

Name: _____ Hour: _____ Date: _____

NOTES: Section 4.7 – Graphing Lines Using Slope-Intercept Form

Goals: #1 – I can graph a linear equation in slope-intercept form.

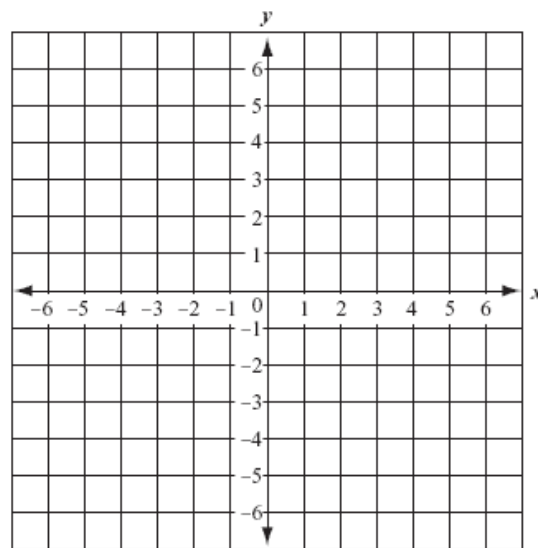


Homework: Section 4.7 Worksheet

Exploration #1: Work with a partner.

1. Graph $y = \frac{1}{2}x - 1$ using a table of values.

x	y



- Find the *slope* of the line.
- Find the *y*-intercept of the line.
- What do you notice?

Notes:

The linear equation _____ is written in _____ form.

$$y = mx + b$$

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Example #1: Identify the slope and the y-intercept of the following equations.

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

2. $2x - y = -3$

slope: _____

slope: _____

y-intercept: _____

y-intercept: _____

Example #2: Graph the following equations.

1. $y = -3x + 2$

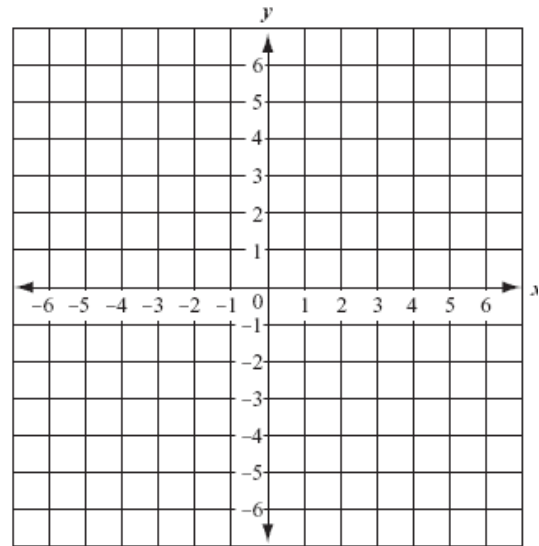
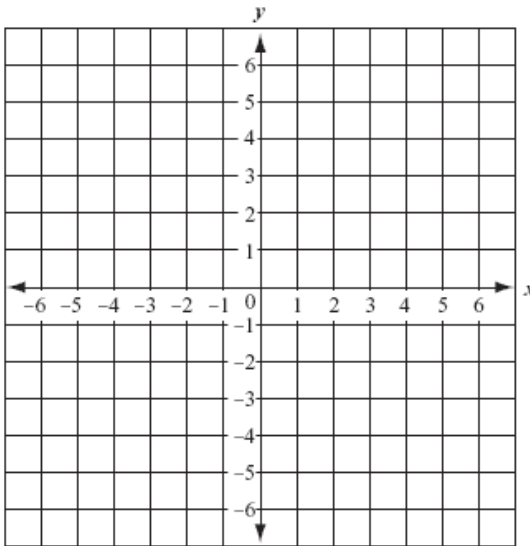
2. $y = \frac{2}{3}x + 2$

slope: _____

slope: _____

y-intercept: _____

y-intercept: _____



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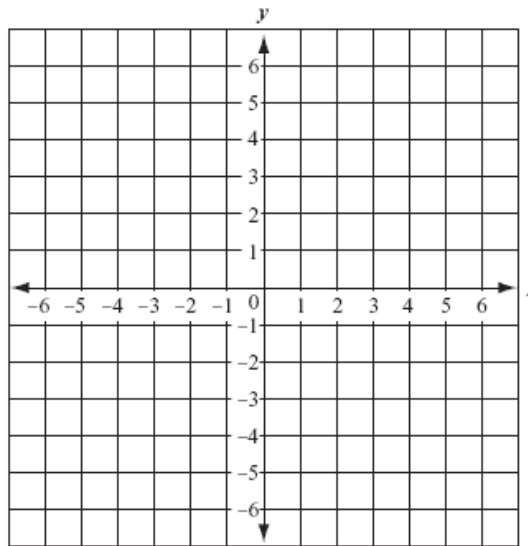
Exploration #2: Graph each equation on the same coordinate plane. Describe any patterns you see.

1. $y = 2x$

2. $y = 2x + 2$

3. $y = 2x - 2$

4. What do you notice?



Notes:

_____ lines have the _____ slope.

Examples:

Example #3: Which of the following lines are parallel?

1. **line a:** $-x + 2y = 6$

line b: $x + 2y = -2$

line c: $x + 2y = 4$

2. **line a:** $3x + 2y = 6$

line b: $3x - 2y = 6$

line c: $6x + 4y = 6$