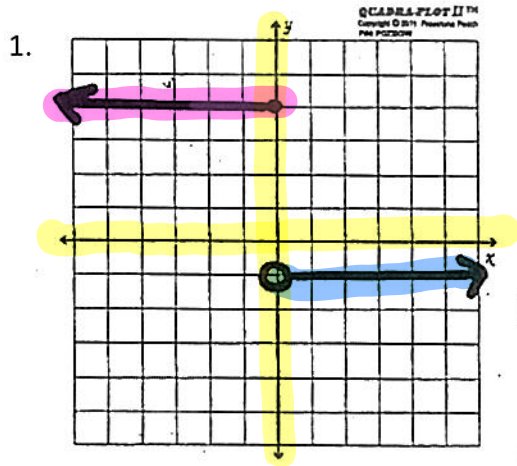


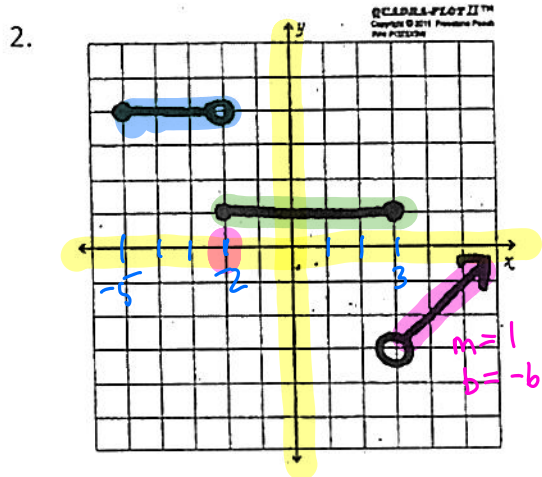
Name: \_\_\_\_\_  
 PC: Do Now

Date: \_\_\_\_\_  
 Ms. Loughran

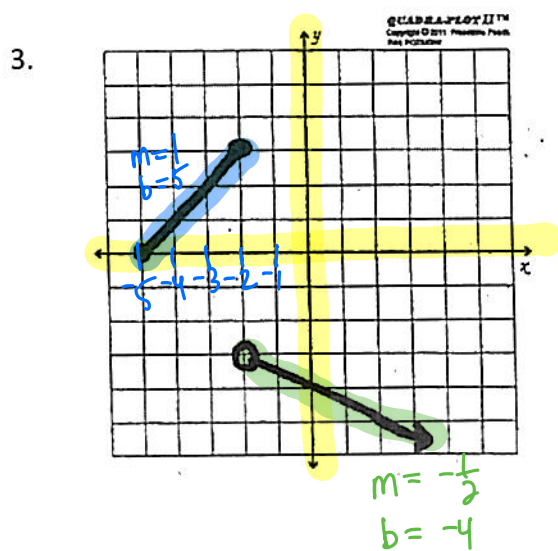
Write the equations for the piecewise functions whose graphs are shown below.



$$f(x) = \begin{cases} 4 & x \leq 0 \\ -1 & x > 0 \end{cases}$$

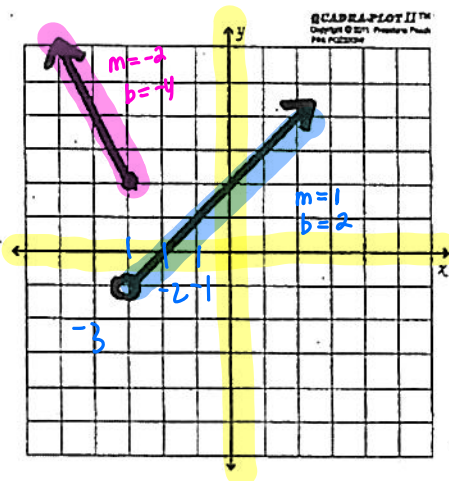


$$f(x) = \begin{cases} 4 & -5 \leq x < -2 \\ 1 & -2 \leq x \leq 3 \\ x - 6 & x > 3 \end{cases}$$



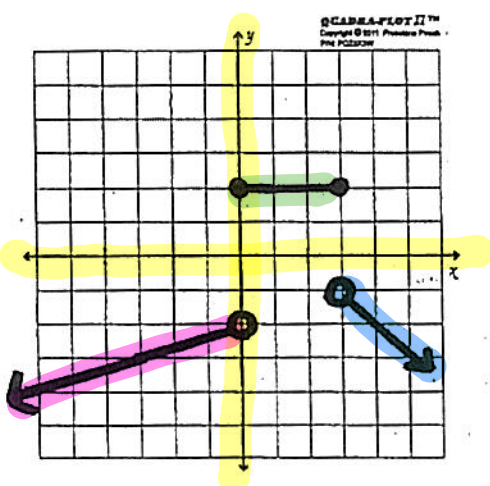
$$f(x) = \begin{cases} x + 5 & -5 \leq x \leq -2 \\ -\frac{1}{2}x - 4 & x > -2 \end{cases}$$

4.



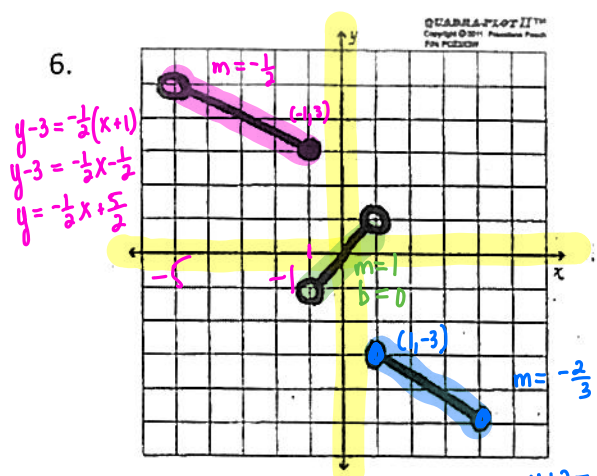
$$f(x) = \begin{cases} -2x - 4 & x \leq -3 \\ x + 2 & x > -3 \end{cases}$$

5.



$$f(x) = \begin{cases} 2 & 0 \leq x \leq 3 \\ \frac{1}{3}x - 2 & x < 0 \\ -x + 2 & x > 3 \end{cases}$$

6.



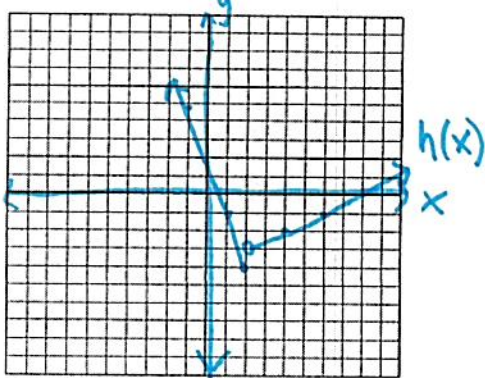
$y - 3 = -\frac{1}{2}(x + 1)$   
 $y - 3 = -\frac{1}{2}x - \frac{1}{2}$   
 $y = -\frac{1}{2}x + \frac{5}{2}$

$$f(x) = \begin{cases} -\frac{1}{2}x + \frac{5}{2} & -5 < x \leq -1 \\ x & -1 < x < 1 \\ -\frac{2}{3}x - \frac{7}{3} & -1 \leq x \leq 4 \end{cases}$$

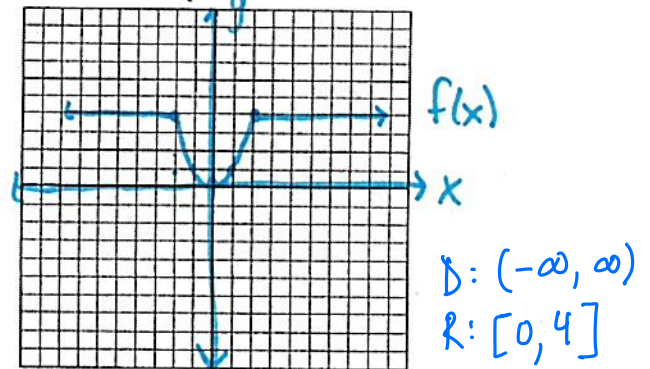
$y + 3 = -\frac{2}{3}(x - 1)$   
 $y + 3 = -\frac{2}{3}x + \frac{2}{3}$   
 $y = -\frac{2}{3}x - \frac{7}{3}$

# Homework 11-07

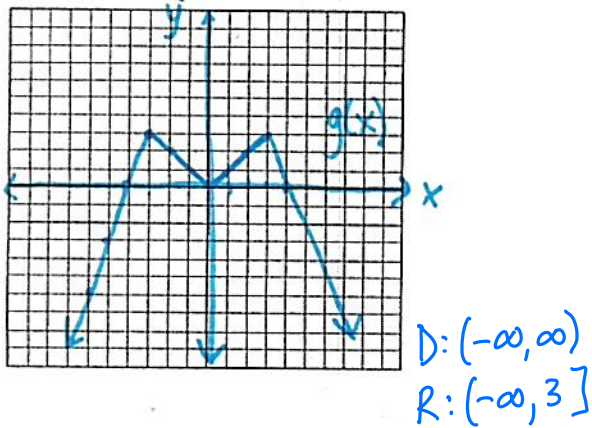
9.  $h(x) = \begin{cases} -3x+2, & x \leq 2 \\ \frac{1}{2}x-4, & x > 2 \end{cases}$



10.  $f(x) = \begin{cases} 4, & x \leq -2 \\ x^2, & -2 < x < 2 \\ 4, & x \geq 2 \end{cases}$



11.  $g(x) = \begin{cases} 3x+12, & x \leq -3 \\ |x|, & -3 < x < 3 \\ -3x+12, & x \geq 3 \end{cases}$



12.  $h(x) = \begin{cases} x^2-4, & x < 3 \\ \frac{2}{3}x-5, & x \geq 3 \end{cases}$

