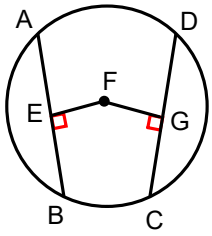


2. Find RS.

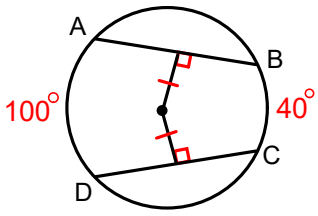


* **In the same circle or congruent circles two chords are congruent if and only if they are equidistant from the center.**

$\overline{AB} \cong \overline{CD}$ if and only if $\overline{EF} \cong \overline{FG}$.

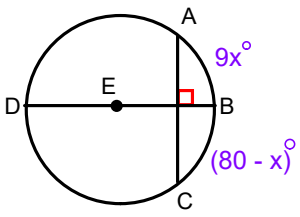


3. Find the measure of $\overset{\frown}{AB}$.



Ch 11 Day 3 Chords

Find the measure of each indicated arc in the diagram.



1. $\overset{\frown}{AB}$

2. $\overset{\frown}{AC}$

3. $\overset{\frown}{CD}$

4. $\overset{\frown}{ADC}$

If a chord is 3 in. from the center of a circle and is 8 in. long, find the diameter of the circle.