Lesson 5-2A - Slope-Intercept Form

Algebra - January 5, 2012

$$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1}$$

Find the slope of the line formed by the points:

1. (2, –5) and (–4, 3)

$$\frac{3+5}{-4-2} = \frac{8}{-6} = \boxed{\frac{4}{-3}}$$

2. (–6, –3) and (–7, –4)

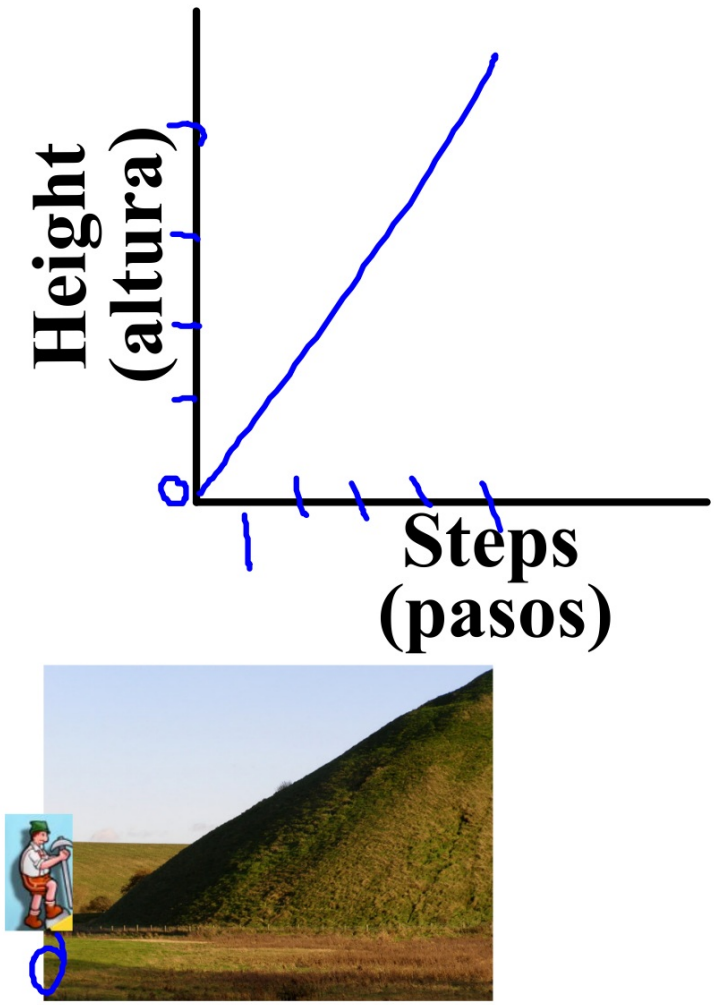
$$\frac{-4-(-3)}{-7-(-6)} = \frac{-1}{-1} = \boxed{1}$$

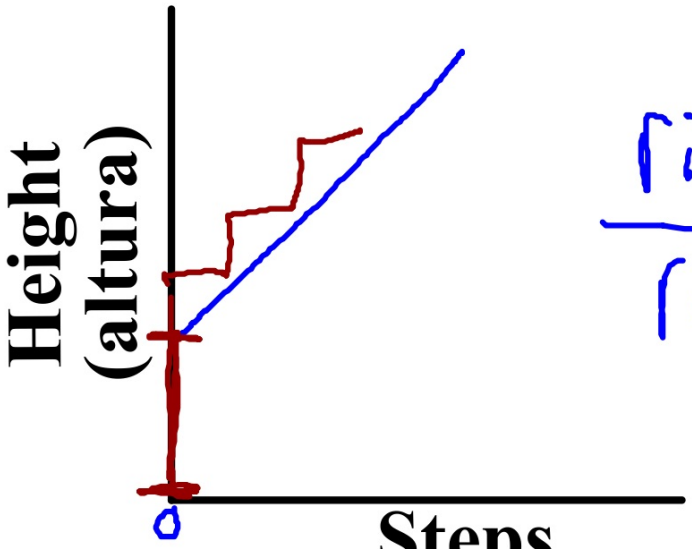
$$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1}$$

x_1 y_1 $\quad$ x_2 y_2

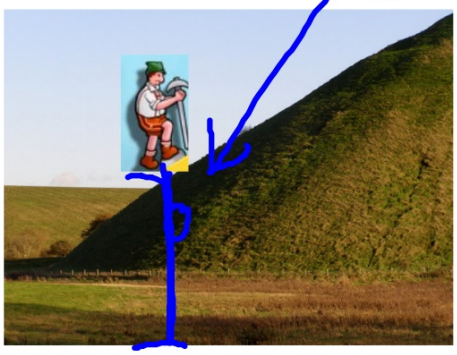
$(4, -6) \quad (-6, -4)$

$$\frac{-4 + (+6)}{-6 - 4} \quad \frac{2}{-10} = \boxed{\frac{1}{-5}}$$


Height
(altura)
Steps
(pasos)



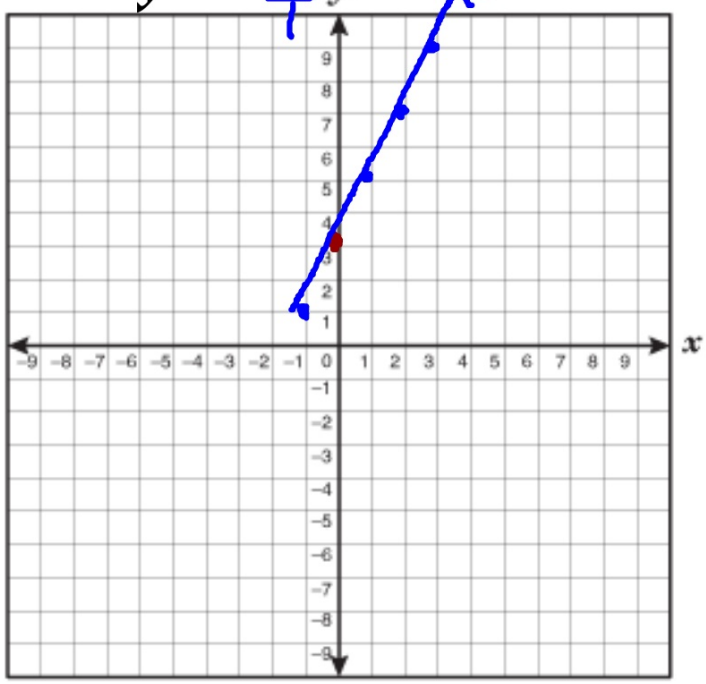
$$\frac{\text{rise}}{\text{run}} = \text{Slope}$$



Slope - Intercept Form

$$y = mx + b$$

$$y = 2x + 3$$



Slope - Intercept Form

$y = mx + b$

Find the slope and y-intercept

. $y = -2x + 1$

$m = -\frac{2}{1}$

$b = 1$

$y = 3x - 6$

$m = \frac{3}{1}$

$b = -6$

Slope - Intercept Form

$$y = mx + b$$

Find the slope and y-intercept

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

$$m = -\frac{2}{3}$$

$$b = -1$$

Slope - Intercept Form

$y = mx + b$

Write the equation

$m = \frac{2}{5}$

$y = \frac{2}{5}x + 0$

$b = 0$