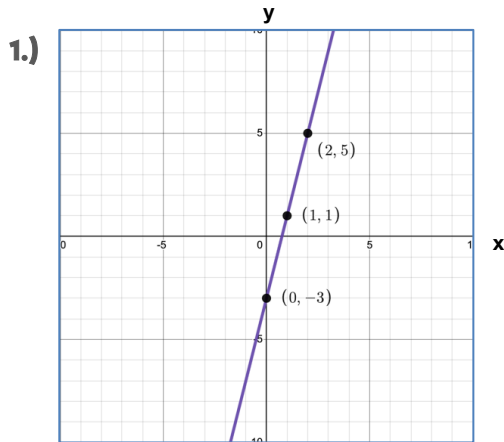Name: _____
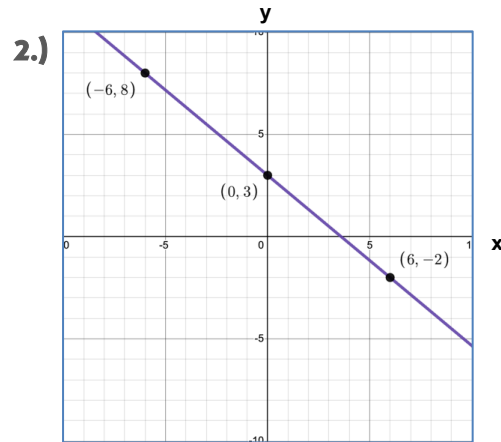
PRACTICE WRITING LINEAR EQUATIONS

Part I: Write the equation for each graph in slope-intercept form ($y = mx + b$)

1.)

$(2, 5)$
$(1, 1)$
$(0, -3)$

2.)

$(-6, 8)$
$(0, 3)$
$(6, -2)$

_____   _____

Part II: Write the equation of each line in slope-intercept form ($y = mx + b$)

3.) Slope is $\frac{1}{5}$ and y-intercept is 9 _____

4.) Slope is -4 and y-intercept is -12 _____

5.) Slope is 0 and y-intercept is $\frac{5}{2}$ _____

Part III: Write the equation of each line in slope-intercept form ($y = mx + b$)

6.) Passes through (1,-7) and (2,-13) with a y-intercept at -1   _____

7.) Passes through (3,7) and (9,11) with a y-intercept at 5   _____

8.) Passes through (-1,9) and (2,-18) with a y-intercept at 0   _____

Part III: Write the equation of each line in slope-intercept form ($y = mx + b$)

9.) Passes through the point (-2,-1) with a slope of 3   _____

10.) Passes through the point (3,5) with a slope of $\frac{8}{3}$ _____

11.) Passes through the point (1,-1) with a slope of -4 _____

12.) Passes through the point (2,0) with a slope of 1   _____

ANSWER KEY

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

2.) $y = -\frac{5}{6}x - 3$

3.) $y = \frac{1}{5}x + 9$

4.) $y = -4x - 12$

5.) $y = \frac{5}{2}$

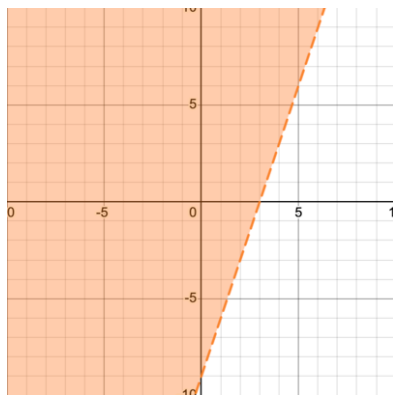**6.)** $y = -6x - 3$

7.) $y = \frac{2}{3}x + 5$

8.) $y = -9x$

9.) $y = 3x + 5$

10.) $y = \frac{8}{3}x - 3$

11.) $y = -4x + 3$

12.) $y = x - 2$

2.)

3.) $y < -\frac{1}{2}x + 3$

4.) B