Math 041 Assignment 1.3 **Last Name:_____1st_____**

Instructions: Write complete legible solutions to the following problems in the space provided. Be sure to supply all the necessary steps that lead to your answers.

1. Find the slope of the line that contains the given points $P_1(-2,1),\ P_2(6,4)$ Ans_____

2. Find the equation of the line that passes through the points $P_1(4,1),\ P_2(-4,3)$ Ans_____

3. Find the equation of the line with x intercepts x=3 and y intercept $y=-1$ Ans_____

4. Give an example of equation of a line that have the defining characteristics .

   Positive slope. Ans_____

   Negative slope Ans_____

   Line with slope equal zero Ans_____

   Line with undefined slope. Ans_____

   Two parallel lines. Ans_____

   Two perpendicular lines. Ans_____

5. For the given the equation of the line find : $3x+2y=-6$

The x intercepts. Ans_____

The y intercept. Ans_____

The equation of a line in standard form. Ans_____

The equation of a line in slope intercept form. Ans_____

6. Find the equation of the line that satisfies the following conditions. Write your answers in both slope intercept form and standard form.

a. Passes through the points $P_1(-1,1),\ P_2(6,-5)$ Ans_____

b. Passes through $(3,5)$ and has a slop -3 ual . Ans_____

c. Passes through $(-2,-4)$ and parallel to the line $2x+3y=9$ Ans_____

d. Passes through $(-2,-4)$ and perpendicular to the line $3x+2y=-4.$ Ans_____

e. Has y intercept $y=2$ and slope equal zero. Ans_____

f. Has *x* intercept $x=3$ and slope equal 3. Ans_____

g. Passes through $(2,200)$ and has an undefined slope. Ans_____