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