

Name: \_\_\_\_\_

7/8A

Date: \_\_\_\_\_

Classwork 9.7

## Rearranging into Slope Intercept Form

**Aim:** How can we rearrange a linear equation in order to find the slope and y-intercept?

**Recall:** The slope-intercept form of a linear equation is:

❖ Not every linear equation will first appear in slope-intercept form. You must use your algebra skills to get the equation into that form before you can find the slope and y-intercept.

**For the following examples, write the equation in slope-intercept form and identify the slope and the y-intercept.**

1)  $y = 14 - 3x$

2)  $2y = 6x + 8$

3)  $3y = 5x + 9$

4)  $3x + 7y = 14$

**Try It:** Write the following equations in standard form and then find the slope and y-intercept.

1.  $2x + y = 6$

2.  $2y = -4 + 5x$

m = \_\_\_\_\_ b = \_\_\_\_\_

m = \_\_\_\_\_ b = \_\_\_\_\_

*On your own!*

**(#1-3) Write the following linear equations in standard form and then identify the slope and y-intercept.**

1.  $y - 5 = 3x$

2.  $2y = 4x + 6$

3.  $-6x + 2y = 8$

4. Which equation represents a line with the same slope as the line  $y = -2x + 3$ ?

$4x + 2y = 5$

$2x + 4y = 1$

$y = 3 - 4x$

$y = 4x - 2$

5. Which equation represents a line with the same y-intercept as  $y = 4x - 3$ ?

$y - 3 = x$

$y = 8x + 3$

$2y = 8x - 3$

$5x + 6y = -18$