

Unit 7: Circles
PRE-TEST

Define each of the following terms and provide a visual:

1. Circle	
2. Radius	
3. Chord	
4. Diameter	
5. Secant	
6. Tangent	
7. Point of Tangency	

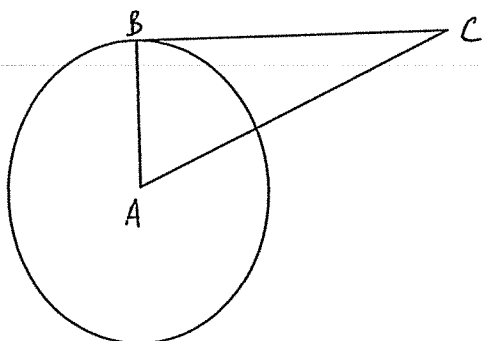
Solve each of the following:

8. In the diagram, AB is the radius of circle A. Is BC tangent to circle A? Explain why or why not.

$$AB = 25$$

$$BC = 60$$

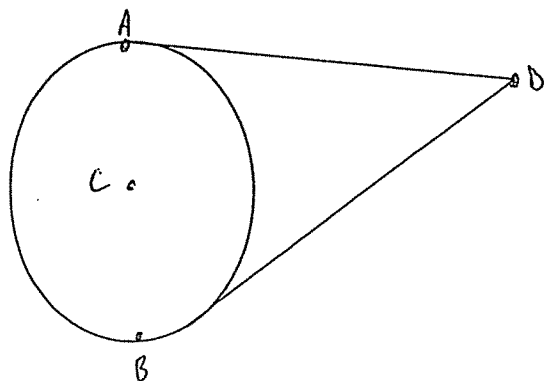
$$AC = 67$$



9. Find the value of x .

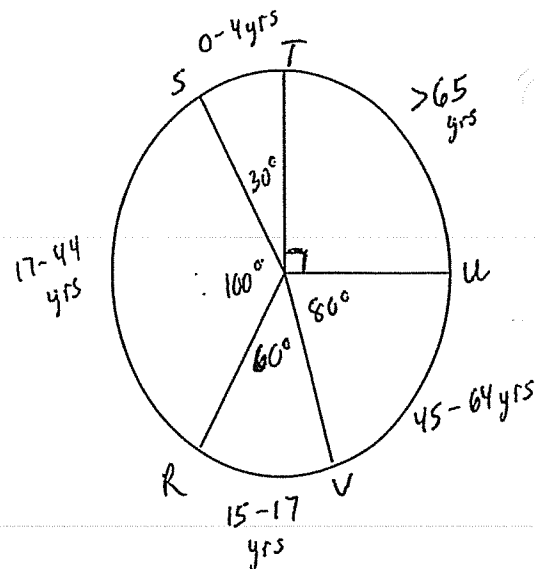
$$AD = 25$$

$$BD = 6x - 8$$



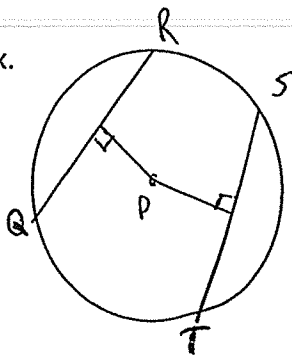
10. A survey about ages of people in a town are shown.
Find each of the following:

- A. $m\widehat{RU}$
- B. $m\widehat{RST}$
- C. $m\widehat{RVT}$
- D. $m\widehat{UST}$

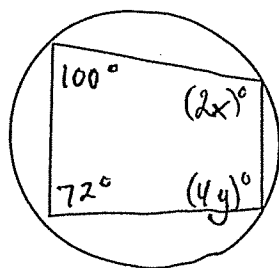


11. Find the value of x .

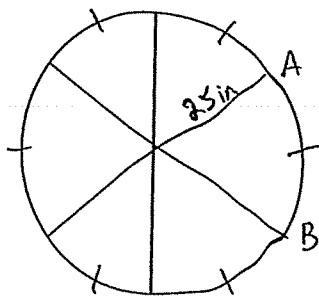
$ST = 3x - 1$
 $QR = 2x + 6$



12. Find the value of x and y .



13. Find the circumference of the given circle and then find the measure of \widehat{AB} .



14. Given that a sector of circle Q has an area of 48 ft^2 , with a central angle of 120° , what is the area of circle Q itself?

Graph the following circles. Identify each of the following items about the equation:

A. The point of the center.

B. The measure of the radius.

15. $(x - 4)^2 + (y + 2)^2 = 25$

16. $9 = 2y - y^2 - 6x - x^2$

