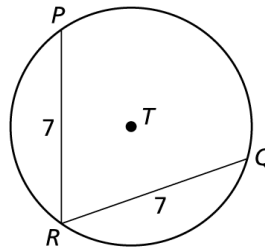


# 10.3

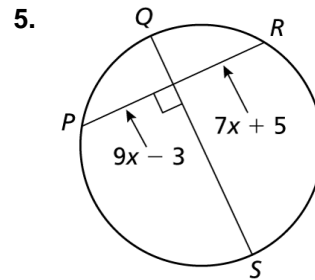
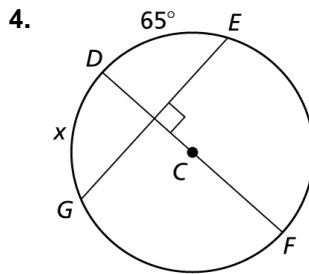
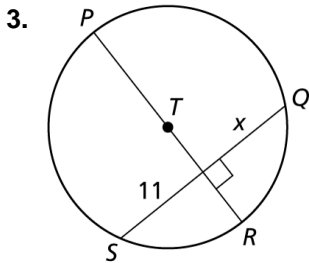
## Practice A

In Exercises 1 and 2, use the diagram of  $\odot T$ .

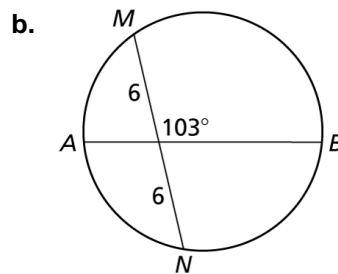
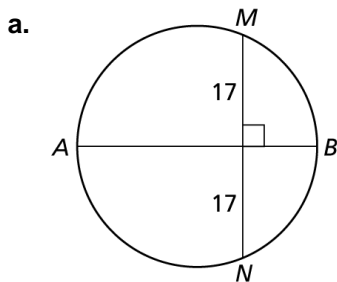
- If  $m\widehat{PQ} = 130^\circ$ , find  $m\widehat{RQ}$ .
- If  $m\widehat{PR} = 100^\circ$ , find  $m\widehat{PQ}$ .



In Exercises 3–5, find the value of  $x$ .

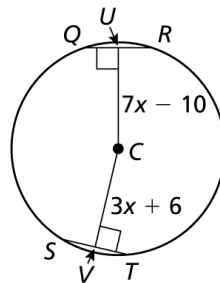


6. Determine whether  $\overline{AB}$  is a diameter of each circle. Explain your reasoning.



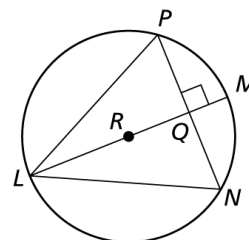
In Exercises 7–9, use the diagram to find the given length.

- $CU$
- $UR$
- the radius of  $\odot C$



10. In the diagram of  $\odot U$ , which congruence relation is *not* necessarily true?

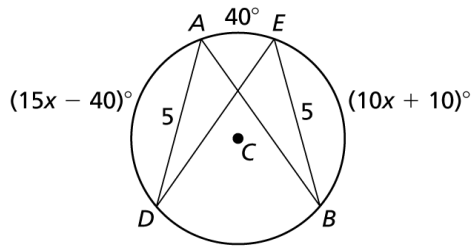
- A.  $\overline{PQ} \cong \overline{QN}$       B.  $\overline{NL} \cong \overline{LP}$   
 C.  $\overline{MN} \cong \overline{MP}$       D.  $\widehat{PN} \cong \widehat{PL}$



# 10.3

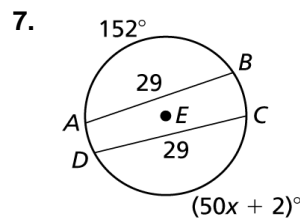
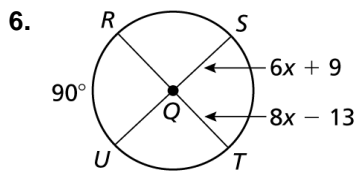
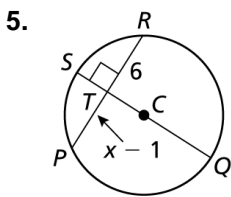
## Practice B

In Exercises 1–4, use the diagram of  $\odot C$ .

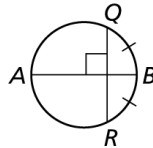


1. Explain why  $\overline{AD} \cong \overline{BE}$ .
2. Find the value of  $x$ .
3. Find  $m\widehat{AD}$  and  $m\widehat{BE}$ .
4. Find  $m\widehat{BD}$ .

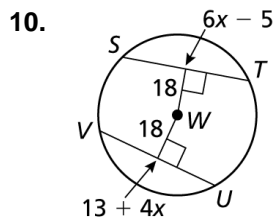
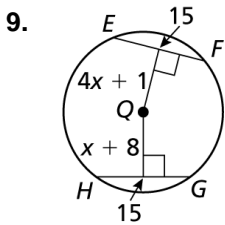
In Exercises 5–7, find the value of  $x$ .



8. Determine whether  $\overline{AB}$  is a diameter of the circle. Explain your reasoning.



In Exercises 9 and 10, find the radius of  $\odot C$ .

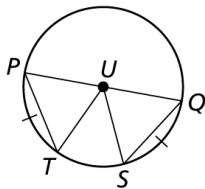


11. Copy and complete the proof.

**Given:**  $\overline{PQ}$  is a diameter of  $\odot U$ .

$$\overline{PT} \cong \overline{QS}$$

**Prove:**  $\triangle PUT \cong \triangle QUS$



STATEMENTS	REASONS
1. $\overline{PQ}$ is a diameter of $\odot U$ .	1. _____
2. _____	2. Congruent Corresponding Chords Theorem (Thm. 10.6)
3. $\overline{UP} \cong \overline{UQ} \cong \overline{UT} \cong \overline{US}$	3. _____
4. $\triangle PUT \cong \triangle QUS$	4. _____

12. Briefly explain what other congruence theorem you could use to prove that  $\triangle PUT \cong \triangle QUS$  in Exercise 11.