

NAME _____ DATE _____ Pd _____

10.3 Using Chords 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
Minor arcs	1, 7		
Central angles	1, 5, 7		
Major arcs	2		
Radius	4, 5, 6		
Chords equidistant from center	5, 6	13, 14, 15	
Chords with congruent arcs	2, 6, 8, 9		
Diameters intersecting chords	3 - 6	10, 11, 12	

In $\odot O$, $OA \perp RS$. Each problem is independent of the others.

1. If $m\widehat{RA} = 40^\circ$, then $m\angle ROA =$ _____

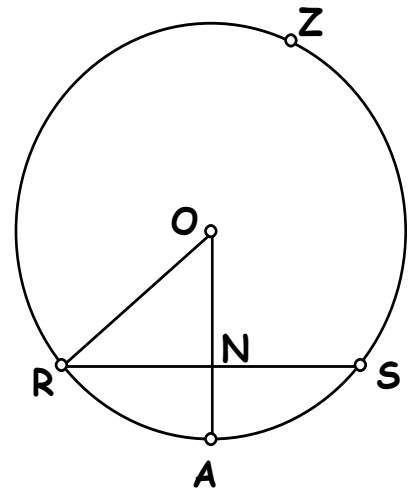
2. If $m\widehat{RZS} = 250^\circ$, then $m\widehat{AS} =$ _____

3. If $RS = 12$, then $RN =$ _____

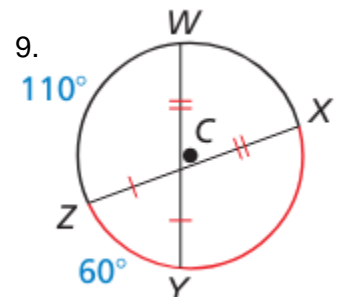
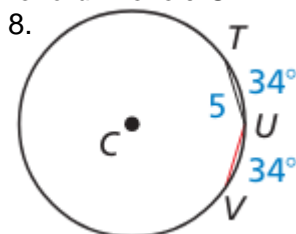
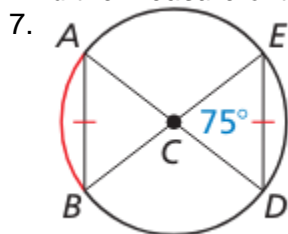
4. If $RO = 10$ and $ON = 6$, then $RN =$ _____

5. If $m\angle RON = 45^\circ$ and $RO = 12$, then $RS =$ _____

6. If $RS = 24$ and $ON = 11$, then $OR =$ _____

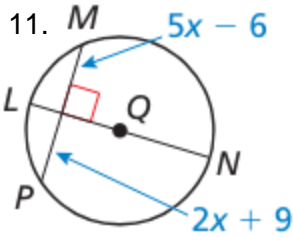
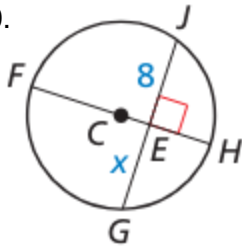


Find the measure of the lighter arc or chord in circle C.

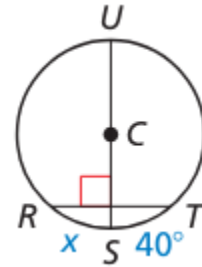


Find the value of x .

10.

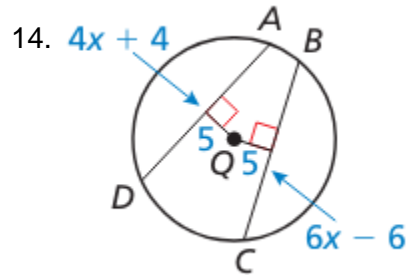
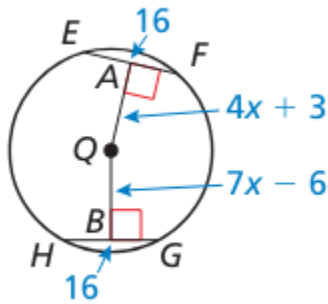


12.

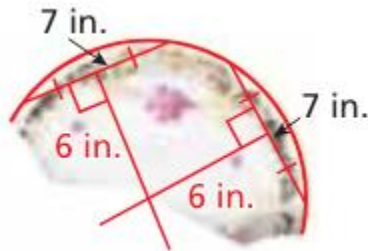


Find the radius of circle Q.

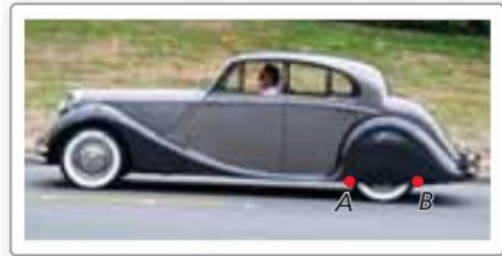
13.



15. **PROBLEM SOLVING** An archaeologist finds part of a circular plate. What was the diameter of the plate to the nearest tenth of an inch? Justify your answer.



16. **MAKING AN ARGUMENT** A car is designed so that the rear wheel is only partially visible below the body of the car. The bottom edge of the panel is parallel to the ground. Your friend claims that the point where the tire touches the ground bisects \overline{AB} . Is your friend correct? Explain your reasoning.



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.

