

Geometry
Homework
Exploring Circles

Name: _____

Date: _____ Period: _____

The diameter of a circle is given. Find the radius.

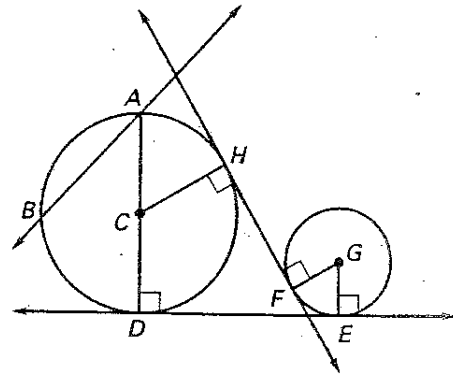
1. $d = 6$ in. 2. $d = 24$ cm 3. $d = 15$ ft 4. $d = 9$ in.

The radius of a circle is given. Find the diameter.

5. $r = 11$ cm 6. $r = 8$ ft 7. $r = 10$ in. 8. $r = 4.6$ cm

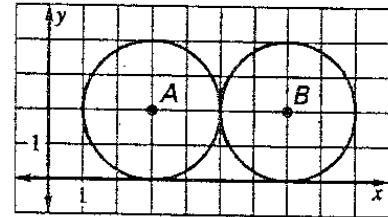
Match the notation with the term that best describes it.

- | | |
|-------------------------------|----------------------------|
| 9. D | A. Center |
| 10. \overleftrightarrow{FH} | B. Chord |
| 11. \overline{CD} | C. Diameter |
| 12. \overline{AB} | D. Radius |
| 13. C | E. Point of tangency |
| 14. \overline{AD} | F. Common external tangent |
| 15. \overleftrightarrow{AB} | G. Common internal tangent |
| 16. \overleftrightarrow{DE} | H. Secant |



Use the diagram at the right.

17. What are the center and radius of $\odot A$?
18. What are the center and radius of $\odot B$?
19. Describe the intersection of the two circles.
20. Describe all the common tangents of the two circles.
21. Are the two circles congruent? Explain.



Tell whether \overleftrightarrow{AB} is tangent to $\odot C$. Explain your reasoning.

