Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Math 8: Writing Slope-Intercept Form**

***Directions: Fill in the blanks below as you watch the video.***

**How do you write an equation in slope-intercept form?**

**(given a slope & a y-intercept)**

Substitute (plug in) the slope & y-intercept you are given into the equation y = mx + b.

**Example 1:** Write the equation of the line with the given slope & y – intercept.

a) slope = 2

 y-intercept= -1 y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) slope = -½

 y-intercept= 0 y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) slope = 1

 y-intercept= -4 y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**You Try 1:** Write the equation of the line with the given slope & y-intercept.

a) slope = 2/5

 y-intercept= 6 y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) slope = -5

 y-intercept= 0 y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) slope = -1

 y-intercept= 3 y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**How do you write an equation in slope-intercept form? (given a graph)**

1) Identify the y-intercept (where the line crosses the y-axis).

2) Find the slope (rise/run).

3) Substitute (plug in) those values into the equation y = mx + b.

**Example 2:** Write the equation of the line.

1) What is the y-intercept? \_\_\_\_\_\_

2) What is the slope? \_\_\_\_\_\_

3) What is your equation? y = \_\_\_\_ x + \_\_\_\_

**Example 3:** Write the equation of the line.

1) What is the y-intercept? \_\_\_\_\_\_

2) What is the slope? \_\_\_\_\_

3) What is your equation? y = \_\_\_\_ x + \_\_\_\_

**You Try 1:** Write the equation of the line.

1) What is the y-intercept? \_\_\_\_\_\_

2) What is the slope? \_\_\_\_\_

3) What is your equation? y = \_\_\_\_ x + \_\_\_\_