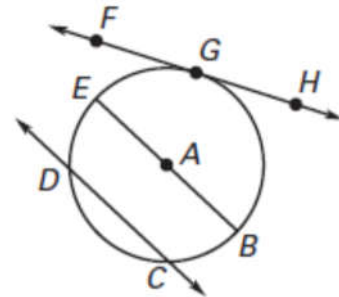


**Match the word with the descriptive phrase.**

- |   |       |             |
|---|-------|-------------|
| 1. a segment whose endpoints are points on a circle                                 | _____ | A. tangent  |
| 2. a chord that passes through the center of the circle                             | _____ | B. chord    |
| 3. a segment whose endpoints are the center of a circle and a point on the circle   | _____ | C. secant   |
| 4. a line that intersects a circle in two points                                    | _____ | D. radius   |
| 5. a line in the plane of a circle that intersects the circle in exactly one point. | _____ | E. diameter |

**Give the term that best describes the line, segment, or point below.**

- |                              |                     |
|------------------------------|---------------------|
| 6. $\overleftrightarrow{CD}$ | 7. $G$              |
| 8. $A$                       | 9. $\overline{CD}$  |
| 10. $\overline{EB}$          | 11. $\overline{AE}$ |

**In #12-16, use the diagram shown at the right.**

12. Name the coordinates of the center of each of the circles.

Circle C:

Circle D:

13. Name the coordinates of the intersection of the two circles.

14. Name the coordinates of the point of tangency of each circle.

15. What is the length of the
- radius**
- of each circle?

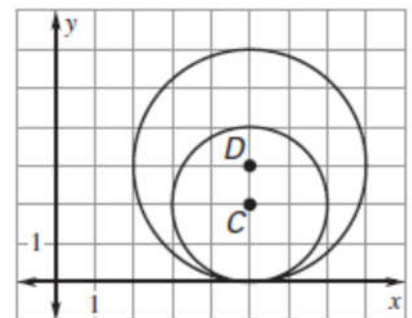
Circle C:

Circle D:

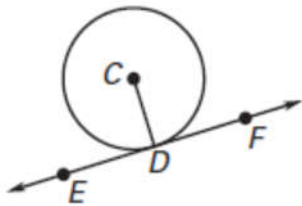
16. What is the length of the
- diameter**
- of each circle?

Circle C:

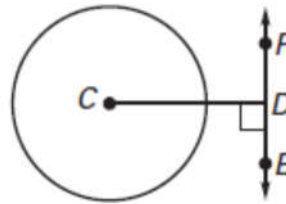
Circle D:



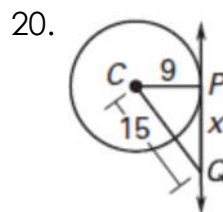
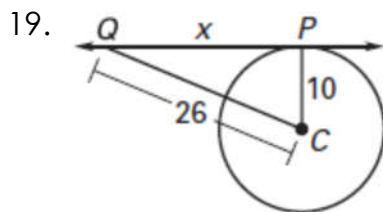
17.  $\overleftrightarrow{EF}$  is tangent to  $\odot C$  at point  $D$ .  
Find  $m\angle CDE$ .



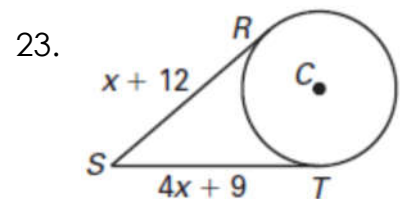
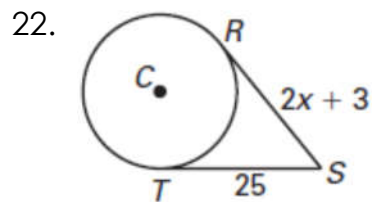
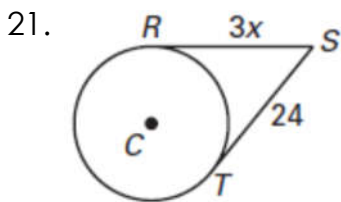
18.  $\overleftrightarrow{EF} \perp \overline{CD}$ . Is  $\overleftrightarrow{EF}$  tangent to  $\odot C$ ? Explain.



$\overleftrightarrow{PQ}$  is tangent to circle C. Find the value of  $x$ .

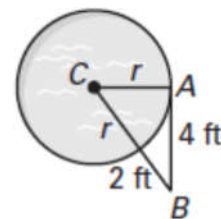


$\overline{SR}$  and  $\overline{ST}$  are tangent to circle C. Find the value of  $x$ .



A child is standing at point B, 2 feet from the edge of a wading pool. The distance from point B to point A is 4 feet.

24. If the radius  $r$  of the pool is 4 feet, is  $\overline{AB}$  a tangent?



25. Find the radius  $r$  to the pool.

In #26-27, use the diagram at the right.

26. Name a minor arc and find its measure.

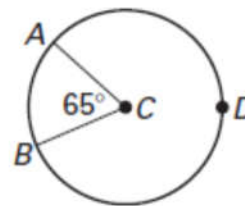
Name:

Measure:

27. Name a major arc and find its measure.

Name:

Measure:



**Determine whether the arc is a minor arc, major arc, or semicircle of circle C.  $\overline{DF}$  is the diameter.**

28.  $\widehat{EF}$

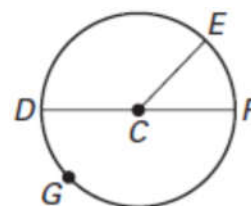
29.  $\widehat{DEF}$

30.  $\widehat{GDF}$

31.  $\widehat{FG}$

32.  $\widehat{EFD}$

33.  $\widehat{DG}$



**$\overline{PS}$  and  $\overline{TR}$  are diameters. Find the measure.**

34.  $m\widehat{TP}$

35.  $m\widehat{QR}$

36.  $m\widehat{TS}$

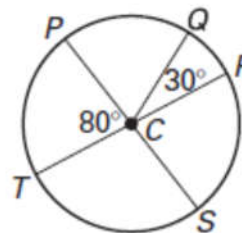
37.  $m\widehat{PQ}$

38.  $m\widehat{TPQ}$

39.  $m\widehat{TQR}$

40.  $m\widehat{TRQ}$

41.  $m\widehat{SRQ}$



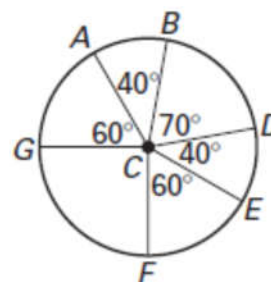
**Find the measures of the arcs. Are they congruent?**

42.  $\widehat{AB}$  and  $\widehat{DE}$

43.  $\widehat{BD}$  and  $\widehat{GF}$

44.  $\widehat{GAB}$  and  $\widehat{FED}$

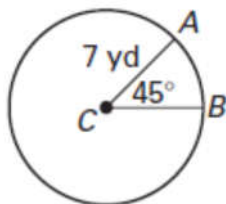
45.  $\widehat{AGF}$  and  $\widehat{GFE}$



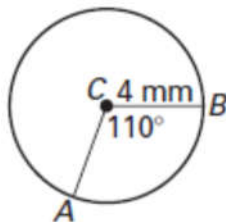
Find the length of  $\widehat{AB}$ . Round your answers to the nearest tenth.

Use the formula :  $\frac{\text{arc length of } AB}{2\pi r} = \frac{m \widehat{AB}}{360^\circ}$

46.



47.



48.

