**Math 1175/D138, Fall 2013 — Quiz #1: Sept 30 - Oct 2, 2013**

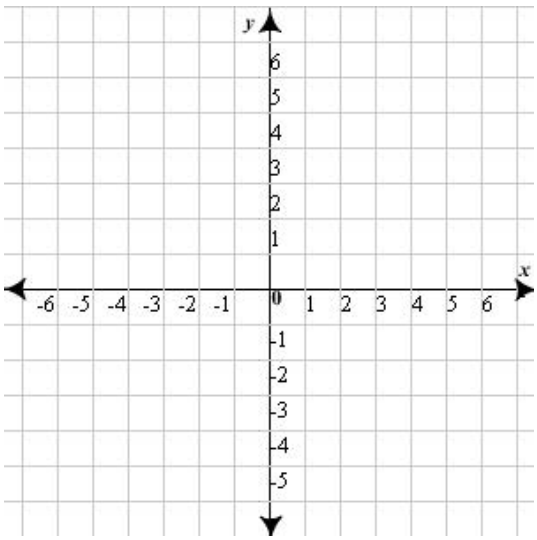
- **The quiz will be collected at the beginning of class on Wednesday, Oct 2.**
- **You are allowed to use the textbook (or other texts), your homework, and your notes, but please work on this quiz individually.**

1. Consider the linear equation $3x + y = 6$.

   (a) Rewrite the equation in slope-intercept form:

   (b) Graph the line on the coordinate plane below.

   (c) What is the $x$-intercept of the graph? (You can either use your graph or solve for the $x$-intercept algebraically from the equation.)




2. Consider the system of linear equations

$$\begin{aligned} 3x + y &= 6 \\ y &= -3 \end{aligned}$$

   (a) Solve the system algebraically, i.e., by using either the substitution method or the addition method:

   (b) Add the graph of the equation $y = -3$ to your graph of $3x + y = 6$ above, and show that you get the same solution to the system by the graphing method.

3. Write down the equation of the line that is parallel to the line $x = 5$ and which passes through the point $(-1, -3)$: