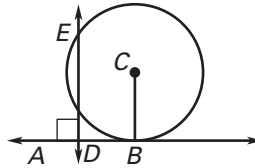
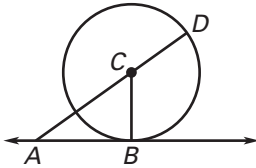


**Practice A**

For use with pages 594–600

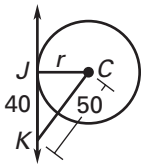
In Exercises 1–3, match the words and the symbols with the theorem statement.

1. If a line is tangent to a circle, then it is perpendicular to the radius drawn at the point of tangency.
2. In a plane, if a line is perpendicular to a radius of a circle at its endpoint on the circle, then the line is tangent to the circle.
3. If two segments from the same point outside a circle are tangent to the circle, then they are congruent.
4. In the diagram below,  $\overleftrightarrow{AB}$  is tangent to  $\odot C$  at point  $B$ . Name a right angle.
5. In the diagram below,  $\overleftrightarrow{AB} \perp \overline{CB}$ . Name a line that is tangent to  $\odot C$ .
- A. If  $\overline{SR}$  and  $\overline{ST}$  are tangent to  $\odot P$  at points  $R$  and  $T$ , then  $\overline{SR} \cong \overline{ST}$ .
- B. If  $l$  is tangent to  $\odot C$  at  $B$ , then  $l \perp \overline{CB}$ .
- C. If  $l \perp \overline{CB}$ , then  $l$  is tangent to  $\odot C$  at  $B$ .

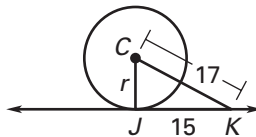


$\overleftrightarrow{JK}$  is tangent to  $\odot C$ . Find the value of  $r$ .

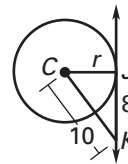
6.



7.

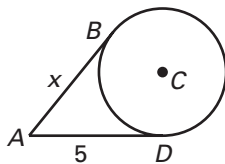


8.

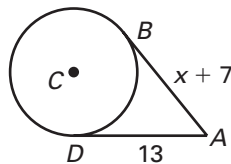


$\overline{AB}$  and  $\overline{AD}$  are tangent to  $\odot C$ . Find the value of  $x$ .

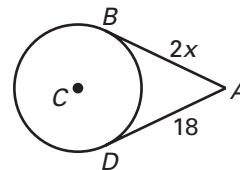
9.



10.



11.



12. You are hanging a circular sun catcher from a nail as shown. The hanging chord forms two tangent segments with the outside of the sun catcher. Find the value of  $x$ .

