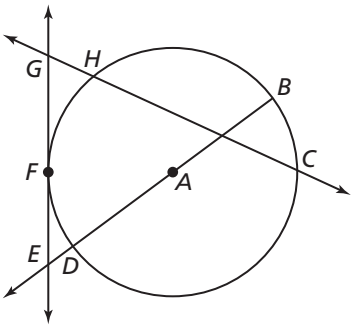
Name_____ Date _____

10.1 Practice A

In Exercises 1–5, use the diagram.



1. Name the circle.

2. Name two radii.

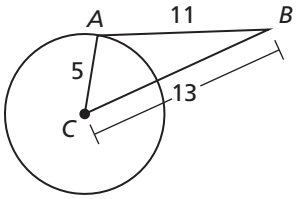
3. Name two chords.

4. Name a secant.

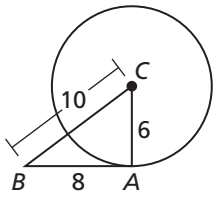
5. Name a tangent.

In Exercises 6 and 7, tell whether $\overline{AB}$ is tangent to $\odot C$. Explain your reasoning.

6.

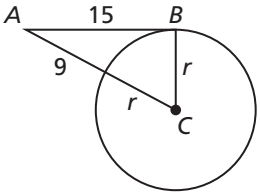


7.

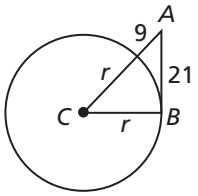


In Exercises 8 and 9, point *B* is a point of tangency. Find the radius *r* of $\odot C$.

8.

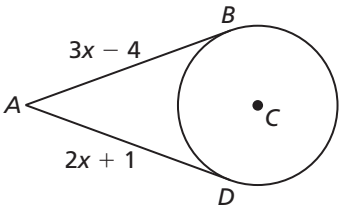


9.

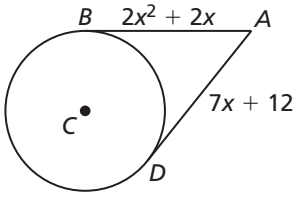


In Exercises 10 and 11, points *B* and *D* are points of tangency. Find the value(s) of *x*.

10.

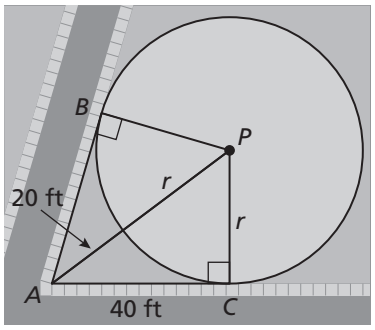


11.



12. Construct $\odot C$ with a 1-inch radius and a point A outside of $\odot C$. Then construct a line tangent to $\odot C$ that passes through A.

13. Two sidewalks are tangent to a circular park centered at P, as shown.



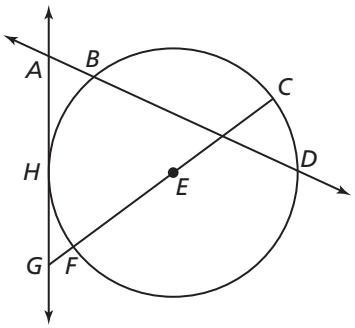
a. What is the length of sidewalk $\overline{AB}$? Explain.

b. What is the diameter of the park?

Name _____ Date _____

10.1 Practice B

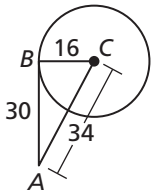
In Exercises 1–5, use the diagram.



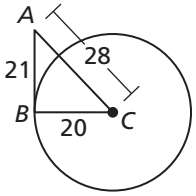
1. Name two radii.
2. Name two chords.
3. Name a diameter.
4. Name a secant.
5. Name a tangent and a point of tangency.

In Exercises 6 and 7, tell whether $\overline{AB}$ is tangent to $\odot C$. Explain your reasoning.

6.

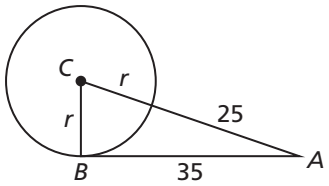


7.

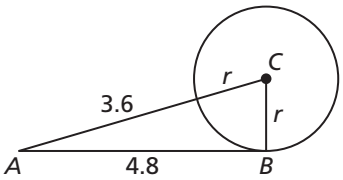


In Exercises 8 and 9, point B is a point of tangency. Find the radius r of $\odot C$.

8.

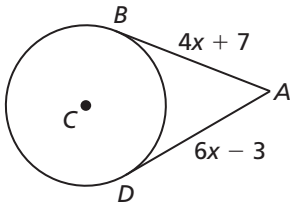


9.

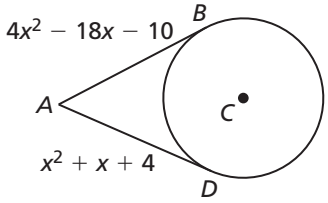


In Exercises 10 and 11, points B and D are points of tangency. Find the value(s) of x.

10.

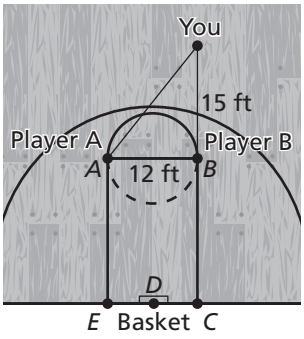


11.



12. When will two circles have no common tangents? Justify your answer.

13. During a basketball game, you want to pass the ball to either Player A or Player B. You estimate that Player B is about 15 feet from you, as shown.



   a. How far away from you is Player A?

   b. How can you prove that Player A and Player B are the same distance from the basket?