Name: $\qquad$
Paper HW \#8 Due 10/6/15
M110
Instructions: Complete these problems for homework due on the date above. The problems should look very similar to those that were covered during our class meeting covering §5.1-5.3.

1. One of the following diagrams shows the graph of $2 x-y=2$.
a) Circle the diagram that shows the graph.
b) Draw a point on that graph and label it with its ordered pair (coordinate pair). This point should be a solution of the equation $2 x-y=2$.
c) Show a check to see that it is the solution.



2. For the following equation: $2 x+5 y=10$
a) Find the x -intercept. Use the correct ordered pair notation.
b) Find the $y$-intercept. Use the correct ordered pair notation.
c) Find a third ordered pair solution.


Use the correct ordered pair solution using the equation.
d) Plot the points you found in part $\mathrm{a}, \mathrm{b}$ \& c on the plot above and draw the graph of $2 \mathrm{x}+5 \mathrm{y}=10$.
3. Use your preferred method to graph the equation
a) $x+2=0$
b) $2(y-3)=9$

4. Does the relation given represent a function? Why or why not?
a)

b) $y=2|x-3|+1$
c)

| $\mathbf{x}$ | $\mathbf{y}$ |
| :--- | :--- |
| -10 | 3 |
| -2 | 4 |
| 2 | 4 |
| 10 | 3 |

d) $\{(0,2),(5,2),(3,2)\}$
e)

5. For the function: $f(x)=2(x-5)+3$
a) Find $f(-2)$
b) Find the $x$ for which $f(x)=7$
6. For the following function: $f(x)=-1 / 2 x+3$
a) Find $f(0)$. I am finding the $\qquad$ . Show your work.
b) For what value of $x$ is $f(x)=0$ ? I am finding the $\qquad$ .
c) What is the domain of the function? Give in set builder notation.
d) What is the range of the function? Give as an interval.
6. For the table of values, find each of the following:
a) $\mathrm{f}(-2)=$ $\qquad$
b) $\quad \mathrm{f}($ $\qquad$ ) $=-8$

| $\mathbf{x}$ | $\mathbf{y}$ |
| :--- | :--- |
| -6 | 10 |
| -2 | 4 |
| 0 | 1 |
| 2 | -2 |
| 6 | -8 |

7. Given the following graph, find the values. Each line on axes are 1-unit.

a) $g\left(\_\right)=0$
b) $\quad \mathrm{f}(2)=$ $\qquad$
