

10.1 and 10.2 Practice Worksheet

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

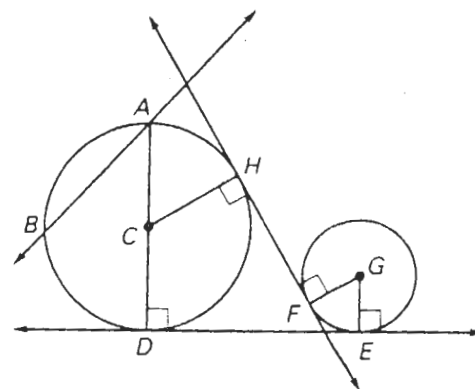
6. $r = 8$ ft

7. $r = 10$ in.

8. $r = 4.6$ cm

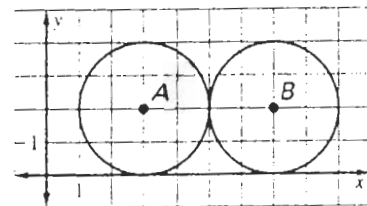
Match the notation with the term that best describes it.

- | | |
|-------------------------------|----------------------------|
| 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 |



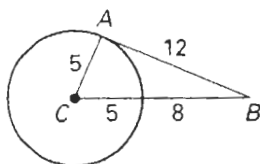
Use the diagram at the right.

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.

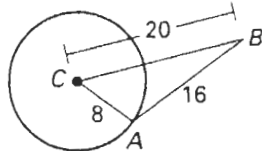


Tell whether \overleftrightarrow{AB} is tangent to $\odot C$. Explain your reasoning.

22.

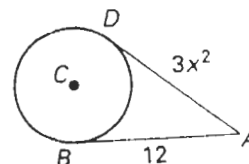


23.

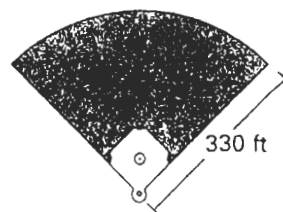


25.

Find x .

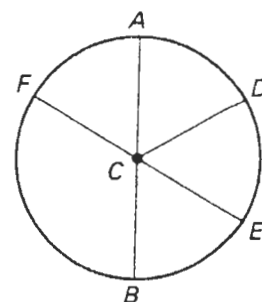


24. **Baseball Stadium** The shape of the outfield fence in a baseball stadium is that of a quarter circle. If the distance from home plate to the wall is 330 feet, what is the radius of the entire circle? What is the diameter of the circle?



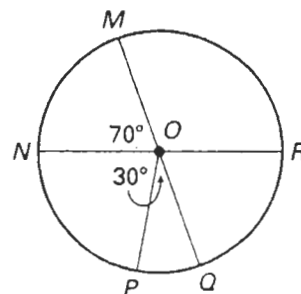
Determine whether the arc is a *minor arc*, a *major arc*, or a *semicircle* of $\odot C$.

- | | |
|--------------------|--------------------|
| 1. \widehat{AE} | 2. \widehat{AEB} |
| 3. \widehat{FDE} | 4. \widehat{DFB} |
| 5. \widehat{FA} | 6. \widehat{BE} |
| 7. \widehat{BDA} | 8. \widehat{FB} |



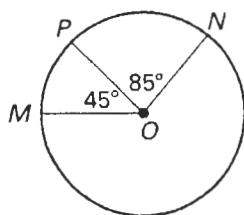
\overline{MQ} and \overline{NR} are diameters. Find the indicated measure.

- | | |
|----------------------|----------------------|
| 9. $m\widehat{MN}$ | 10. $m\widehat{NQ}$ |
| 11. $m\widehat{NQR}$ | 12. $m\widehat{MRP}$ |
| 13. $m\widehat{QR}$ | 14. $m\widehat{MR}$ |
| 15. $m\widehat{QMR}$ | 16. $m\widehat{PQ}$ |
| 17. $m\widehat{PRN}$ | 18. $m\widehat{MQN}$ |

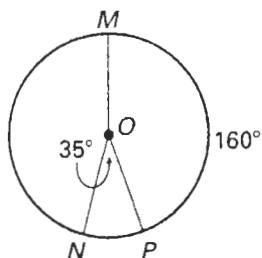


Find the measure of \widehat{MN} .

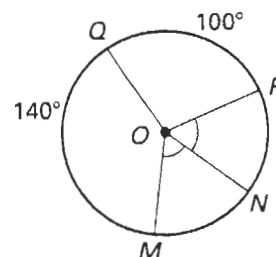
19.



20.

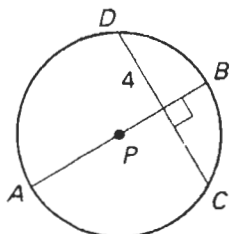


21.

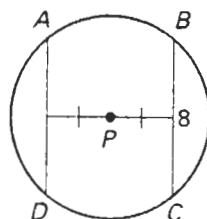


Find the indicated measure for $\odot P$.

25. $DC = \underline{\hspace{1cm}} ?$



26. $AD = \underline{\hspace{1cm}} ?$



27. $EC = \underline{\hspace{1cm}} ?$

