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

**Advanced Angle Relationships: Homework #1**

**Find the measure of EACH numbered angle. Justify the set up!**



1. 2. 3.



4. 5. 6.

**Use the diagram to complete the statement. Justify the set up!**

7. m<KPL= \_\_\_\_\_\_\_ 8. m<LPN= \_\_\_\_\_\_\_\_

9. m<MPN= \_\_\_\_\_\_ 10. m<MPO= \_\_\_\_\_\_\_

**Find the value of the variable and find the m<PQR. Justify the set up!**

11. 12. 13.



**Justify ALL STEPS!**

14





15





16. 17.





**18.** Two angles are complementary. The measure of one angle is 21 more than twice the measure of the other angle. Find the measures of the angles.

**19.** If a supplement of an angle has a measure 78 less than the measure of the angle, what are the measures of the angles?