Linear Equations – Slope-Intercept Form

- Slope
- Rate of change
- Rise over run
- Independent variable
- · It is also our x-coordinate

Identify the slope and y-intercept of each equation

(HINT: Make sure the equation is in slope-intercept form!)

$$y = 3x + 5$$

$$\mathbf{y} = \frac{1}{2}\mathbf{x}$$

$$y = -x$$

$$y = 3$$

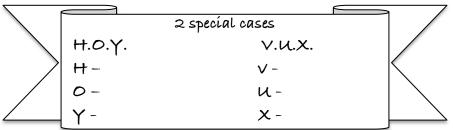
$$\mathbf{y} = -\frac{3}{4}\mathbf{x} - \frac{5}{4}$$

$$2y = 4x + 8$$

$$3y = x + 2$$

Graphing — Slope-Intercept Form

- Make sure the equation is in slope-intercept form 1.
- 2. Identify the slope and y-intercept
- Graph the y-intercept on the y-axis
- Graph two points using the slope (make sure to write directions before graphing)



Graph the following equations on the same graph below.

1.
$$y = 2x - 3$$

4.
$$x = 3$$

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

5.
$$y = -\frac{3}{4}x + 6$$

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

6.
$$y = -2$$

