

Algebra I
Review for Quiz #1
5.1-5.3

NAME: _____
DATE: _____ HOUR: _____

You may use a calculator on the quiz.

Part I. Definition of Slope.

A. **Define** "slope" 3 different ways:

- 1.
- 2.
- 3.

B. **Draw** a line with the following slopes:

- 1.
- 2.
- 3.

positive slope

negative slope

slope of zero

C. What is the **formula** for the slope of the line between the points (x_1, y_1) and (x_2, y_2) ?

$$m = \underline{\hspace{2cm}}$$

D. Find the **slope** between the two points. Simplify and reduce all fractions.

1. $(-3, 5)$ and $(7, 6)$ _____
2. $(-1, 1)$ and $(-3, -3)$ _____
3. $(0, 2)$ and $(3, 0)$ _____
4. $(-3, 1)$ and $(2, 6)$ _____
5. $(3, 5)$ and $(-2, -6)$ _____
6. $(10, 4)$ and $(7, 4)$ _____

E. Find the **slope** for each of the given lines. Simplify and reduce all fractions.

1. rise 8, run 4 _____

4. rise 7, run 14 _____

2. rise 12, run -10 _____

5. rise -1, run 7 _____

3. rise -1, run -3 _____

6. rise 10, run -10 _____

Part II. Definition of a y-intercept.

A. Describe a "y-intercept" 3 different ways.

1.

2.

3.

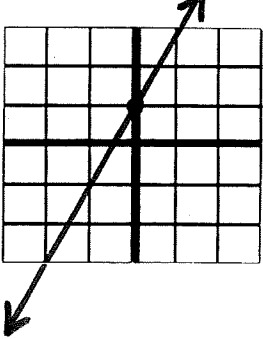
B. Write the **coordinates** where each line crosses the y-axis:

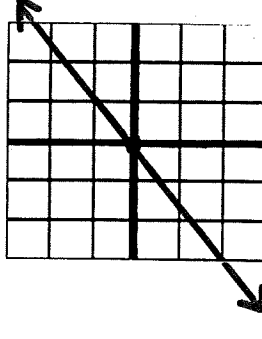
1. $y = 2x + 9$ _____

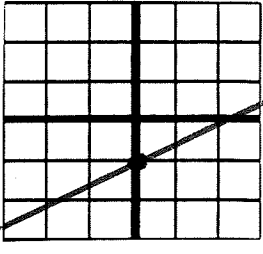
3. $y = -4x - \frac{1}{2}$ _____

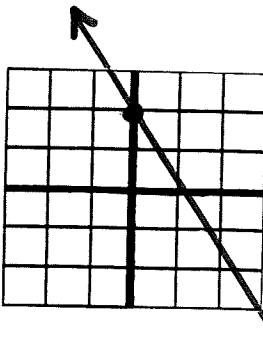
2. $y = 14x - 29$ _____

4. $y = 2x$ _____

5.  _____

6.  _____

7.  _____

8.  _____