Worksheet #2 - Linear Equations in 2 Variables

For problems 1 to 3, use the given graph to find the desired information.

1
(a) What is the y-intercept?
(b) What is the slope of the line?
(c) Write an equation for the line.

2
(a) What is the y-intercept?
(b) What is the slope of the line?
(c) Write an equation for the line.

3
(a) What is the y-intercept?
(b) What is the slope of the line?
(c) Write an equation for the line.
For questions 4 to 6, use the given equation for a line to find the desired information, and then graph the line.

4 \[ y = 3(x - 1) \]
(a) What is the \( y \)-intercept?
(b) What is the slope of the line?
(c) What is the \( x \)-intercept?

5 \[ y = 4 - 2x \]
(a) What is the \( y \)-intercept?
(b) What is the slope of the line?
(c) What is the \( x \)-intercept?

6 \[ 2x + 3y = 6 \]
(a) What is the \( y \)-intercept?
(b) What is the slope of the line?
(c) What is the \( x \)-intercept?
7 A line goes through the points \((-1, 0)\) and \((0, 3)\).
   (a) What is the slope?

   (b) What is the x-intercept?

   (c) What is the y-intercept?

8 A line goes through the points \((1, 2)\) and \((3, 8)\).
   (a) What is the slope?

   (b) What is the x-intercept?

   (c) What is the y-intercept?

9 A line goes through the points \((-1, 3)\) and \((-2, 5)\).
   (a) What is the slope?

   (b) What is the x-intercept?

   (c) What is the y-intercept?