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 $AB$ is tangent to $C$. Explain your reasoning.

6.

7.

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

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 $C$ with a 1-inch radius and a point $A$ outside of $C$. Then construct a line tangent to $C$ 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 $AB$? Explain.
   
   b. What is the diameter of the park?
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?