Grab a packet on front table

Discuss HW issues

Name_____ Hour_____ Math 2 Trimester 1

Assignment Packet Week #2

Date	Sections Done in Class	Homework Assigned	Homework Due and Score out of 10
Mon 8/26	Piecewise Functions Intro: folding and post-it activity	**Intro to piecewise Functions Worksheet**	
Tue 8/27	1.2 Piecewise Functions Day 1: Graphing, Evaluating, and Domain and Range	**1.2 Piecewise Functions – Graph , Evaluate, Domain, Range** pg 16-18: #s 2, 3-21 odd, 22, 31, 49, 51, 59, 61	**1.1 Absolute Value Functions** Pg 8-10 #s 1-3, 5, 7, 9, 23-26, 35-37, 42, 45, 46, 64, 67 (assigned last Friday) /10
Wed 8/28	1.2 Piecewise Functions Day 2: Writing and Applications	**1.2 Piecewise Functions – Writing and Applications** pg 16-18: #s 23-30, 35, 36, 37, 48, 55	**Intro to piecewise Functions Worksheet** /10
Thurs 8/29	Rational and Irrational Numbers Worksheet	**Rational and Irrational Numbers Worksheet**	**1.2 Piecewise Functions – Graph , Evaluate, Domain, Range** /10
Fri 8/30	**STANDARD 1A QUIZ** Graphs of functions, domain and range, writing functions & applications	No HW	**1.2 Piecewise Functions – Writing and Applications** /10
Mon 9/3	No School Labor Day		
Tue 9/4			**Rational and Irrational Numbers Worksheet** /10
Bell Ringer Week 2 Score – 2.5 pts per day			/10
Assignment Total for the week:			**/60**

Upcoming Dates……..

- **Chapter 1 Test: Standards 1A and 1B on Tuesday, September 10th**

BELL RINGER

Monday 8/26

Watch the clip and answer the questions below: https://bhi61nm2cr3mkdgk1dtaov18-wpengine.netdna-ssl.com/wp-content/uploads/2017/03/Mistakes-are-Powerful.mp4

1. What are your main take-aways from the video?

mistake → brain grows
synapse fired if didn't make mistake

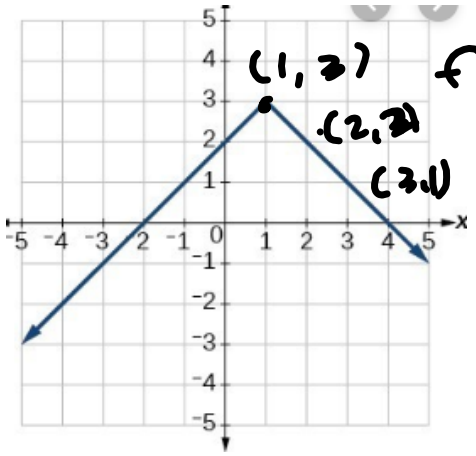
2. How can you apply what you learned about mistakes to your school work?

Describe the transformation done to the parent function f(x) = |x|

$$g(x) = -3|x + 2| - 1$$

down 1
left 2
reflects ↙↘
stretch

Write the equation of the function below



$f(x) = -|x-1|+3$

Domain: $(-\infty, \infty)$

Range: $(-\infty, 3]$

$y \leq 3$

Write the equation of the function described

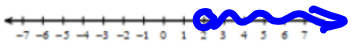
An absolute value function shifted right 2, down 7 and compressed by a factor of 3/4

$y = \frac{3}{4}|x-2| - 7$

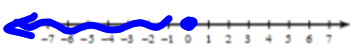
Task 1.2 Intro to Piecewise Functions Activity Name_____ Hr___

1-6. Graph the following inequalities on the number line.

1. $x > 2$

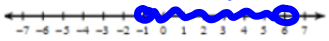


2. $p \leq 0$

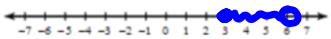


3. $r \geq -4$

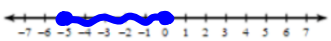
4. $-1 < x < 6$ $x < 6$ $x > -1$



5. $3 \leq p < 6$

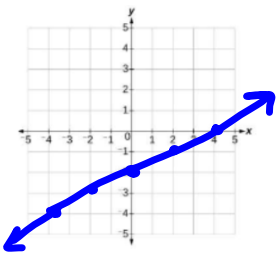


6. $-5 \leq r \leq 0$

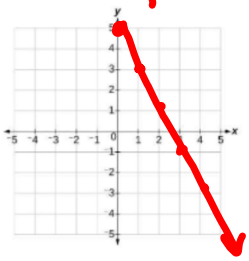


7-10. Graph the following functions

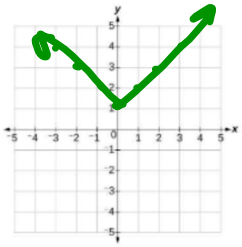
7. $f(x) = \frac{1}{2}x - 2$



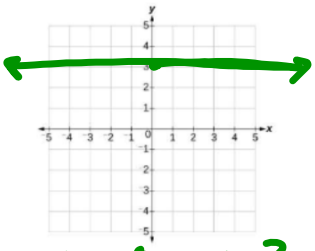
8. $f(x) = -2x + 5$



9. $f(x) = |x| + 1$



10. $f(x) = 3$



$y = mx + b$

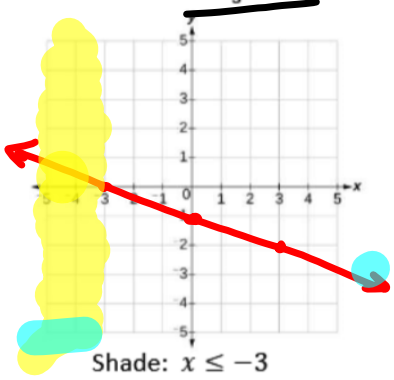
slope y-int

$y = 0x + 3$

$y = -2$

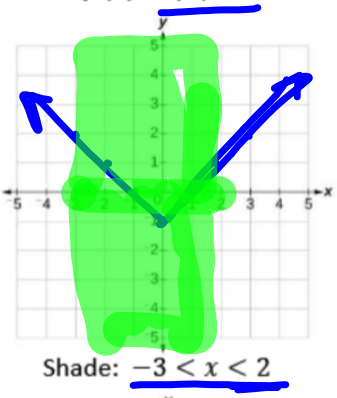
11-13: Graph the functions. Then, lightly shade the part of each graph that fits in the given inequlity boundary. Finally, Fold paper so only colored parts of each graph are showing to create one big graph.

11. $f(x) = -\frac{1}{3}x - 1$



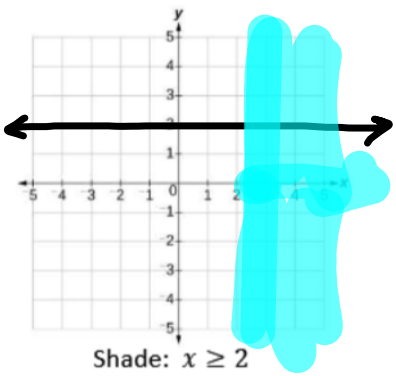
Shade: $x \leq -3$

12. $f(x) = |x| - 1$



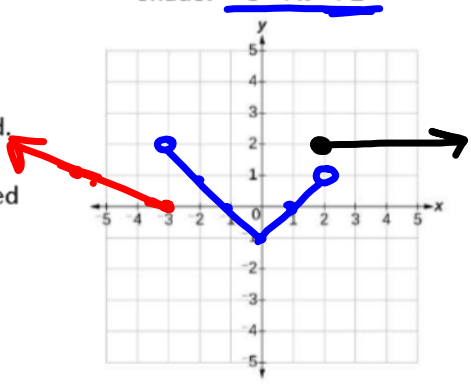
Shade: $-3 < x < 2$

13. $f(x) = 2$



Shade: $x \geq 2$

14. Draw the final image that's created when the lines are folded. (All the colored parts).
Be sure to include open and closed dots where appropriate.



Piecewise function:

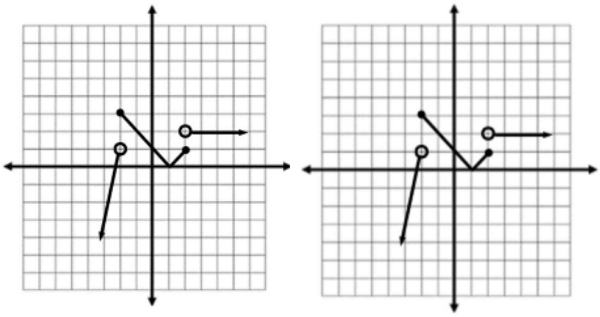
$$f(x) = \begin{cases} -\frac{1}{3}x - 1, & x \leq -3 \\ |x| - 1, & -3 < x < 2 \\ 2, & x \geq 2 \end{cases}$$

Partner Post-It Activity

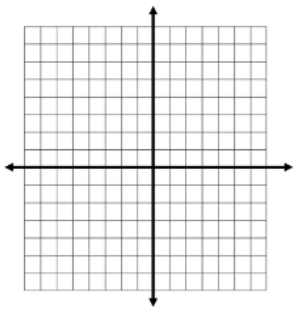
Name: _____

Piecewise
Post-it Note Worksheet

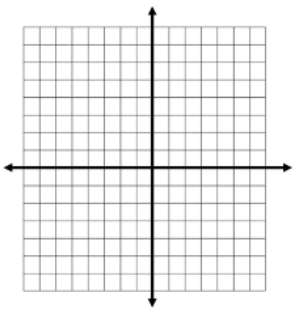
For problems 1-6 draw the graph below with the given restrictions on its domain.



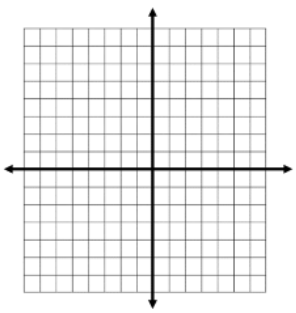
1. $0 \le x \le 2$



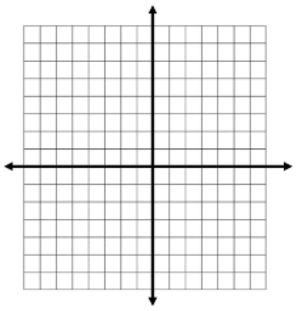
2. $x > 0$



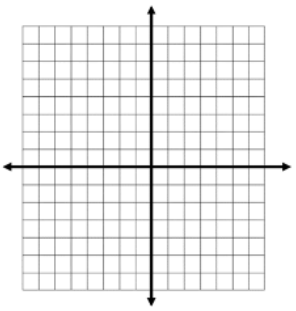
3. $x \le -1$



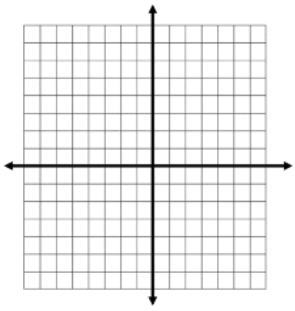
4. $-3 \le x < -1$



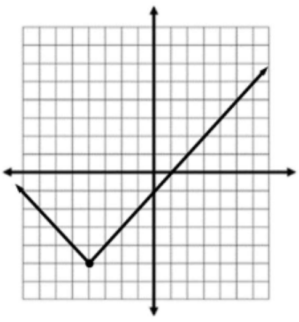
5. $x \ge 3$



6. $-1 < x \le 4$

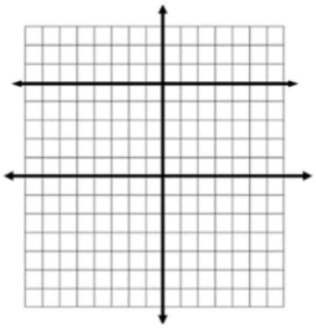


For problems 7-12 draw a graph with the given restrictions using graphs "a-c"



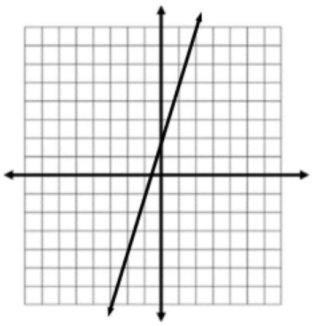
Graph A

$y = |x+4| - 5$



Graph B

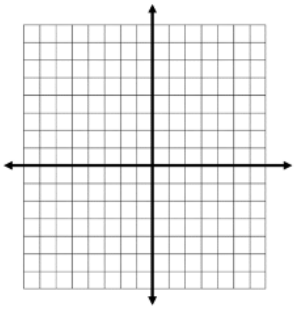
$y = 5$



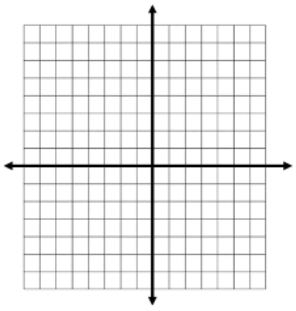
Graph C

$y = 3x + 2$

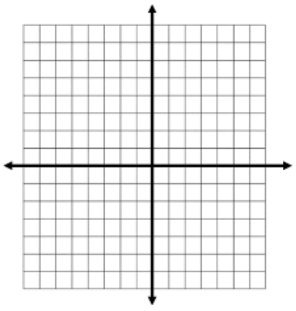
1. Graph B: $0 \le x \le 2$
   Graph C: $x < 0$



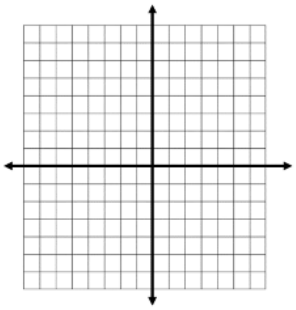
2. Graph A: $x < 0$
   Graph B: $x \ge 2$



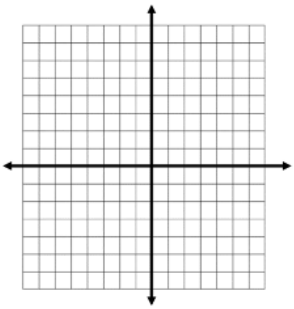
3. Graph A: $x \le -3$
   Graph C: $x > 1$



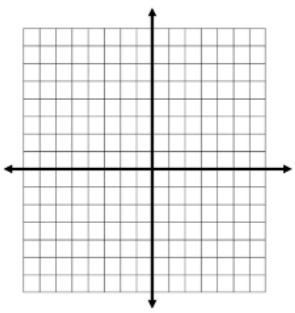
4. Graph A: $-3 \le x < -1$
   Graph B: $-1 \le x \le 1$
   Graph C: $x > 1$



5. Graph A: $-7 \le x < -2$
   Graph B: $x \ge 3$
   Graph C: $-2 \le x \le 0$



6. Graph A: $x \ge 6$
   Graph B: $1 \le x < 6$
   Graph C: $-2 < x < 1$

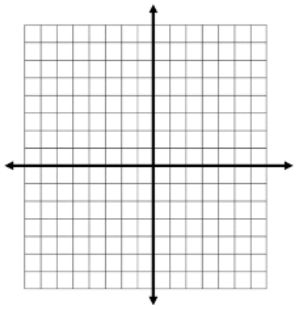


Assignment - in packet

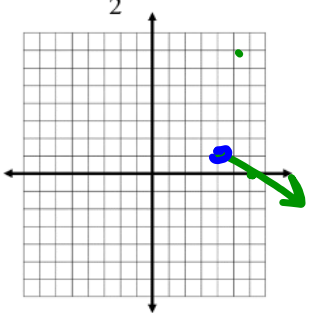
Intro to Piecewise Functions Worksheet Name:_____Hr: ____

Graph the following functions with their restricted domains.

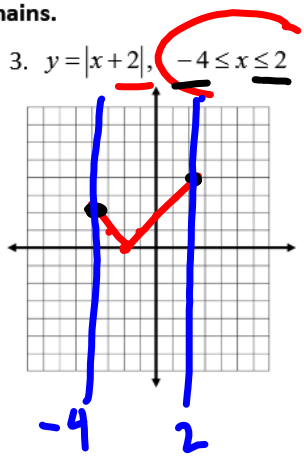
1. $y = 2x + 1, \quad x \le 3$



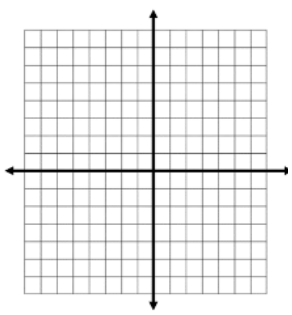
2. $y = -\frac{1}{2}x + 3, \quad x > 4$



3. $y = |x + 2|, \quad -4 \le x \le 2$

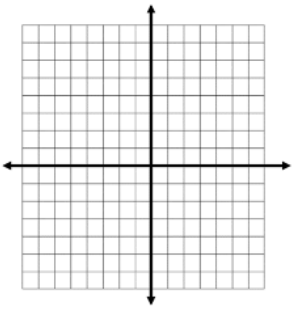


4. $y = 5, \quad -1, < x < 4$

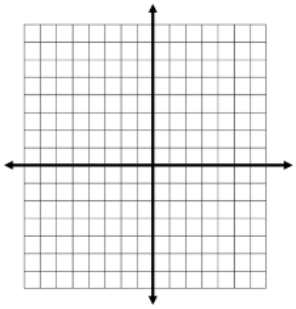


Graph the following piecewise functions.

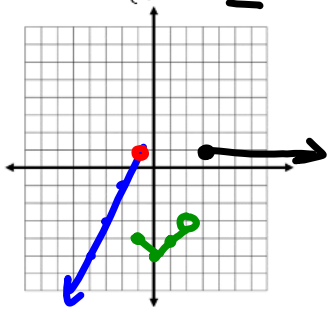
5. $f(x) = \begin{cases} -2x + 1 & x \le 2 \\ |x - 4| & x > 2 \end{cases}$



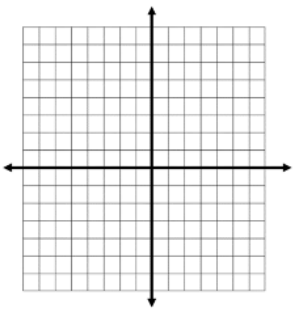
6. $f(x) = \begin{cases} 5 & x \le -3 \\ -2x - 3 & x > -3 \end{cases}$



* 7. $f(x) = \begin{cases} 2x + 3, & x < -1 \\ |x| - 5, & -1 \le x < 2 \\ 1, & x \ge 3 \end{cases}$

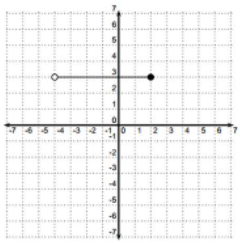
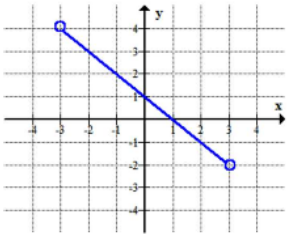


8. $f(x) = \begin{cases} x + 1, & x \le 0 \\ 2x - 1, & 0 < x \le 4 \\ 3, & x > 4 \end{cases}$



Write an equation with its restricted domain for each graph

9.



10.