

# Guided Practice 9.3

NAME \_\_\_\_\_

Module 9 Characteristics of Geometric Shapes  
Lesson 3 Circles

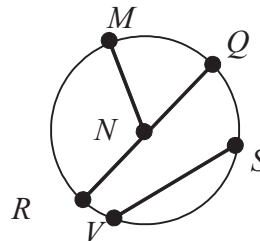
## Set 1

- 1 Identify the radii, the diameter, and the chords shown in Circle  $N$ .

Radii:  $\overline{NM}, \overline{NR}, \overline{NQ}$

Diameter:  $\overline{QR}$

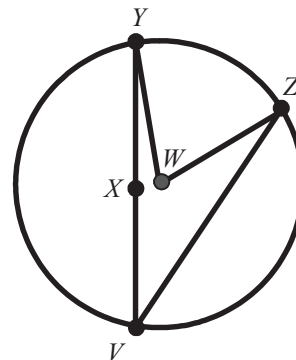
Chords:  $\overline{QR}, \overline{VS}$



- 2 Identify the radii, the diameter, and the chords shown in Circle  $W$ .

Radii:  $\overline{WY}$  and  $\overline{WZ}$

Chords:  $\overline{VY}$  and  $\overline{VZ}$



- 3 The diameter of a compact disc is 120 millimeters. Find the length of the radius.

$$\begin{aligned} d &= 2r \\ 120 &= 2r \\ 120 \div 2 &= r \\ 120 \div 2 &= 60 \end{aligned}$$

The radius of the compact disc is 60 mm.

4 Tell whether each statement is always true, sometimes true, or never true.

- Chords in the same circle are congruent. **Sometimes**
- A diameter passes through the center of a circle. **Always**

### Set 2

1 The diameter of a coin is 35 mm. What is the circumference? Round to the nearest millimeter.

$$\begin{aligned}C &= \pi d \\C &\approx 3.14(35) \\C &\approx 109.9\end{aligned}$$

**The coin's circumference is about 110 mm.**

2 The radius of the lens of a magnifying glass is 38 millimeters. What is the circumference? Round to the nearest millimeter.

$$\begin{aligned}C &= \pi d \\C &\approx 3.14(76) \\C &\approx 238.64\end{aligned}$$

**The circumference is about 239 mm.**

3 The radius of a circle is  $6\frac{1}{4}$  inches. What is the circumference? Round to the nearest inch.

$$\begin{aligned}d &= 2r \\d &= 2\left(\frac{25}{4}\right) = \frac{50}{4} = \frac{25}{2}\end{aligned}$$

$$\begin{aligned}C &= \pi d \\C &\approx \frac{11}{7} \times \frac{25}{2} = \frac{275}{7} = 39\frac{2}{7}\end{aligned}$$

**The circumference of the circle is about 39 inches.**