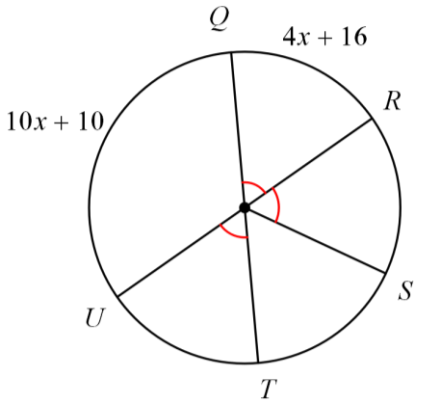
Name: _____

9.2 CHORDS & ARCS

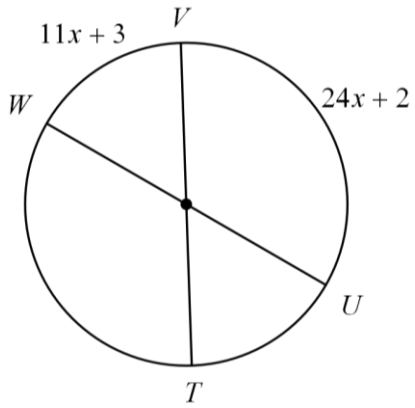
Past due on: _____ Period: _____

Set up and solve an equation to find the value of x. Then find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

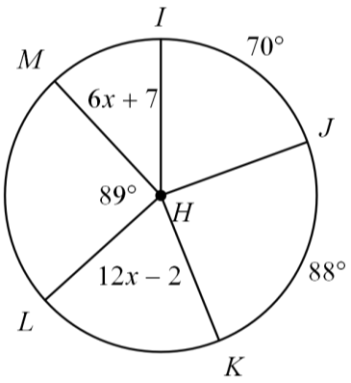
1. $m\widehat{ST}$



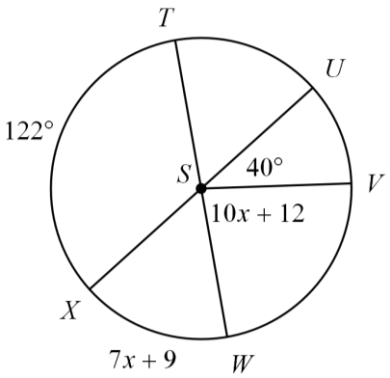
2. $m\widehat{WVT}$



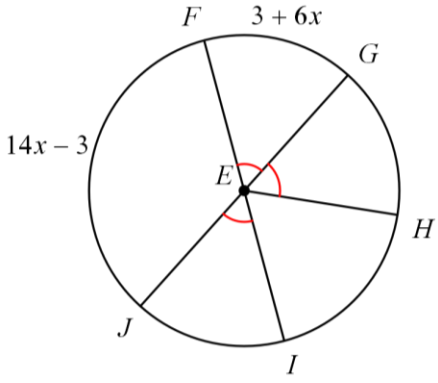
3. $m\angle KHL$



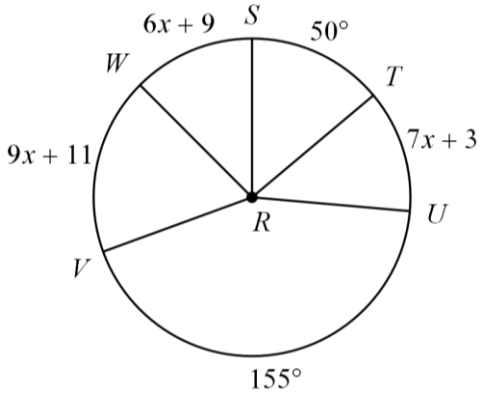
4. $m\angle WSX$



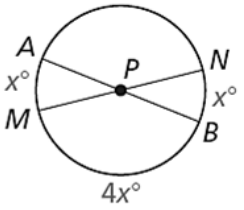
5. $m\widehat{HI}$



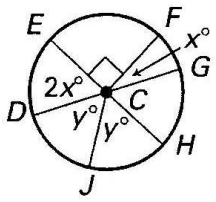
6. $m\widehat{VWS}$



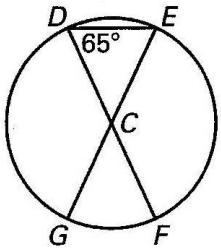
7. Your friend claims that there is not enough information given to find the value of x. If your friend correct? Explain your reasoning.



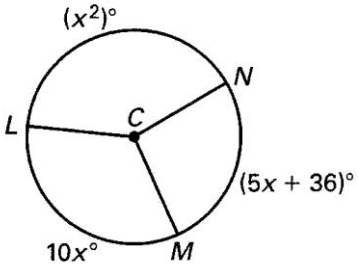
8. Set up and solve equations to find the values of x and y. Then find $m\widehat{JG}$.



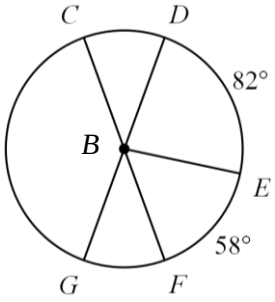
9. In the diagram shown at the right, find $m\angle GCF$, $m\widehat{DE}$, $m\widehat{EF}$, and $m\angle DCG$ if C is the center of the circle.



10. Set up and solve a quadratic equation and find the value of x, that makes sense. Then find $m\angle LCN$, $m\widehat{MN}$, and $m\widehat{LMN}$.



11. In circle B, the $m\angle CBD = 2x^2 + 11x$. Set up and solve an equation and find the value of x, that makes sense.



12. In circle D, the $m\widehat{EG} = 36x^2 - 12x$. Set up and solve an equation to find the value of x that makes sense.