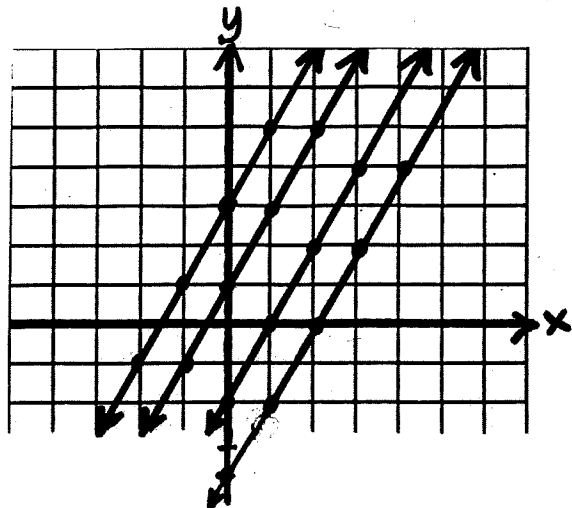


Algebra I  
Notes 5.2 Graphs of Linear Functions

Objectives: For an equation in the form  $y = mx + b$ :  
 complete a table of integer values;  
 identify the slope and the y-intercept of the line;  
 graph the equation from ordered pairs or match an equation to its graph;  
 and compare and contrast graphs.

Complete the table of values to match each equation with its graph.

1. $y = 2x + 3$	2. $y = 2x + 1$	3. $y = 2x - 2$	4. $y = 2x - 4$
x	y	x	y
-2		-1	
-1		0	
0		1	
1		2	



How are the equations similar?

\_\_\_\_\_

How are the equations different?

\_\_\_\_\_

Use the graph to determine the slope (rise/run) of each line.

line #1 \_\_\_\_\_ line #2 \_\_\_\_\_ line #3 \_\_\_\_\_ line #4 \_\_\_\_\_

How are the lines similar? \_\_\_\_\_

How are the lines different? \_\_\_\_\_

Complete the table of values to match each equation with its graph.

5.  $y = -1x$

x	y
-1	
0	
1	
2	

6.  $y = -1x + 1$

x	y
-1	
0	
1	
2	

7.  $y = -1x - 2$

x	y
-1	
0	
1	
2	

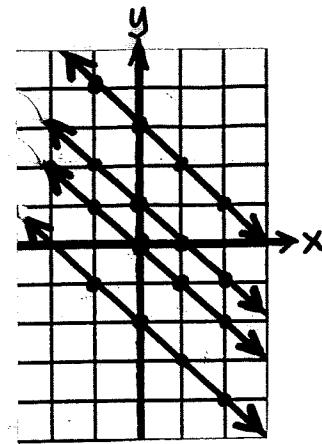
8.  $y = -1x + 3$

x	y
-1	
0	
1	
2	

Use the graph to determine the slope (rise/run) of each line.

line #5 \_\_\_\_\_ line #6 \_\_\_\_\_

line #7 \_\_\_\_\_ line #8 \_\_\_\_\_



How are the lines similar? \_\_\_\_\_

How are the lines different? \_\_\_\_\_

How are the equations similar? \_\_\_\_\_

How are the equations different? \_\_\_\_\_

In the equation  $y = mx + b$ , what is determined by the

m: \_\_\_\_\_

b: \_\_\_\_\_

\_\_\_\_\_