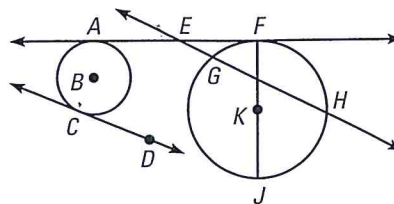


Chapter 10

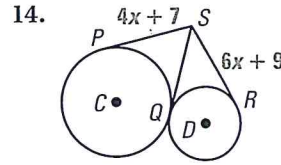
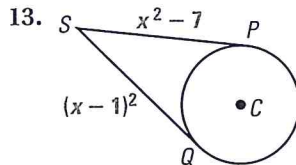
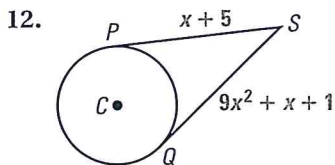
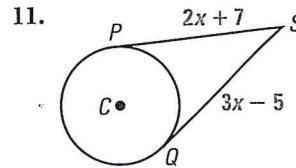
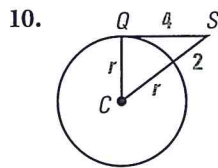
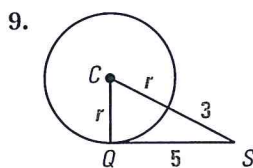
EXTRA PRACTICE

10.1 Use the diagram to give an example of the term.

- | | |
|------------|----------------------|
| 1. Radius | 2. Common tangent |
| 3. Tangent | 4. Secant |
| 5. Center | 6. Point of tangency |
| 7. Chord | 8. Diameter |

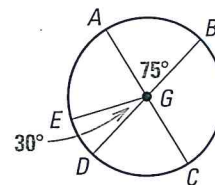


10.1 Find the value(s) of the variable. P , Q , and R are points of tangency.



10.2 \overline{AC} and \overline{BD} are diameters of $\odot G$. Determine whether the arc is a *minor arc*, a *major arc*, or a *semicircle* of $\odot G$. Then find the measure of the arc.

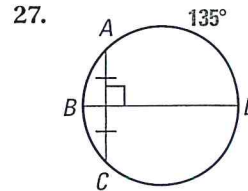
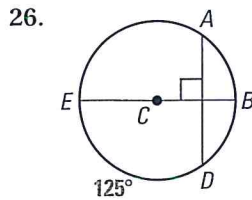
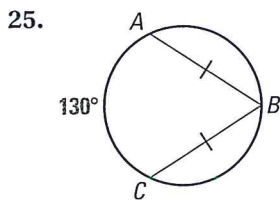
- | | | |
|---------------------|--------------------|---------------------|
| 15. \widehat{ED} | 16. \widehat{EB} | 17. \widehat{EC} |
| 18. \widehat{BEC} | 19. \widehat{BC} | 20. \widehat{BCD} |



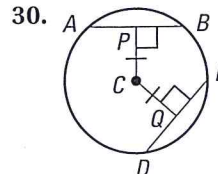
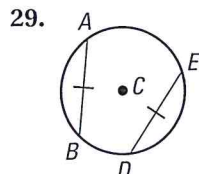
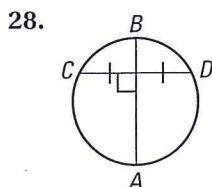
10.2 In $\odot C$, $m\widehat{AD} = 50^\circ$, B bisects \widehat{AD} , and \overline{AE} is a diameter. Find the measure of the arc.

- | | | | |
|---------------------|--------------------|--------------------|---------------------|
| 21. \widehat{AED} | 22. \widehat{BD} | 23. \widehat{DE} | 24. \widehat{BAE} |
|---------------------|--------------------|--------------------|---------------------|

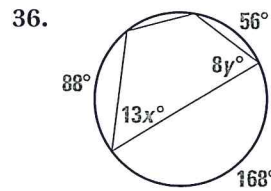
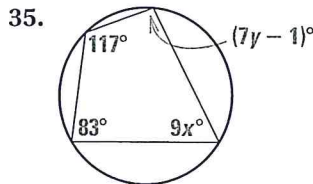
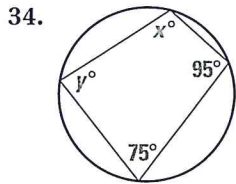
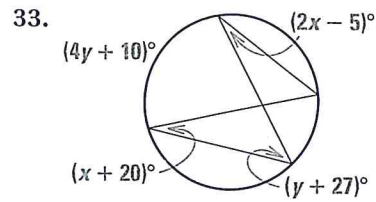
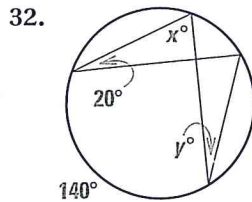
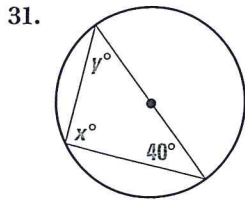
10.3 Find the measure of \widehat{AB} .



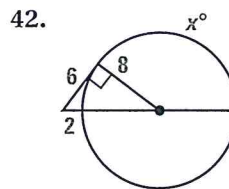
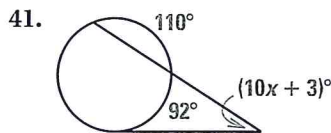
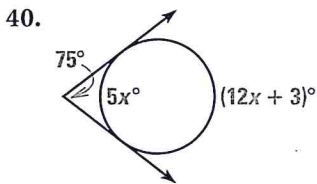
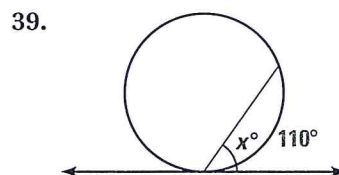
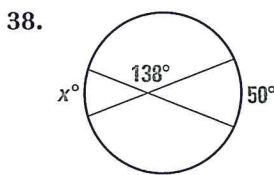
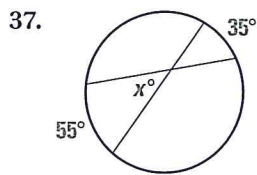
10.3 In Exercises 28–30, what can you conclude about the diagram shown? State theorems to justify your answer.



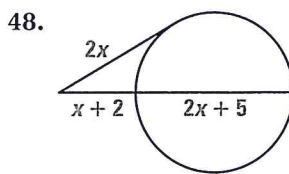
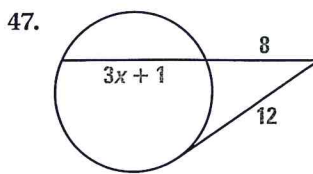
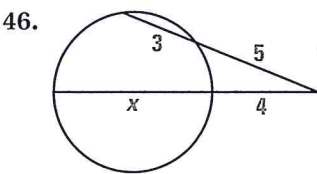
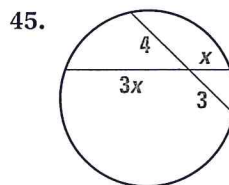
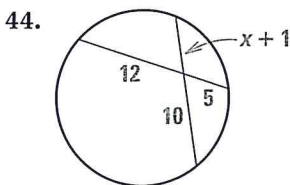
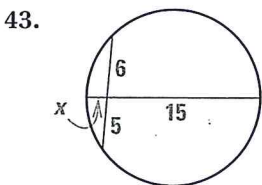
10.4 Find the values of the variables.



10.5 Find the value of x.



10.6 Find the value of x.



10.7 Use the given information to write the standard equation for the circle.

- 49. The center is $(0, -2)$, and the radius is 4 units.
- 50. The center is $(2, -3)$, and a point on the circle is $(7, -8)$.
- 51. The center is (m, n) , and a point on the circle is $(m + h, n + k)$.

10.7 Graph the equation.

- 52. $x^2 + y^2 = 25$
- 53. $x^2 + (y - 5)^2 = 121$
- 54. $(x + 4)^2 + (y - 1)^2 = 49$