

**Unit 6 Review - Circles**

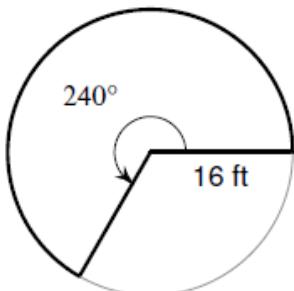
NAME \_\_\_\_\_

**Arc Length and Area of a Sector**

Find each requested measurement.

1. central angle =  $67^\circ$ , radius = 3 m  
Find area of sector.

2. Find arc length.



3. arc length = 17 in, radius = 4 in  
Find central angle.
4. area of sector =  $34 \text{ cm}^2$ , central angle =  $105^\circ$   
Find radius.

**Equation of a Circle**

Determine the center and radius of each circle.

5.  $(x - 5)^2 + (y + 6)^2 = 9$

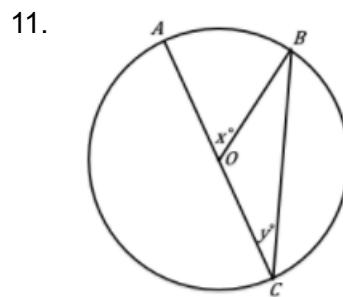
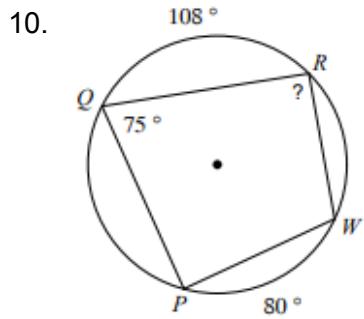
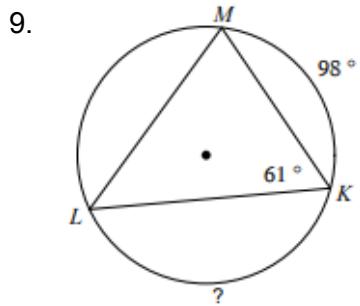
6.  $(x - 9)^2 + y^2 = 60$

7.  $x^2 + y^2 + 8x - 4y + 11 = 0$

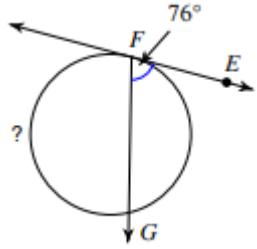
8.  $x^2 + y^2 + 24x + 10y + 160 = 0$

**Inscribed Angles**

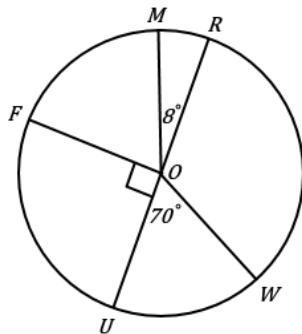
Solve for each indicated measurement.



12.

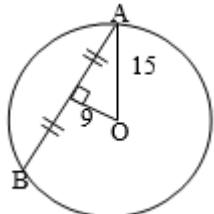


13. Find arc MRF.

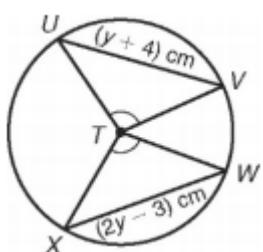
**Chords**

Solve for each indicated measurement.

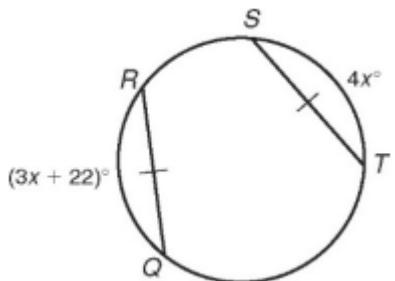
14. Find length of AB



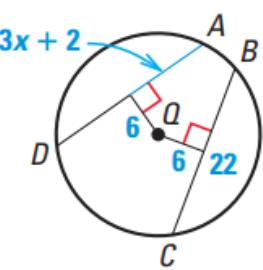
15.



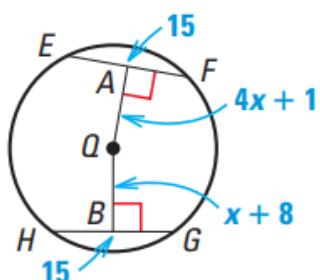
16.



17.

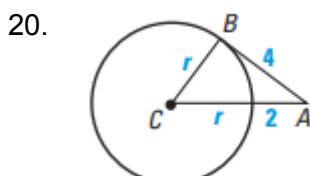
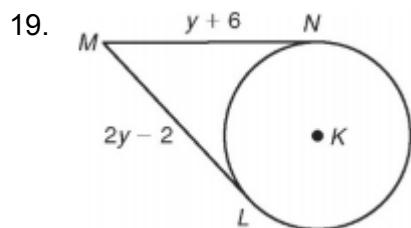


18.

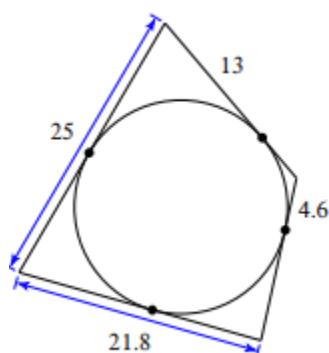


### Tangents

Solve for the variable.

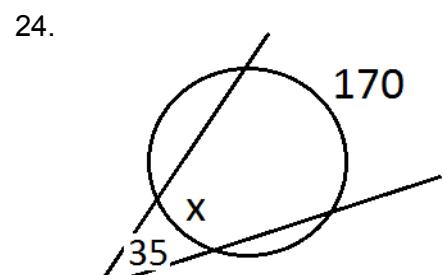
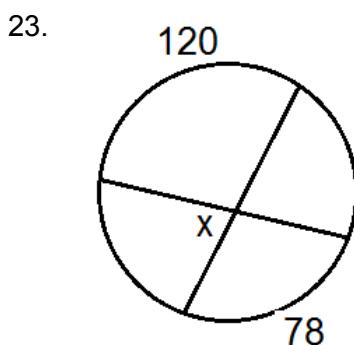
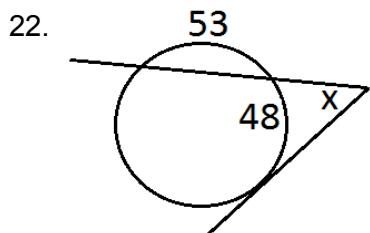


21. Find perimeter.



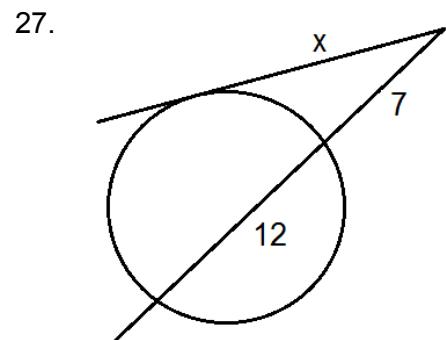
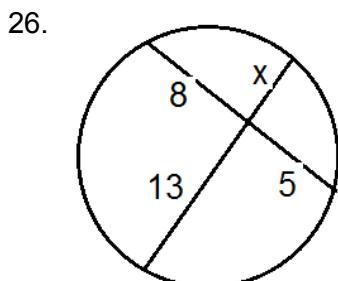
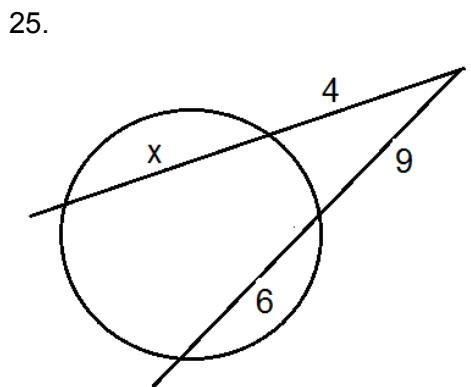
### Angles Formed By Secants, Tangents, and Chords

Solve for x.



### Lengths Formed By Secants, Tangents, and Chords

Solve for x.



## Fun with Factoring!!

*Factor.*

$$28. \ 4x^2 - 9$$

$$29. \ -6g^7 + 7g^4$$

$$30. \ w^2 - 5w + 6$$

$$31. \ 5a^3 - 10a^2 - 15a$$

$$32. \ 3x + 2$$

$$33. \ 20x^2 + 13x + 2$$