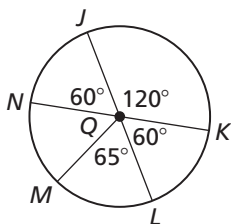


# 10.2

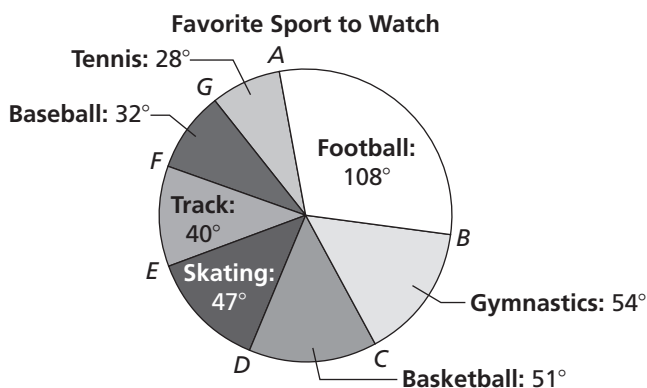
## Practice A

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

1.  $\widehat{NM}$
2.  $\widehat{JLM}$
3.  $\widehat{NLK}$
4.  $\widehat{LMN}$



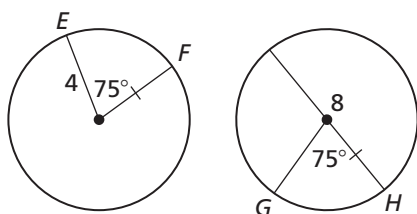
5. A recent survey asked high school girls to name the sport they like to watch the most. The results are shown in the circle graph. Find each indicated measure.



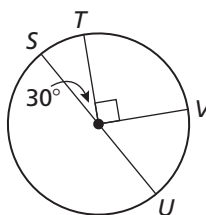
- a.  $m\widehat{FG}$
- b.  $m\widehat{EGB}$
- c.  $m\widehat{DB}$
- d.  $m\widehat{ACE}$

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

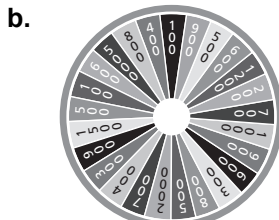
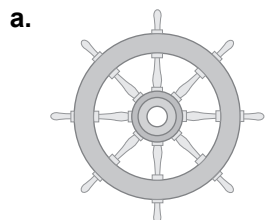
6.  $\widehat{EF}$  and  $\widehat{GH}$



7.  $\widehat{STV}$  and  $\widehat{UVT}$



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

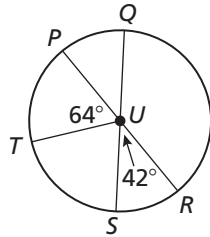


# 10.2

## Practice B

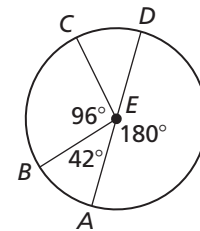
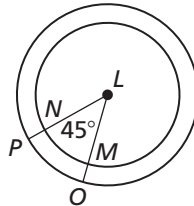
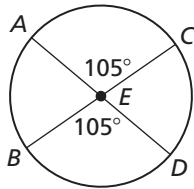
In Exercises 1–4, identify the given arc as a *major arc*, *minor arc*, or *semicircle*. Then find the measure of the arc of  $\odot U$  if  $\overline{SQ}$  and  $\overline{PR}$  are diameters.

1.  $\widehat{QRS}$
2.  $\widehat{TS}$
3.  $\widehat{TPS}$
4.  $\widehat{PQ}$

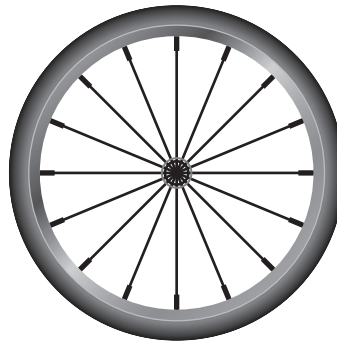


In Exercises 5–7, tell whether the given arcs are congruent. Explain why or why not.

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

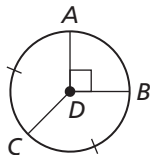


8. The spokes on a bicycle wheel divide the wheel into congruent sections. What is the measure of each arc in this circle?

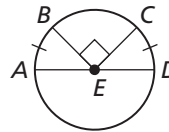


9. Find the measure of each arc.

a.  $\widehat{AC}$



b.  $\widehat{DAB}$



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?

