

Name: _____

Date: _____

Period: _____

SECTION 9.4: ARCS AND CHORDS

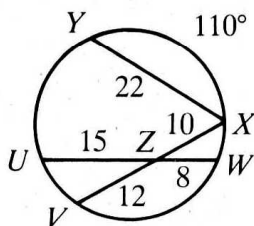
THEOREM

THEOREM

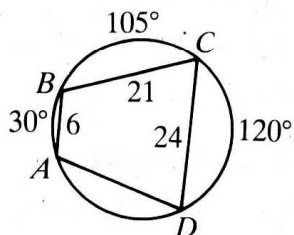
THEOREM

Complete.

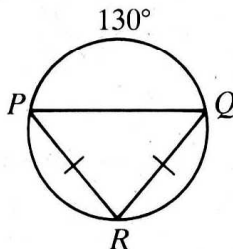
1. $m\widehat{VWX} = \underline{\quad?}$
 $m\widehat{VUY} = \underline{\quad?}$



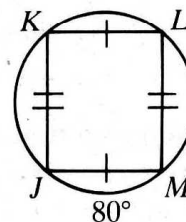
2. $AD = \underline{\quad?}$



3. $m\widehat{PR} = \underline{\quad?}$
 $m\widehat{RQ} = \underline{\quad?}$

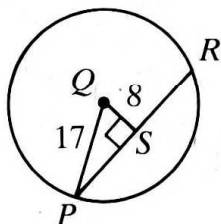


4. $m\widehat{JK} = \underline{\quad?}$, $m\widehat{LM} = \underline{\quad?}$,
 $m\widehat{KL} = \underline{\quad?}$

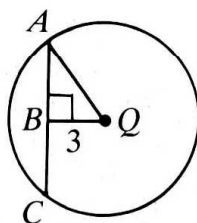


In the diagrams that follow, Q is the center of each circle. Complete.

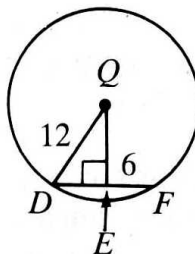
5. $PR = \underline{\quad?}$



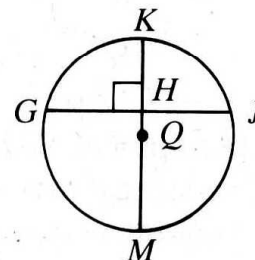
6. $AC = 8$
 $AQ = \underline{\quad?}$



7. $QE = \underline{\quad?}$

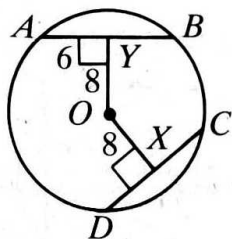


8. $m\widehat{GMJ} = 200$
 $m\widehat{GK} = \underline{\quad?}$

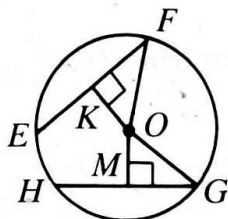


In the diagrams that follow, O is the center of the circle. Complete.

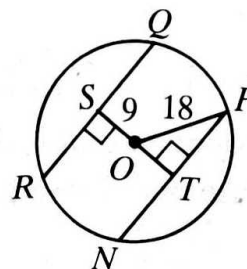
9. $DC = \underline{\quad?}$



10. $HG = 12\sqrt{2}$; $OM = 6\sqrt{2}$;
 $EF = 12\sqrt{2}$; $OK = \underline{\quad?}$



11. $NP = 18\sqrt{3}$; $RQ = \underline{\quad?}$



12. Sketch a $\odot O$ with radius of length 17 and chord \overline{AB} of length 30. How far is the chord from O ?

13. Sketch a $\odot R$ with radius of length $5\sqrt{3}$ and chord \overline{XY} that is 5 units from R . Find the length of \overline{XY} .