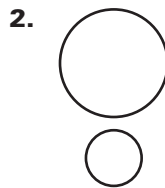
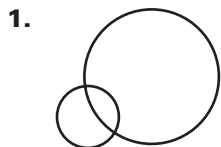
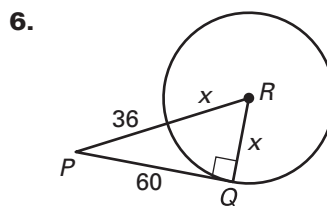
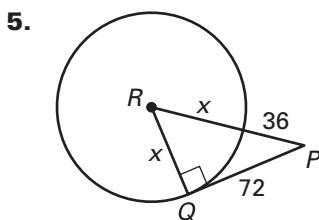
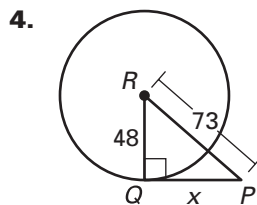
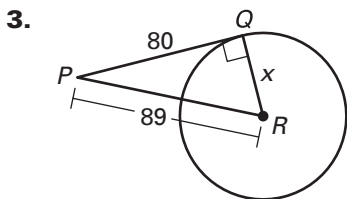


CHAPTER 10 **Chapter Test B**
For use after Chapter 10

Tell how many common tangents the given circles have.

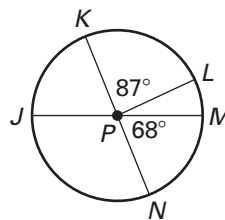


\overline{QR} is a radius of $\odot R$ and \overline{PQ} is tangent to $\odot R$. Find the value of x .



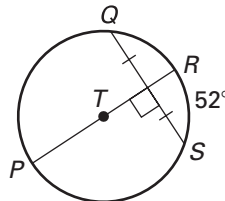
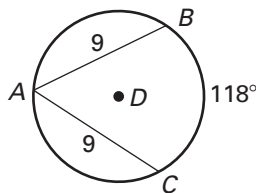
\overline{JM} and \overline{KN} are diameters of $\odot P$. Identify the given arc as a major arc, minor arc, or semicircle. Then find the measure of the arc.

- | | |
|---------------------|----------------------|
| 7. $m\widehat{MN}$ | 8. $m\widehat{LM}$ |
| 9. $m\widehat{KLN}$ | 10. $m\widehat{JLN}$ |
| 11. $m\widehat{JN}$ | 12. $m\widehat{NJL}$ |



Find the measure of the given arc.

- | | |
|---------------------|----------------------|
| 13. $m\widehat{AC}$ | 14. $m\widehat{QRS}$ |
|---------------------|----------------------|



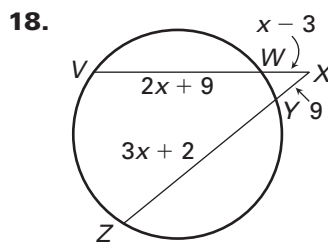
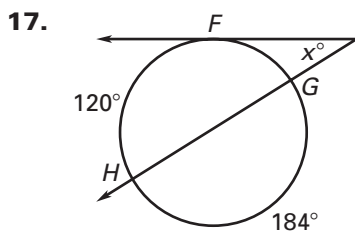
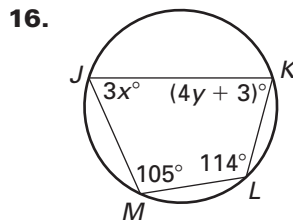
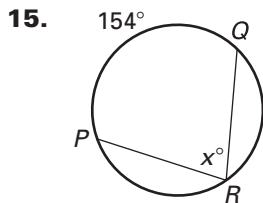
Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____

CHAPTER 10

Chapter Test B *continued*
For use after Chapter 10

Find the value(s) of the variable(s).



Write the standard equation of the circle with the given center and radius.

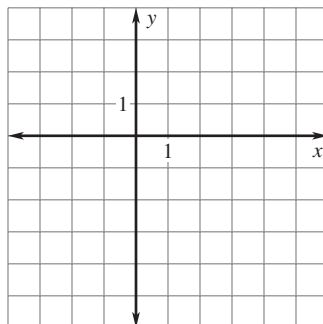
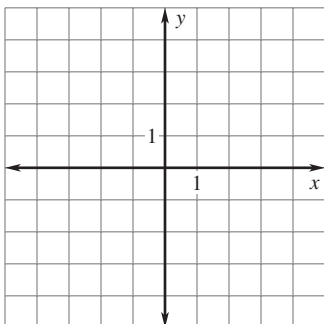
19. Center $(-4, 7)$, radius 6

20. Center $(3, -9)$, radius 8.4

Graph the equation.

21. $(x - 3)^2 + (y - 2)^2 = 1$

22. $(x - 4)^2 + (y + 4)^2 = 2$



23. You are standing 9 meters from a circular pond. The distance from you to a point of tangency on the pond is 51 meters. What is the radius of the pond?

24. A wagon wheel has 14 spokes. What is the measure of the angle between any two spokes? Round your answer to the nearest tenth.

25. Two spokes in the wagon wheel in Exercise 24 form a central angle of about 128.5° . How many spokes are between the two spokes?

Answers

15. _____
 16. _____
 17. _____
 18. _____
 19. _____
 20. _____
 21. See left.
 22. See left.
 23. _____
 24. _____
 25. _____