

Module 5 Lesson 5:

Math Lab: Analyzing General Form

Part A

1. Rearrange each of the following equations into slope-intercept form. Do not reduce fractions. For instance, do not reduce $\frac{6}{2}$ to 3. Instead, leave the expression as $\frac{6}{2}$.

General Form	Slope-Intercept Form	Slope	y-intercept
$2x + 3y + 6 = 0$			
$3x + 4y - 12 = 0$			
$9x - 3y + 12 = 0$			
$5x - 2y - 10 = 0$			

Analysis

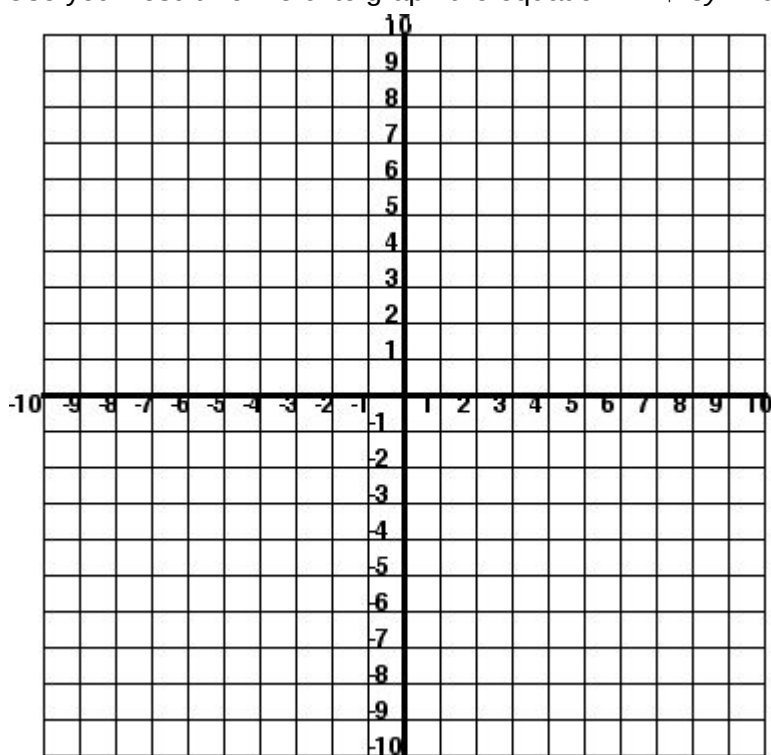
2. Which coefficients in general form are used to determine the slope of the linear function?
3. Which coefficients in general form are used to determine the y-intercept of the linear function?
4. What would be the slope and the y-intercept of the linear function represented by the equation $Ax + By + C = 0$?

Part B

5. Consider the equation $2x + 3y - 6 = 0$.
 - a. How could you find the y-intercept of the line represented by this equation without graphing?
 - b. How could you find the x-intercept of the line represented by this equation without graphing?

c. Determine the x-intercept and the y-intercept of this graph.

d. Use your result from 5.c. to graph the equation $2x + 3y - 6 = 0$.



Note: You will be revisiting your responses later in the lesson. At that time, you will be instructed to add to your responses here to show what you have learned about graphing linear functions.