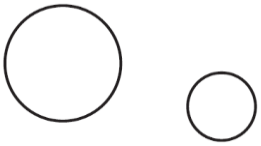
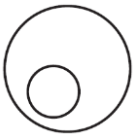
Name: _____

Geometry Chapter 10 Review

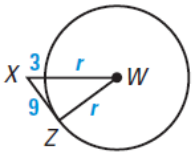
Tell how many common tangents the circles have and draw them.

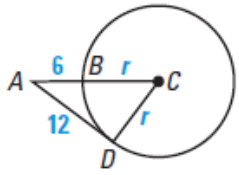
1. 

2. 

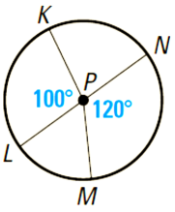
3. 

Find the value of the variable. Assume point on the circle are points of tangency.

4. 

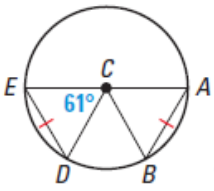
5. 

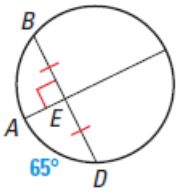
Use the diagram to find the measures of the indicated arc and state whether the arc is *major*, *minor*, or *semicircle*.

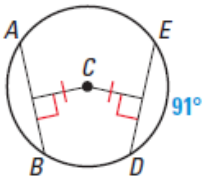


6. $\overset{\frown}{KL}$
7. $\overset{\frown}{LN}$
8. $\overset{\frown}{KM}$
9. $\overset{\frown}{KN}$
10. $\overset{\frown}{KNM}$

Find the measure of $\overset{\frown}{AB}$.

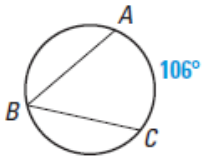
11. 

12. 

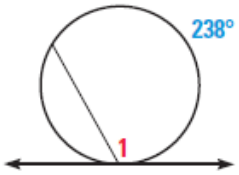
13. 

Find the indicated measure.

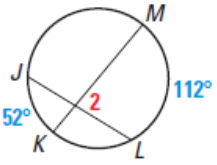
14. $m\angle ABC$



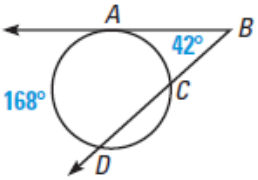
15. $m\angle 1$



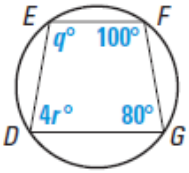
16. $m\angle 2$



17. $m\overset{\frown}{AC}$

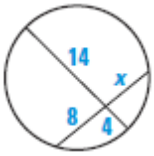


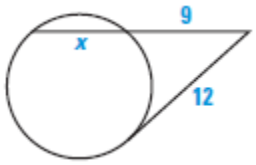
18. q and r

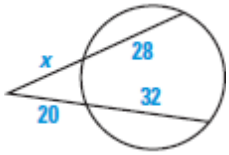


Name: _____

Find the value of *x*. Round decimal answers to the nearest tenth.

19. 

20. 

21. 

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

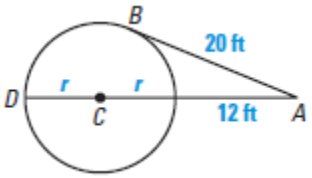
22. The center is $(0, -2)$, and the radius is 4 units.

23. The center is $(2, -3)$, and a point on the circle is $(7, -8)$.

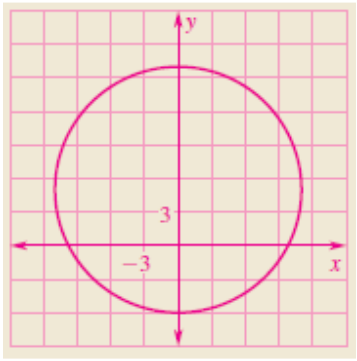
Graph the equation.

24. $x^2 + (y - 5)^2 = 121$

25. A local park has a circular ice skating rink. You are standing at point A, about 12 feet from the edge of the rink. The distance from you to a point of tangency on the rink is about 20 feet. Estimate the radius of the rink.



Answers

1. 4
2. 0
3. 1
4. 12
5. 9
6. 100°; minor
7. 180°; semicircle
8. 160°; minor
9. 80°; minor
10. 200°; major
11. 61°
12. 65°
13. 91°
14. 53°
15. 119°
16. 82°
17. 84°
18. 100, 20
19. 7
20. 7
21. 21.2
22. $x^2 + (y + 2)^2 = 16$
23. $(x - 2)^2 + (y + 3)^2 = 50$
24. 

25. $10\frac{2}{3}\ ft$