

Name \_\_\_\_\_ Date \_\_\_\_\_ Pd \_\_\_\_\_

10.1 Tangents, Secants and Angle Measures CYU

Use when you get it right all by yourself

**S** Use when you did it all by yourself, but made a silly mistake

**H** Use when you could do it alone with a little help from teacher or peer

**G** Use when you completed the problem in a group

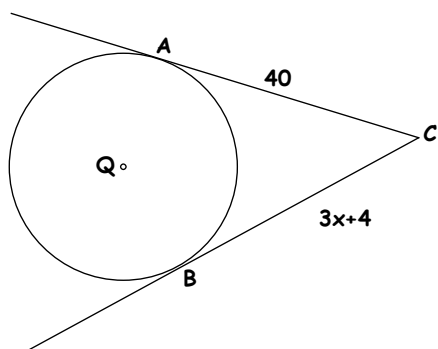
**X** Use when a question was attempted but wrong (get help)

**N** Use when a question was not even attempted

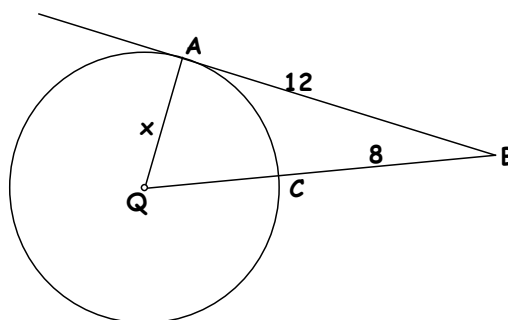
CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Tangent Line to a Circle Theorem		2, 5	4
External Tangent Congruence Theorem	1	3	4
Circle Vocabulary Terms	7 - 13		6
Real World Application			14, 15

For each  $\odot Q$ , find the value of  $x$ . Assume that segments that appear to be tangent are tangent.

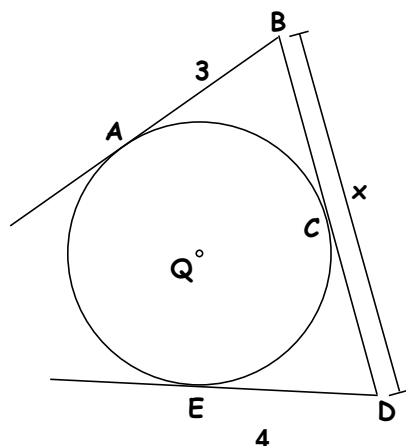
1.



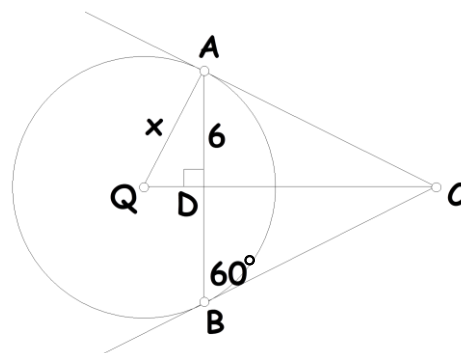
2.



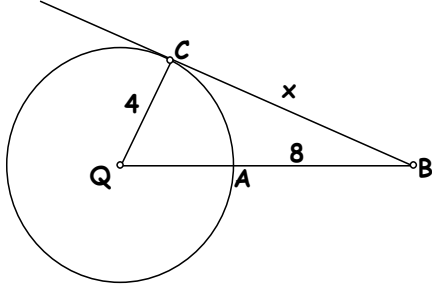
3.



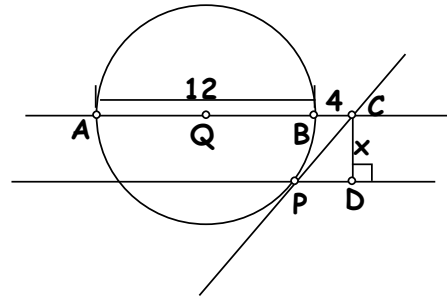
4.



5.

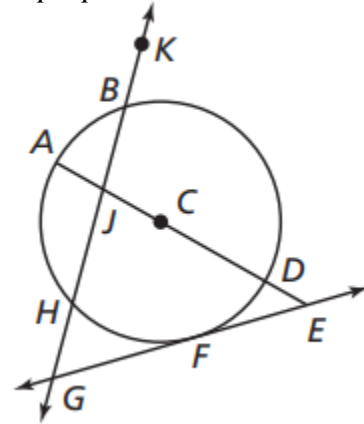


6.



Name the following terms based on the provided diagram. Use proper notation.

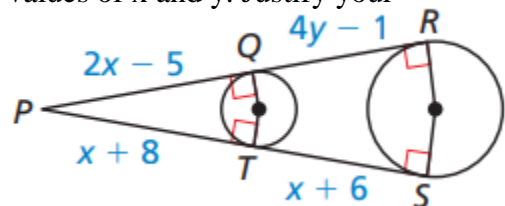
7. circle
8. two radii
9. two chords
10. a diameter
11. secant
12. tangent
13. point of tangency



14. **MODELING WITH MATHEMATICS** A bicycle chain is pulled tightly so that  $\overline{MN}$  is a common tangent of the gears. Find the distance between the centers of the gears.



15. **MATHEMATICAL CONNECTIONS** Find the values of  $x$  and  $y$ . Justify your answer.



**CYU Reflection:** How far can you go: basic, intermediate, or advanced?

**Rate your mastery level!**

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

1    2    3    4    5    6    7    8  
 Basic   Intermediate   Advanced   Solved ALL!

