

Name _____

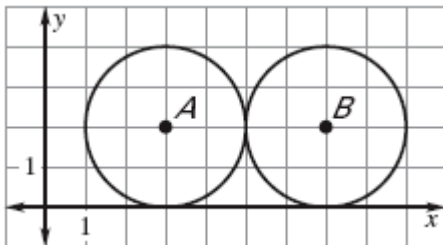
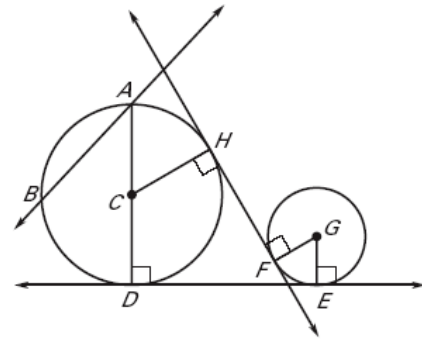
Date _____

LESSON 10.1

Practice A

Match the notation with the term that best describes it.

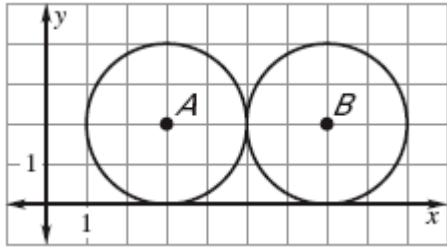
- | | |
|------------------------------|----------------------------|
| 1. D | A. Center |
| 2. \overleftrightarrow{FH} | B. Chord |
| 3. \overline{CD} | C. Diameter |
| 4. \overline{AB} | D. Radius |
| 5. C | E. Point of tangency |
| 6. \overline{AD} | F. Common external tangent |
| 7. \overleftrightarrow{AB} | G. Common internal tangent |
| 8. \overleftrightarrow{DE} | H. Secant |



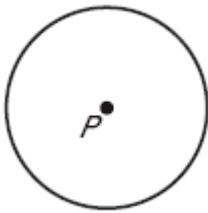
Use the diagram at the above.

9. What are the diameter and radius of $\odot A$?
10. What are the diameter and radius of $\odot B$?
11. Describe the intersection of the two circles.

12. Describe all the common tangents of the two circles.



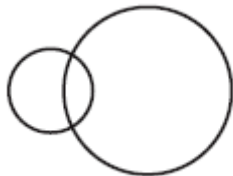
Use $\odot P$ to draw the part of the circle described or answer the question.



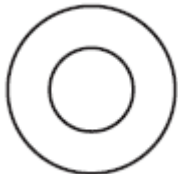
13. Draw a diameter \overline{AB}
14. Draw tangent line \overleftrightarrow{CB} .
15. Draw chord \overline{DB} .
16. Draw a secant through point A .
17. What is the name of a radius in the figure?

Tell how many common tangents the circles have and draw them.

- 18.

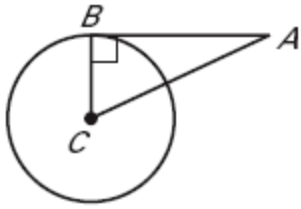


- 19.

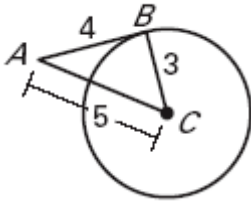


In the diagram, \overline{BC} is a radius of $\odot C$. Determine whether \overline{AB} is tangent to $\odot C$. Explain your reasoning.

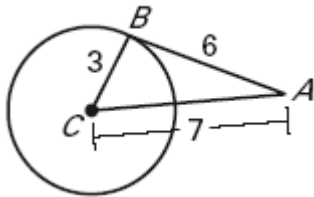
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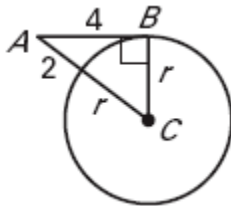


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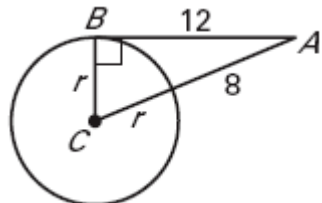


In the diagram, \overline{AB} is tangent to $\odot C$ at point B . Find the radius r of $\odot C$.

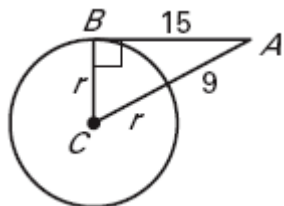
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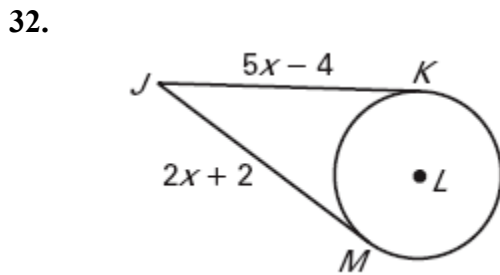
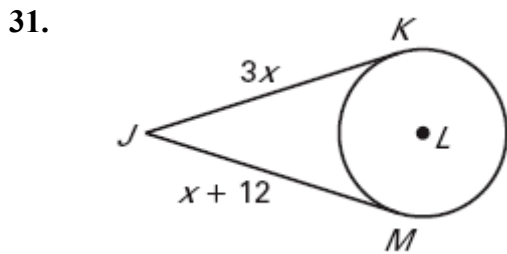
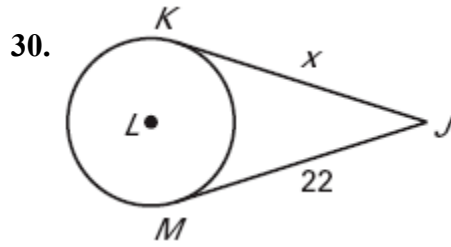
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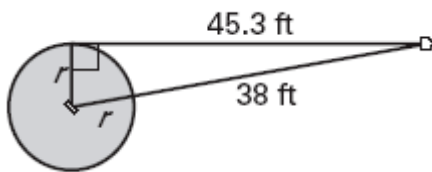
29.



\overline{JK} is tangent to $\odot L$ at K and \overline{JM} is tangent to $\odot L$ at M . Find the value of x .



31. **Softball** On a softball field, home plate is 38 feet from the pitching circle. Home plate is about 45.3 feet from a point of tangency on the circle.



- How far is it from home plate to a point of tangency on the other side of the pitching circle?
- What is the radius of the pitching circle?