

Algebra I

Review for Quiz #1 continued

NAME: _____

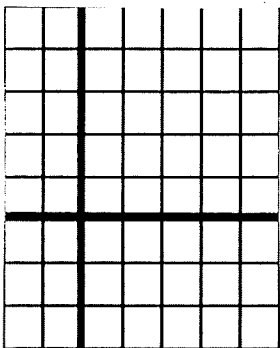
You will need a piece of graph paper.

Part III. The Slope-Intercept Form of an Equation.

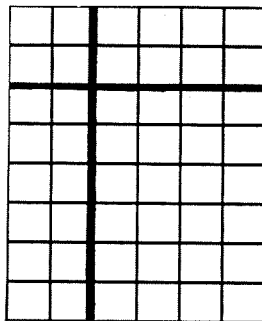
A. Write the **slope-intercept** equation for each of the following lines:

1. slope is 3, y-intercept is 9 _____
2. slope is $-\frac{1}{2}$, y-intercept is -8 _____
3. slope is 5, contains the point (0, 3) _____
4. slope is -3 , passes through the origin _____

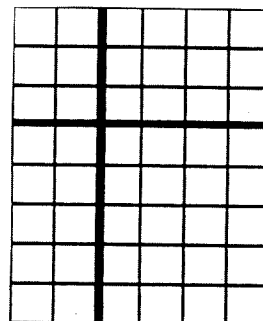
B. **Graph** each of the following lines from their equations:



1. $y = \frac{1}{4}x + 2$

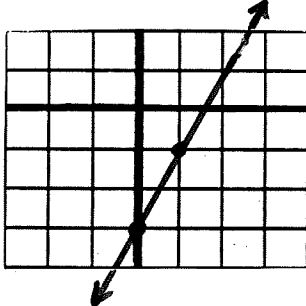


2. $y = -3x - 2$

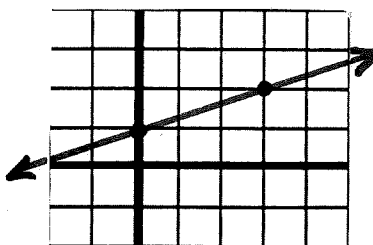


3. $y = -2x$

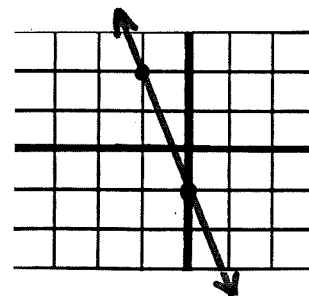
C. Write the **slope-intercept** equation of each line from its graph.



1. _____



2. _____



3. _____

D. Describe what is the **same** and what is **different** from the two lines given their equations:

1. $y = 4x$
 $y = -4x$ same _____ different _____

2. $y = 2x + 5$
 $y = 3x + 5$ same _____ different _____

3. $y = -x + 1$
 $y = -x - 1$ same _____ different _____

E. Write the **slope-intercept** equation for a line containing these points. Show all 4 steps.

1. (3, 3) and (5, 7)

Step 1. Find the slope.

Step 3. Write the equation.

Step 2. Solve for b.

Step 4. Check your equation.

2. (1, 4) and (3, 5)

Step 1. Find the slope.

Step 3. Write the equation.

Step 2. Solve for b.

Step 4. Check your equation.

3. (-2, 4) and (1, 2)

Step 1. Find the slope.

Step 3. Write the equation.

Step 2. Solve for b.

Step 4. Check your equation.

F. Write the **slope-intercept** equation for a line with the given slope and point:

1. slope = 2; (1, 5)

2. slope = $-\frac{1}{2}$; (3, 1)

Part IV. Lines of Best Fit.

1. Graph the data on a piece of graph paper.
2. Draw a **line of best fit**.
3. Circle two points ON your line of best fit.
4. Find the **slope** of your line using your two circled points.

Hours Sleeping	X	7	8	2	6	9	4
Hours on Internet	Y	2	2	5	3	1	4