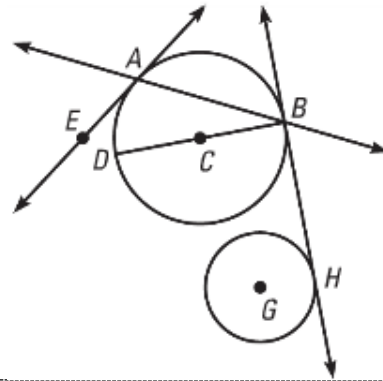


Target 1: Understand, identify, and apply basic facts of circles

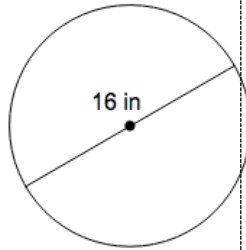
Directions: Match the term and the notation that best describes it.

1) B	a) Center
2) \overrightarrow{BH}	b) Radius
3) \overline{AB}	c) Chord
4) \overleftrightarrow{AB}	d) Diameter
5) \overrightarrow{AE}	e) Secant
6) G	f) Tangent
7) \overline{CD}	g) Point of Tangency
8) \overline{BD}	h) Common Tangent

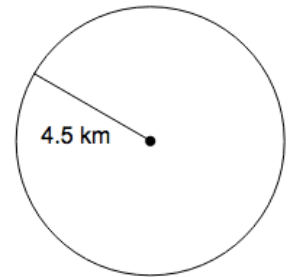


Directions: For 9 and 10, find the exact area and circumference of each circle.

9)



10)

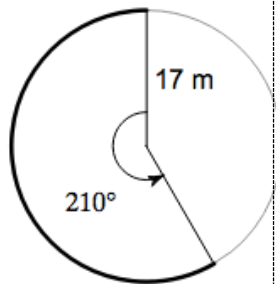


Area: _____ Circumference: _____

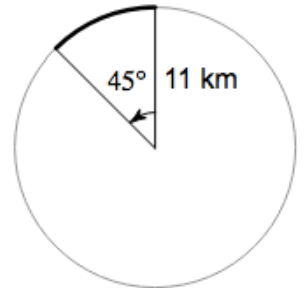
Area: _____ Circumference: _____

Find the exact length of each arc.

11)



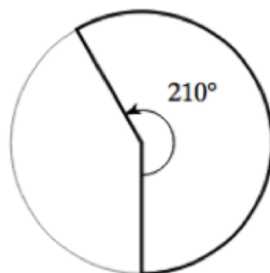
12)



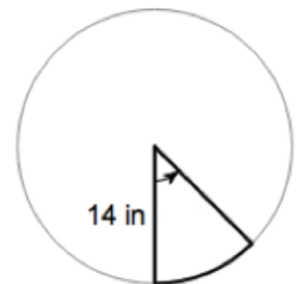
Answer: _____

Answer: _____

13) Find the diameter given that area of the indicated sector is 148.4 mi^2 .



14) Find the measure of the arc of the indicated sector given that the arc length is 82 in.

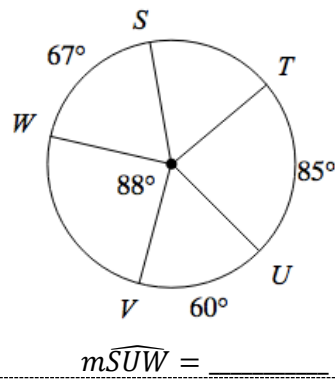


Answer: _____

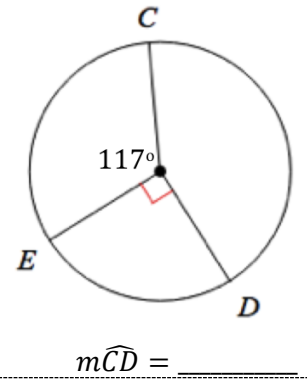
Answer: _____

Directions: Find the measure of the indicated arc or central angle. Assume that lines that appear to be diameters are actual diameters.

15)

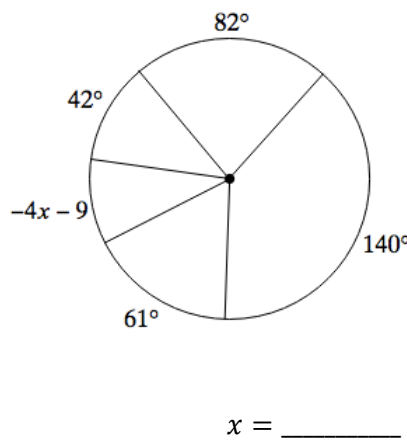


16)

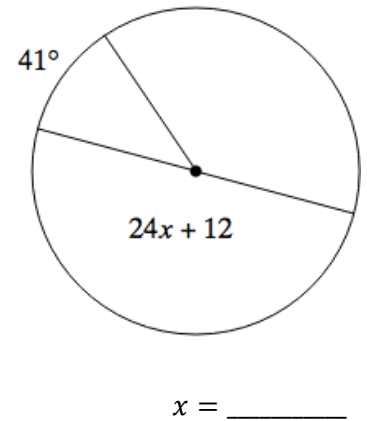


Directions: Find the value of x .

17)



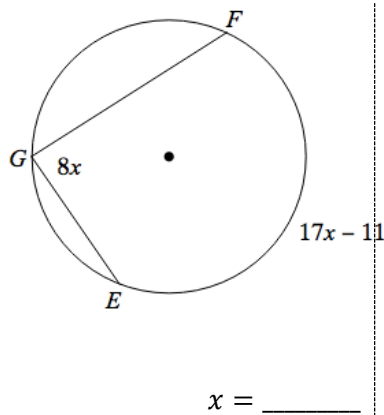
18)



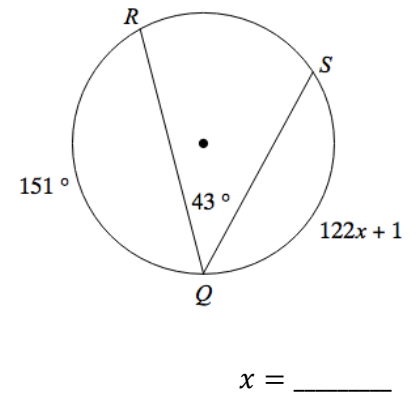
Target 2: Understand and apply information about angles formed inside of a circle

Directions: Solve for the value of x .

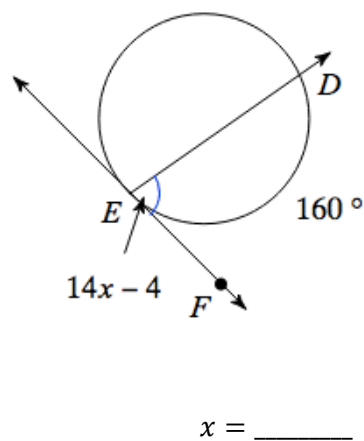
19)



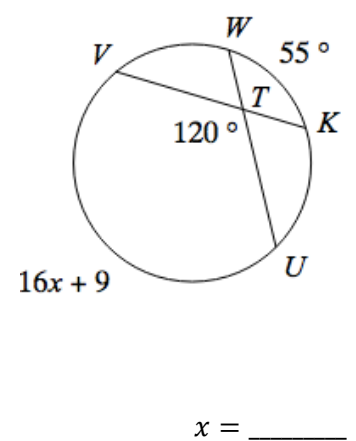
20)



21)

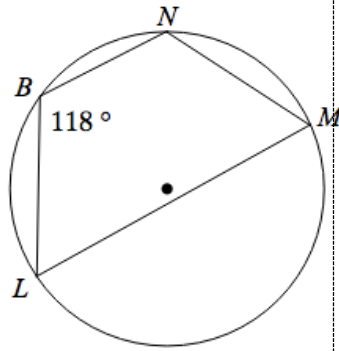


22)



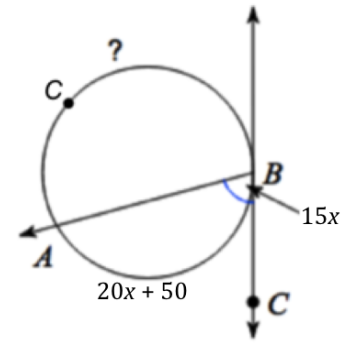
Directions: Find the measure of the indicated arc or angle. Assume that lines that appear to be tangent are tangent.

23)



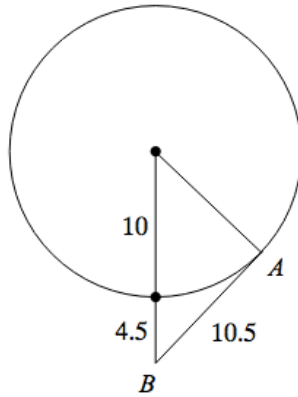
$m\widehat{NBL} = \underline{\hspace{2cm}}$

24)

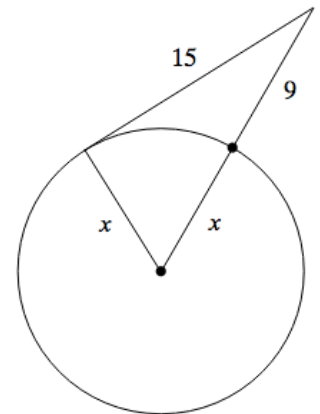


$m\widehat{ACB} = \underline{\hspace{2cm}}$

25) Determine if line AB is tangent to the circle.



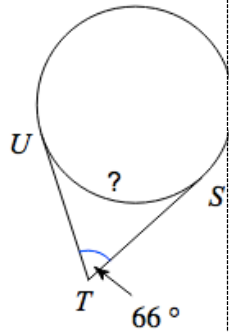
26) Solve for x . Assume that lines that appear to be tangent are tangent.



Target 3: Understand and apply information about angles formed outside of a circle

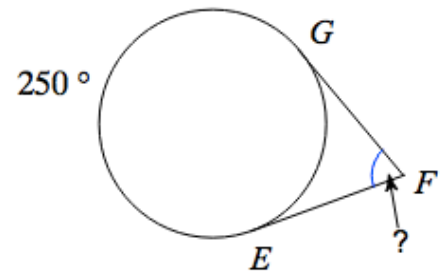
Directions: Find the measure of the indicated arc or angle. Assume that lines that appear to be tangent are tangent.

27)



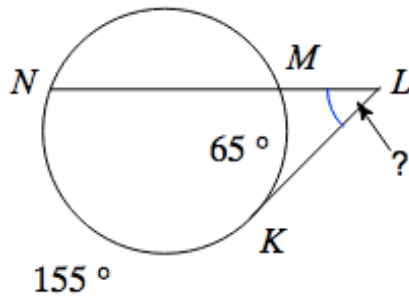
$m\widehat{US} = \underline{\hspace{2cm}}$

28)



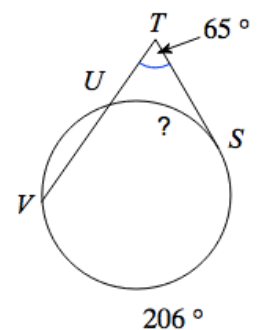
$m\angle GFE = \underline{\hspace{2cm}}$

29)



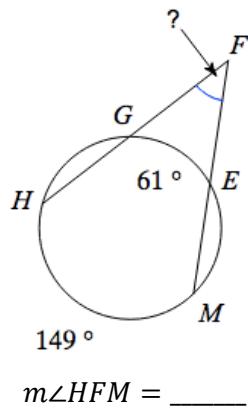
$m\angle NLK = \underline{\hspace{2cm}}$

30)

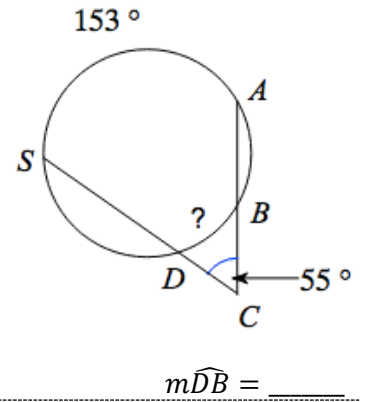


$m\widehat{US} = \underline{\hspace{2cm}}$

31)

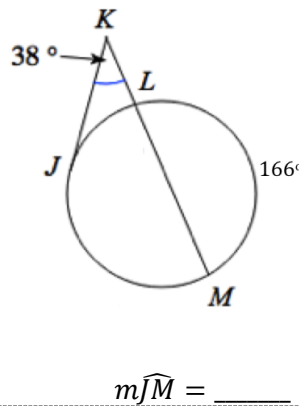


32)

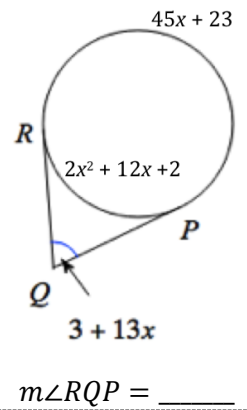


Directions: Solve for the indicated arc or angle. Assume lines that appear to be tangent are tangent.

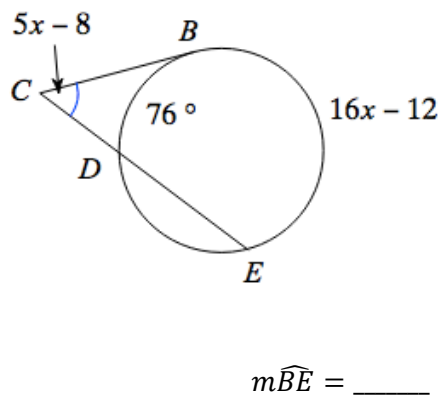
33)



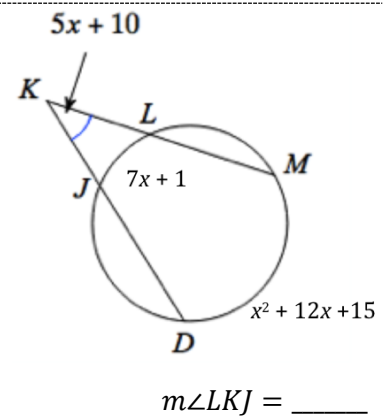
34)



35)



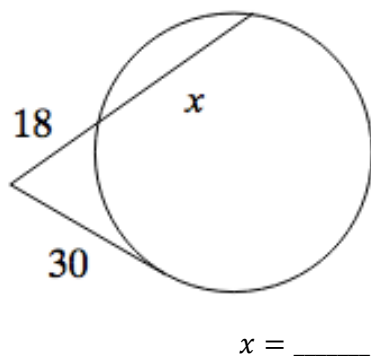
36)



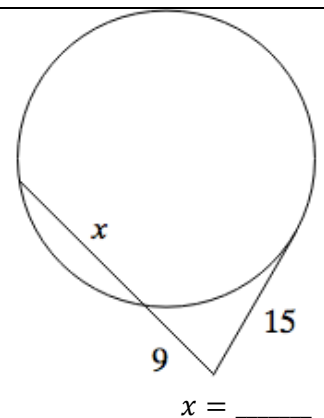
Target 4: Understand and apply relationships of segments formed by tangents, chords, and secants

Directions: Solve for x .

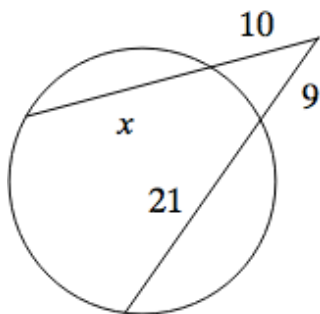
37)



38)

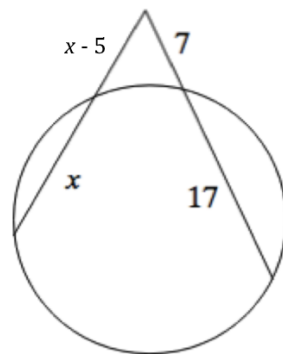


39)



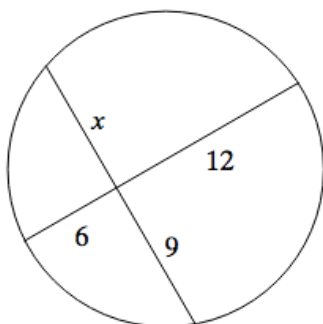
$x = \underline{\hspace{2cm}}$

40)



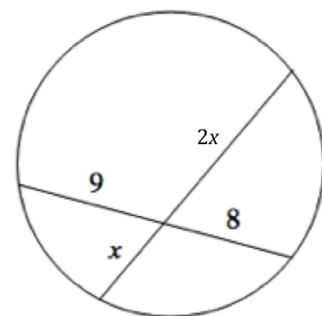
$x = \underline{\hspace{2cm}}$

41)



$x = \underline{\hspace{2cm}}$

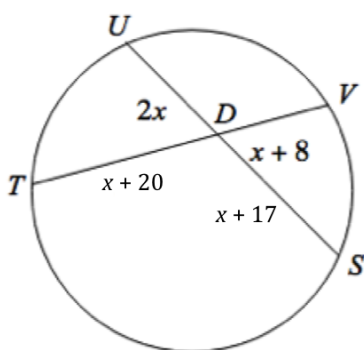
42)



$x = \underline{\hspace{2cm}}$

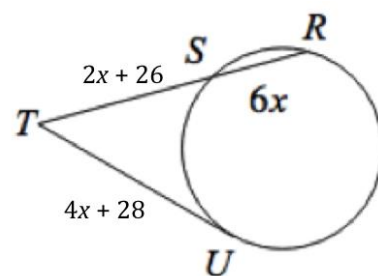
Directions: Find the measure of the indicated line segment.

43)



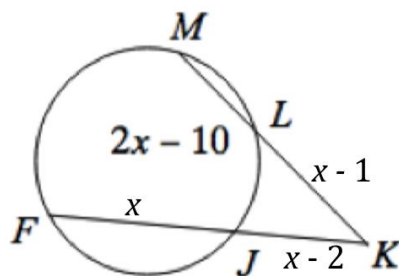
$DV = \underline{\hspace{2cm}}$

44)



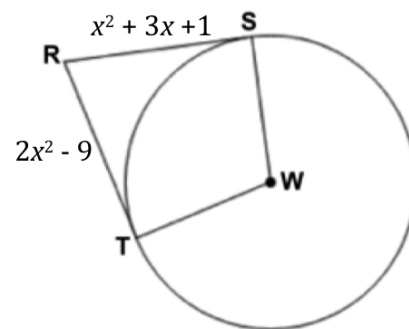
$TR = \underline{\hspace{2cm}}$

45)



$ML = \underline{\hspace{2cm}}$

46)



$RS = \underline{\hspace{2cm}}$

Target 5: Write and Analyze Graphs of Circles

Directions: Write the equation of the circle given the following information.

47) Center: (2,-4)
Radius: 6

48) Center: (-4,-1)
Area: 100π

49) Center: (4,6)
Circumference: 30π

Equation: _____

Equation: _____

Equation: _____

Directions: Write the equation of the circle given the following information. Then find the area of the circle.

50) Center: (-6,2)
Point on the graph: (-6,6)

51) Center: (-2,3)
Point on the graph: (1,4)

52) Center: (3,0)
Point on the graph: (7,-9)

Equation: _____

Equation: _____

Equation: _____

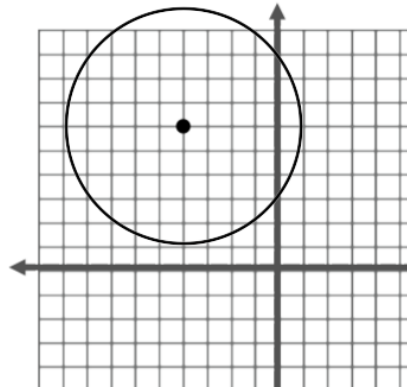
Area: _____

Area: _____

Area: _____

Directions: Write the equation based on the given graph.

53)

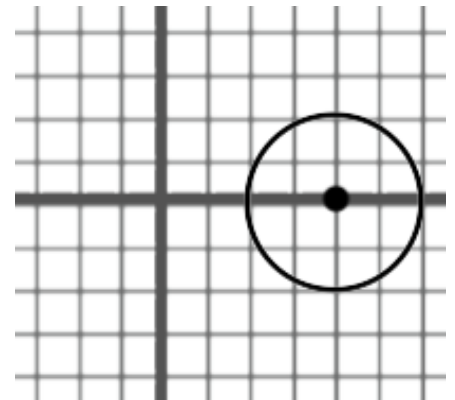


Center: _____

Radius: _____

Equation: _____

54)

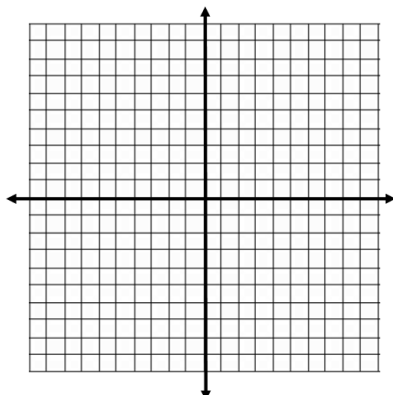


Center: _____

Radius: _____

Equation: _____

55) If a circle has a center at point (3, y) and a point on the circle is (-9, 0) with a radius of 13, what are all the possible values of y?



56) If a circle has a center at point (x, -3) and a point on the circle is (1, 2) with a radius of $5\sqrt{2}$, what are all the possible values of x?

