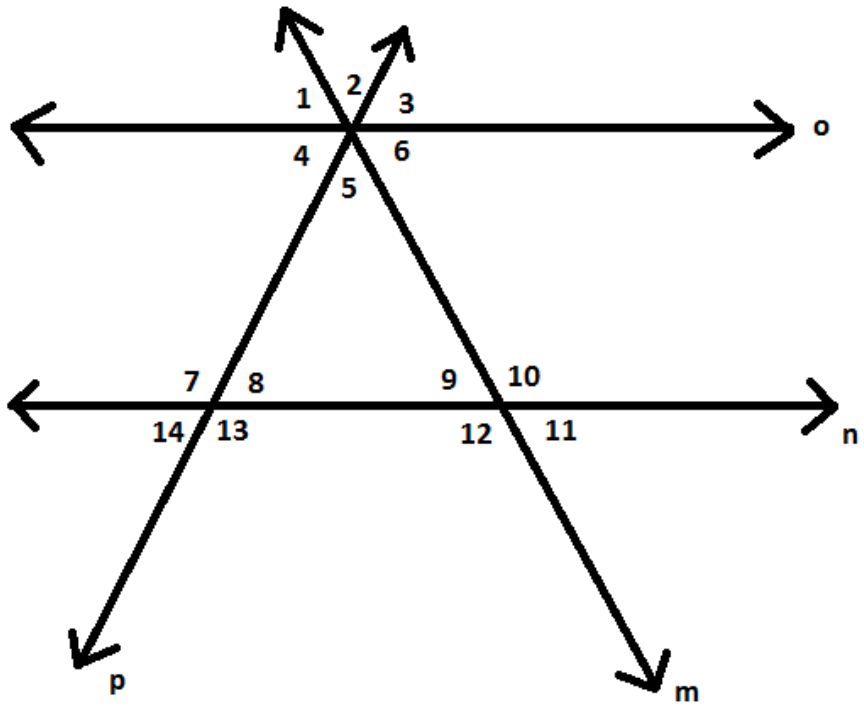
Name: _____ Geometry
Date: _____ Unit 2
Class: _____ HW 2-3



1) If $\angle 3 \cong \angle 14$ is $\overleftrightarrow{n} \| \overleftrightarrow{o}$? What is your reasoning?

2) If $\angle 1 \cong \angle 14$ is $\overleftrightarrow{n} \| \overleftrightarrow{o}$? What is your reasoning?

3) If $m\angle 2 + m\angle 3 = m\angle 10$ is $\overleftrightarrow{n} \| \overleftrightarrow{o}$? What is your reasoning?

4) If $\overleftrightarrow{n} \| \overleftrightarrow{o}$, m<13 = 10x – 30, m<1 = 4x + 4, and m<2 = 3x + 8 find and explain m<4

4) If segment GJ has endpoints (2, 4) and (-3, -6), find GJ.

5) Using segment GJ from #4, find the equation of a line that is parallel to segment GJ and passes through (-1, -3).

6) $\overline{LQ}$ is bisected by $\overleftrightarrow{PZ}$ at point D. If LD = 4x + 3, DZ = 6x, and QL = 10x – 2, find DZ.

7) Using the diagram on the front, $\overleftrightarrow{n} \parallel \overleftrightarrow{o}$, m<1 = 3x + 3, m<11 = 4x – 13, and m<13 = 9x – 35. Find and explain m<2.