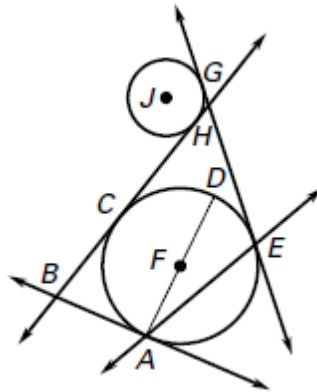


**CHAPTER
10**

Use the diagram to match the notation with the term that best describes it.

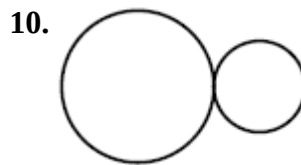
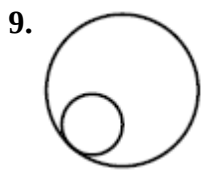
- | | |
|------------------------------|----------------------|
| 1. $\overleftrightarrow{EA}$ | A. Center |
| 2. $\overleftrightarrow{AF}$ | B. Chord |
| 3. $\overleftrightarrow{EG}$ | C. Radius |
| 4. F | D. Diameter |
| 5. $\overline{DA}$ | E. Secant |
| 6. C | F. Point of tangency |
| 7. $\overline{AE}$ | G. Common tangent |
| 8. $\overleftrightarrow{AB}$ | H. Tangent |



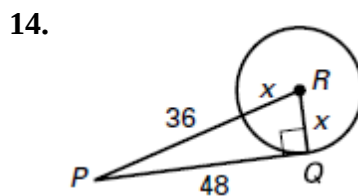
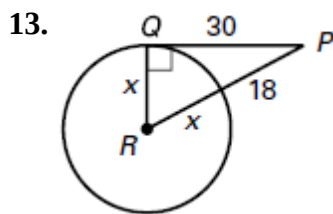
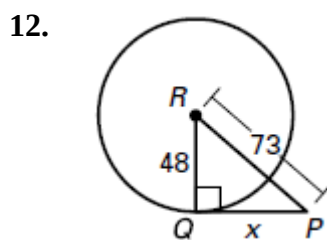
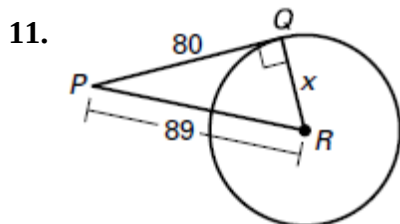
Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

Tell how many common tangents the given circles have.

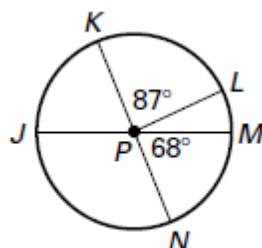


$\overline{QR}$ is a radius of $\odot R$ and $\overline{PQ}$ is tangent to $\odot R$. Find the value of x .



$\overline{JM}$ and $\overline{KN}$ are diameters of $\odot P$. Identify the given arc as a *major arc*, *minor arc*, or *semicircle*. Then find the measure of the arc.

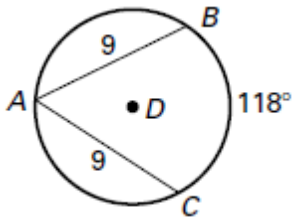
- | | |
|----------------------|----------------------|
| 15. $m\widehat{MN}$ | 16. $m\widehat{LM}$ |
| 17. $m\widehat{KLN}$ | 18. $m\widehat{JLN}$ |
| 19. $m\widehat{JN}$ | 20. $m\widehat{NJL}$ |



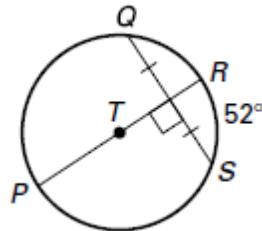
CHAPTER
10

Find the measure of the given arc.

21. $m\widehat{AC}$



22. $m\widehat{QRS}$



Answers

21. _____

22. _____

23. _____

24. _____

25. _____

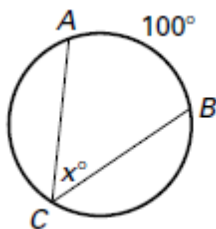
26. _____

27. _____

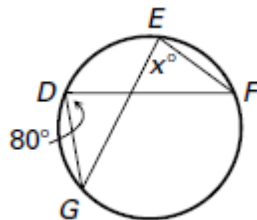
28. _____

In Exercises 23-28, find the value(s) of the variable(s).

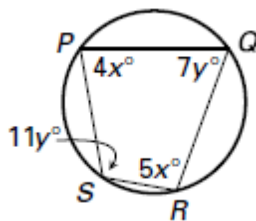
23.



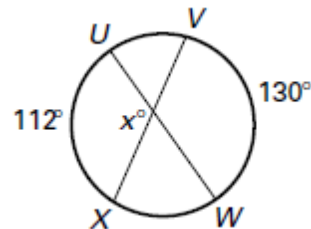
24.



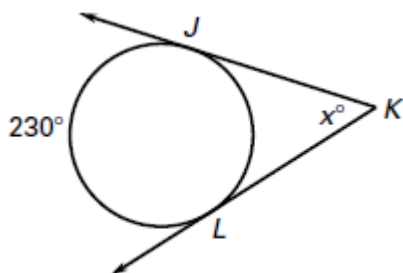
25.



26.



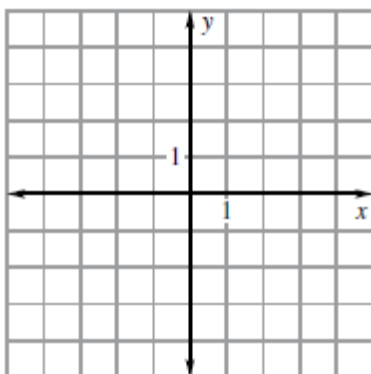
27.



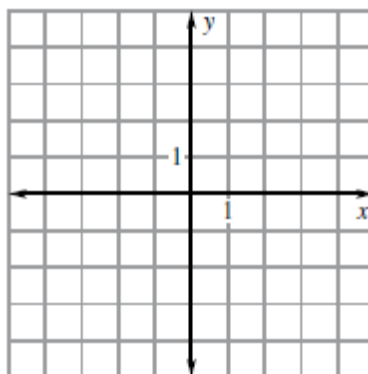
28. Find the center and radius of a circle that has the standard equation $(x - 3)^2 + (y + 1)^2 = 25$.

Graph the equation.

29. $x^2 + (y - 1)^2 = 9$



30. $(x - 2)^2 + (y + 1)^2 = 1$



Answers for Properties of Circles

CHAPTER 10

1. E 2. C 3. G 4. A 5. D 6. F 7. B
8. H 9. 1 10. 3 11. $x = 39$ 12. $x = 55$
13. $x = 16$ 14. $x = 14$ 15. minor arc, 68° 16. minor arc, 25°
17. semicircle, 180° 18. major arc, 248°
19. minor arc, 112° 20. major arc, 267°
21. 121° 22. 104°
23. $x = 50$ 24. $x = 80$ 25. $x = 20, y = 10$
26. $x = 121$ 27. $x = 50$
28. center: $(3, -1)$, radius = 5

