Angle Relationships – Day \_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour: \_\_\_\_\_\_\_\_\_

Advanced Angle Relationships: Homework #2

**In the figure,** $\vec{YX} and \vec{YZ}$ **are opposite rays.** $\vec{YU}$ **bisects** $<ZYW$**, and** $\vec{YT}$ **bisects** $<XYW$**. Show your work. Justify steps!**

1. If $m<ZYU=8p-10$ and $m<UYW=10p-20$, find $m<ZYU$.

2. If the $m<1=5x+10$ and the $m<2=8x-23$, find $m<2$.

3. If $m<1=y$ and $m<XYW=6y-24$, find y.

4. if $m<WYZ=82$ and $m<ZYU=4r+25$, find r.

5. If $m<WYX=2(12b+7)$ and $m<ZYU=9b-1$, find $m<UYW$.

**Find x and the measure of each angle. Justify steps!**



6. 7.





8.



9.

10. Find m<T if m<t is 20 more than four times the measure of its supplement.

11. Find the measures of the two complementary angles: <A and <B, if <A is four times less than <B.