

Study Guide and Intervention

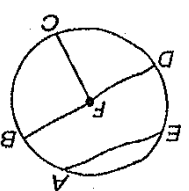
Circles and Circumference

of Circles A circle consists of all points in a plane that are a given distance, called the **radius**, from a given point called the **center**.

A segment or line can intersect a circle in several ways.

- A segment with endpoints that are the center of the circle and a point of the circle is a **radius**.
- A segment with endpoints that lie on the circle is a **chord**.
- A chord that contains the circle's center is a **diameter**.

chord: \overline{AE} , \overline{BD}
 radius: \overline{FB} , \overline{FC} , \overline{FD}
 diameter: \overline{BD}



Example

- Name the circle.
- The name of the circle is $\odot O$.

- Name radii of the circle.

\overline{AO} , \overline{BO} , \overline{CO} , and \overline{DO} are radii.

- Name chords of the circle.

\overline{AB} and \overline{CD} are chords.

- Name a diameter of the circle.

\overline{AB} is a diameter.

Exercises

- Name the circle.

- Name radii of the circle.

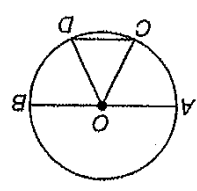
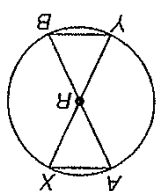
- Name chords of the circle.

- Name diameters of the circle.

- Find AR if AB is 18 millimeters.

- Find AR and AB if RY is 10 inches.

- Is $\overline{AB} \cong \overline{XY}$? Explain.



NAME _____ DATE _____ PERIOD _____