

5-5 Write Equations in Point-Slope Form

Alg 1

Point-Slope Form

Comes from the Slope Formula

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$



Example 1 - Write an Equation Given Slope and 1 Point

Write the point-slope form of an equation for a line that passes through (-1, 5) with the slope -3

Write the point-slope form of an equation for a line that passes through (-2, 0) with the slope $-\frac{2}{3}$

Example 2 - Write an Equation of a HORIZONTAL LINE

Write the point-slope form of an equation for a horizontal line that passes through (6, -2)



Write the point-slope form of an equation for a horizontal line that passes through (0, 5)


Forms of Linear Equations

Form	Equation	Description
Slope-Intercept Form		
Point-Slope Form		
Standard Form		

Example 3 - Write an equation in Standard Form

Write the following equations in Standard Form

$$y + 5 = \frac{-5}{4}(x - 2)$$


$$y = \frac{3}{4}x - 5$$

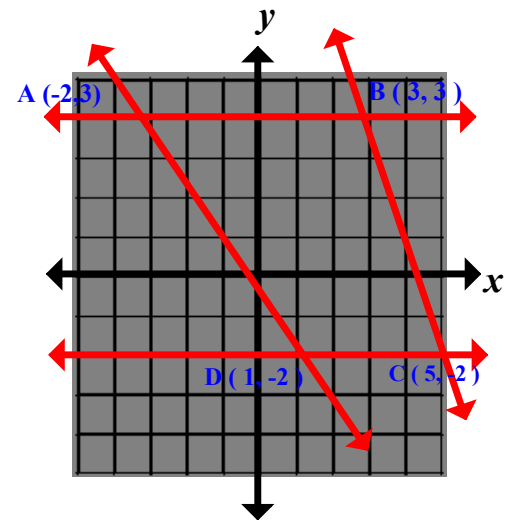
Example 4 - Write an equation in Slope-Intercept Form

$$y - 5 = \frac{4}{3}(x - 3)$$

Example 5 - Write an Equation in Point- Slope Form

GEOMETRY - The figure shows trapezoid ABCD with bases AB and CD

Write the point -slope form of the lines containing the bases of the trapezoid.



Write each equation in standard form

