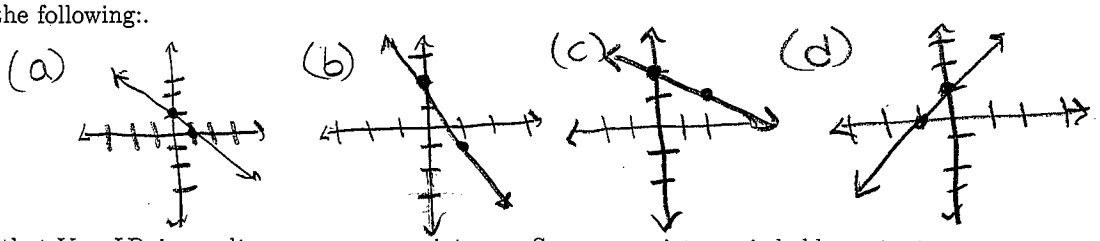
GroupWork Sections 3.2
6-27-12

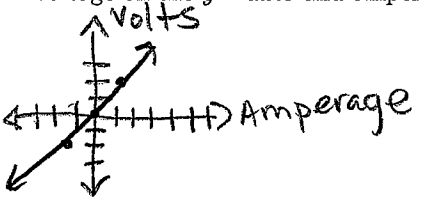
Group Members_____

1. Sketch a graph of the following:.

   (a) $x + y = 1$
   (b) $3x + y = 2$
   (c) $\frac{1}{2}x + y = 2$
   (d) $-x + y = 1$



2. Ohm's law tells us that $V = IR$; i.e. *voltage* $=$ *amps* $\cdot$ *resistance*. Suppose resistance is held constant at 2 ohms. Sketch a graph displaying the relationship between voltage and amperage. (Hint: sketch your graph with voltage on the $y - axis$ and amperage on the $x - axis$.)



$V = 2 \cdot I$

3. Suppose we have 30 meters of fence and we wish to build a rectangular fence. Answer the following questions:

   (a) Write a function that relates the width and length of the rectangular region surrounded by our fence.

   $2w + 2l = 30$

   (b) Use the equation found in (a) to complete the ordered pair (5,).

   $(5, 10)$

   (c) Write a sentence explaining what the ordered pair found in (b) represents.

   The fence has width 5 meters and length 10 meters

   (d) Can I fence in a rectangle with a width 40 meters?

   No, there are only 30 meters of fencing, we would have to have negative length:

   $2(40) + 2l = 30$

   $l = -25$