

**Geometry
Assignment 9.3**

Name _____

Tell whether the line or segment is best described as a chord, secant, tangent, diameter, or radius of $\odot C$.

1. \overline{CA}

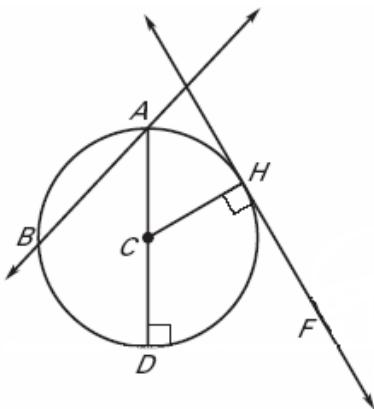
2. \overrightarrow{AB}

3. \overline{AD}

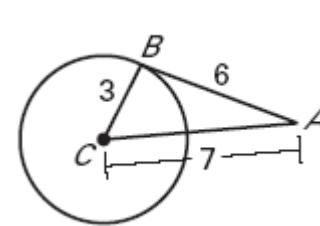
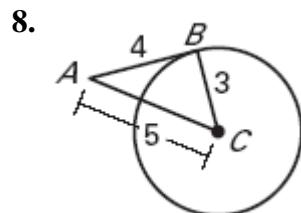
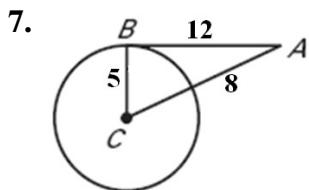
4. \overline{HF}

5. \overline{AB}

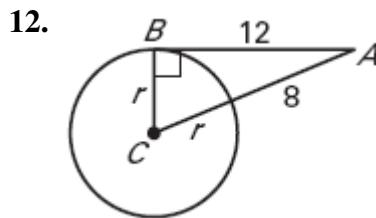
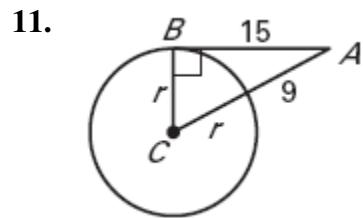
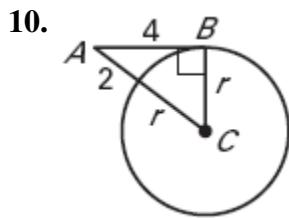
6. \overline{CH}



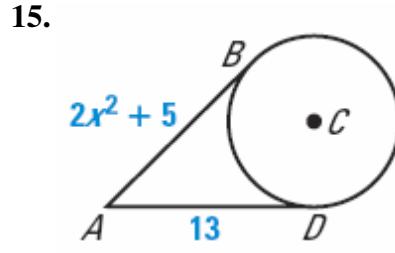
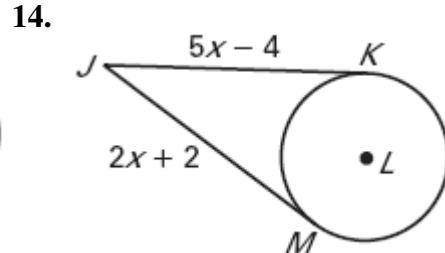
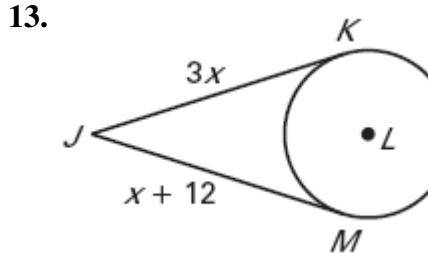
In the diagram, \overline{BC} is a radius of $\odot C$. Determine whether \overline{AB} is tangent to $\odot C$.



Find the value of the variable.

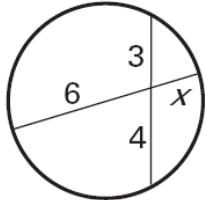


Find the value of the variable. K, M, B, and D are points of tangency.

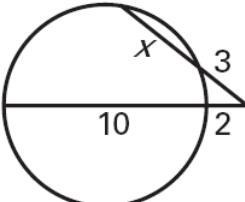


Find the value of the variable.

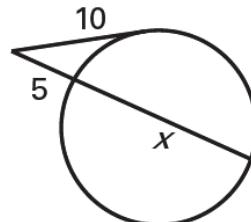
16.



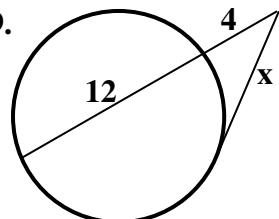
17.



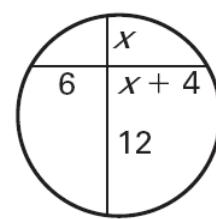
18.



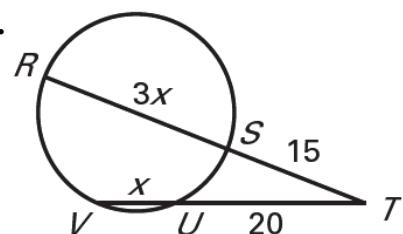
19.



20.

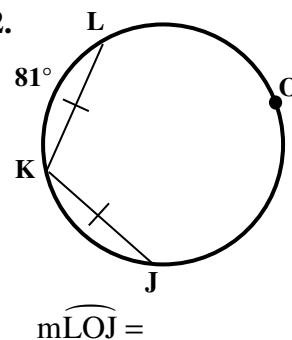


21.



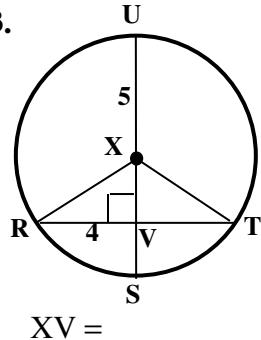
Find the indicated measure.

22.



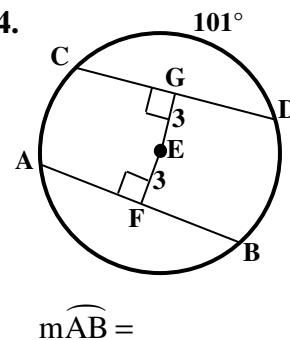
$$m\widehat{LOJ} = \underline{\hspace{2cm}}$$

23.



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

24.



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

Find the measure of the arc or angle in $\odot M$.

25. $m\angle QMP$

26. $m\angle NMO$

27. $m\angle PNO$

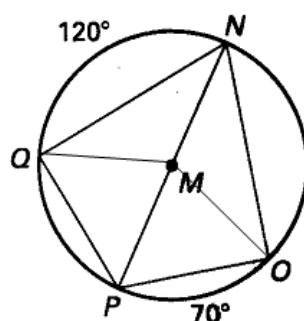
28. $m\angle QNP$

29. $m\widehat{QO}$

30. $m\widehat{NOP}$

31. $m\widehat{PQ}$

32. $m\widehat{OQN}$



Answer Key:

1) radius	2) secant	3) diameter	4) tangent	5) chord	6) radius	7) Yes	8) Yes	9) No	10) $r = 3$
11) $r = 8$	12) $r = 5$	13) $x = 6$	14) $x = 2$	15) $x = \pm 2$	16) $x = 2$	17) $x = 5$	18) $x = 15$	19) $x = 8$	
20) $x = 4$	21) $x = 7$	22) 198°	23) 3	24) 101°	25) 60°	26) 110°	27) 35°	28) 30°	29) 130°
30) 180°	31) 60°	32) 250°							