

Rewriting in Slope Intercept Form

Directions: Fill in the blanks for converting a standard linear equation into Slope Intercept Form.

Variables
Describe a specific point

$$y = mx + b$$

Slope
Describes the slope of the line

y-intercept
Describes where the line crosses the y-axis

$$8x + 4y = 16$$

$8x + 4y = 16$ first subtract

$4y = \text{} + 16$ then divide all by 4

$y = \text{} + \text{}$ slope form

$$2y = 4x + 2$$

(divide both sides by 2 to get y alone)

$$\frac{2y}{2} = \frac{4x}{2} + \frac{2}{2}$$

(now simplify all fractions)

$$y = \text{} + \text{}$$

$$3y - 5x = 9$$

$\Rightarrow 3y = 5x + 9$ Add to both sides

$\Rightarrow y = \frac{5x + 9}{3}$ both sides by

$\Rightarrow y = \frac{5x}{3} + \frac{9}{3}$ Split into 2 fractions

$\Rightarrow y = \frac{5x}{3} + \text{}$

$\Rightarrow y = \text{}x + \text{}$

~~$$2x + 3y = 6$$~~

$$\text{} + \text{}$$

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

$$y = \text{} - \frac{\text{}}{\text{}}x$$

$$y = \text{} + \text{}$$

$$\cancel{4x} - y = -3$$

$$-y = -4x - 3$$

$$y = \boxed{} + \boxed{}$$

Slope = Y-Intercept = (,)

$$2y + 26 = -6x$$

Step 1: Subtract both sides by 26

Step 2: Divide both sides by 2 to get y by itself

Step 3: Simplify all fractions

What is the slope? _____

What is the y-intercept? _____