

Writing Equations in Slope-Intercept Form (Part 2)

Find the equation of a line that goes through the following point and has the given slope.

$$(-2, 9) \quad m = -2$$

Step 1: FIND b

- plug in the x , y , and m values to $y = mx + b$
- solve for b

Step 2: put the m and b back into $y = mx + b$

Find the equation of a line that goes through the given point and has the given slope

1) $(1, -8)$ $m = -$

2) $(-2, 1)$ $m = \frac{1}{2}$

3) $(2, 5)$ $m =$

4) $(-3, -1)$ $m = \text{undefined}$

Find the equation of a line that goes through the following 2 points

$(-2, 6)$ $(3, 1)$

Step 1: Find $n \left(\frac{y_1 - y_2}{x_1 - x_2} \right)$

Step 2: Find
pick a point & plug
 x , y , and m into $y = mx +$

Step 3: put them and b
back into $y = mx + b$

1. (5, 1), (8, -2)

2. (6, 0), (0, 4)

3. (5, 2), (-7, -4)

4. (5, 2), (-7, 7)

5. x-intercept is 5
y-intercept is -3

6. x-intercept is -1
y-intercept is -6