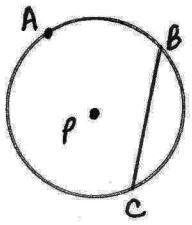
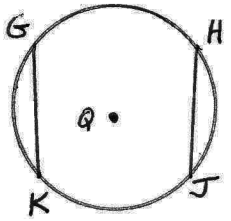
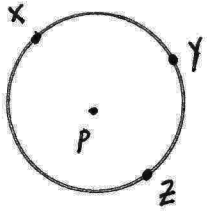
Name: _____ Date: _____ Period: _____

SECTION 9.4: ARCS AND CHORDS



THEOREM





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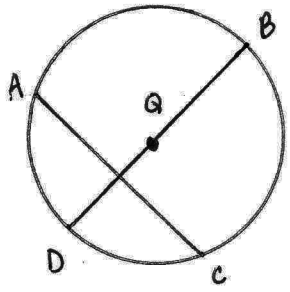
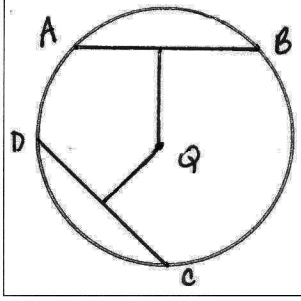
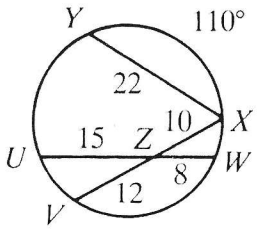


THEOREM

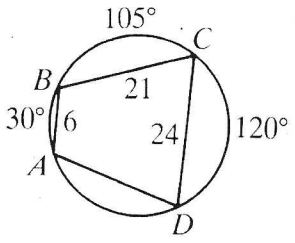


Complete.

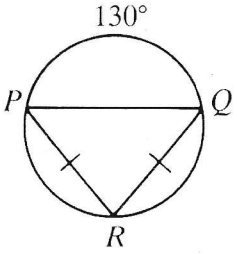
1. $m\overset{\frown}{VWX} = \underline{?}$
$m\overset{\frown}{VUY} = \underline{?}$



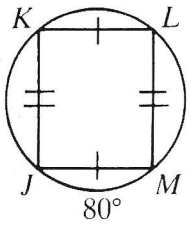
2. $AD = \underline{?}$



3. $m\overset{\frown}{PR} = \underline{?}$
$m\overset{\frown}{RQ} = \underline{?}$

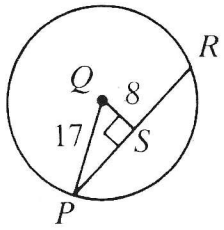


4. $m\overset{\frown}{JK} = \underline{?}$, $m\overset{\frown}{LM} = \underline{?}$,
$m\overset{\frown}{KL} = \underline{?}$

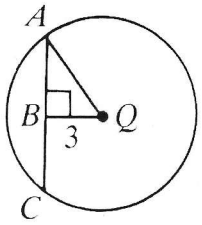


In the diagrams that follow, Q is the center of each circle. Complete.

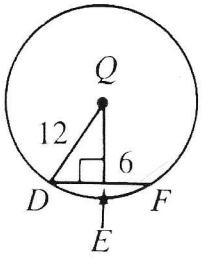
5. $PR = \underline{?}$



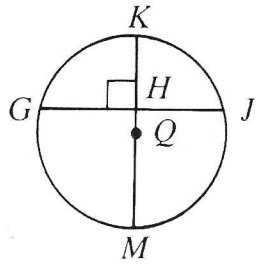
6. $AC = 8$
$AQ = \underline{?}$



7. $QE = \underline{?}$

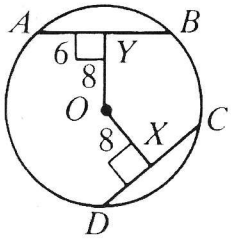


8. $m\overset{\frown}{GMJ} = 200$
$m\overset{\frown}{GK} = \underline{?}$

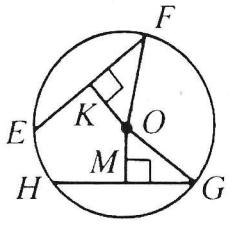


In the diagrams that follow, O is the center of the circle. Complete.

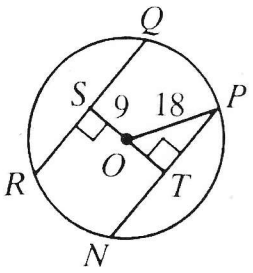
9. $DC = \underline{?}$



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



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



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 $\overline{XY}$.