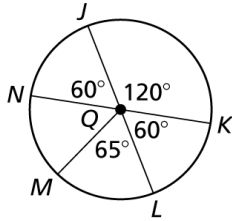


# 10.2

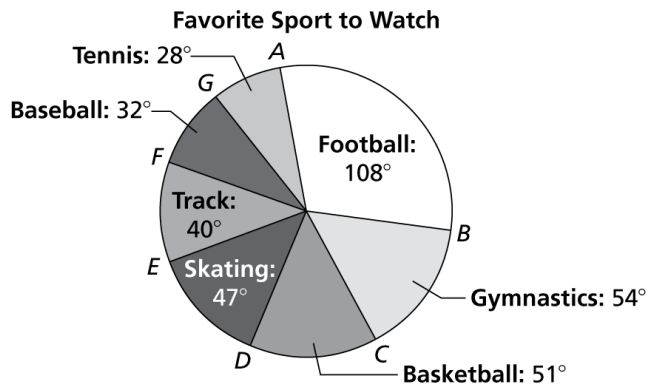
## Practice A

In Exercises 1–4, identify the given arc as a *major arc*, *minor arc*, or *semicircle*. Then find the measure of the arc.

1.  $\overset{\frown}{NM}$
2.  $\overset{\frown}{JM}$
3.  $\overset{\frown}{NEK}$
4.  $\overset{\frown}{LMN}$



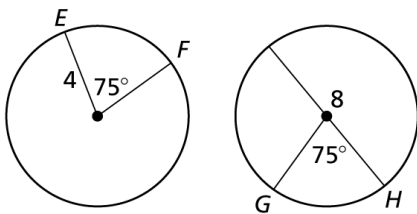
5. A recent survey asked high school girls to name the sport they like to watch the most. The results are shown in the circle graph. Find each indicated measure.



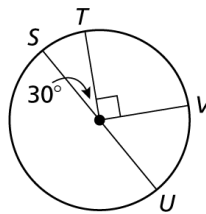
- a.  $m\overset{\frown}{FG}$
- b.  $m\overset{\frown}{EGB}$
- c.  $m\overset{\frown}{DB}$
- d.  $m\overset{\frown}{ACE}$

In Exercises 6 and 7, tell whether the given arcs are congruent. Explain why or why not.

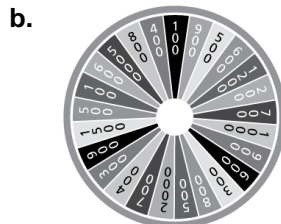
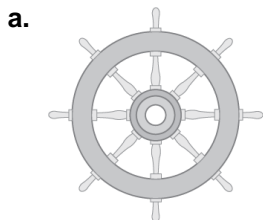
6.  $\overset{\frown}{EF}$  and  $\overset{\frown}{GH}$



7.  $\overset{\frown}{ST}$  and  $\overset{\frown}{UV}$



8. Each wheel shown is divided into congruent sections. Find the measure of each arc.

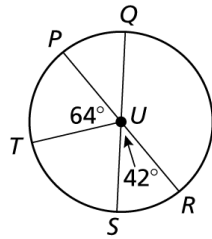


# 10.2

## Practice B

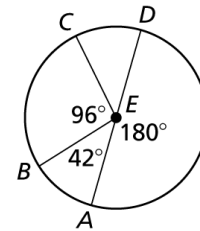
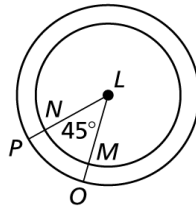
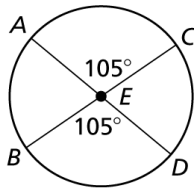
In Exercises 1–4, identify the given arc as a *major arc*, *minor arc*, or *semicircle*. Then find the measure of the arc of  $\epsilon U$  if  $\overline{SQ}$  and  $\overline{PR}$  are diameters.

1.  $\overset{\frown}{QRS}$
2.  $\overset{\frown}{TS}$
3.  $\overset{\frown}{PTS}$
4.  $\overset{\frown}{PQ}$

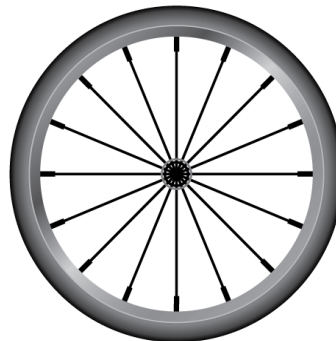


In Exercises 5–7, tell whether the given arcs are congruent. Explain why or why not.

5.  $\overset{\frown}{AC}$  and  $\overset{\frown}{BD}$
6.  $\overset{\frown}{NM}$  and  $\overset{\frown}{OP}$
7.  $\overset{\frown}{AB}$  and  $\overset{\frown}{CD}$

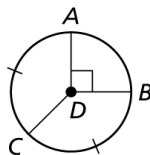


8. The spokes on a bicycle wheel divide the wheel into congruent sections. What is the measure of each arc in this circle?

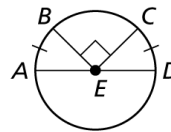


9. Find the measure of each arc.

- a.  $\overset{\frown}{AC}$



- b.  $\overset{\frown}{DAB}$



10. A water sprinkler covers the area shown in the figure. It moves through the covered area at a rate of about  $5^\circ$  per second.

- a. What is the measure of the arc covered by the sprinkler?
- b. When the sprinkler starts at the far left position, how long will it take for the sprinkler to reach the far right position?

