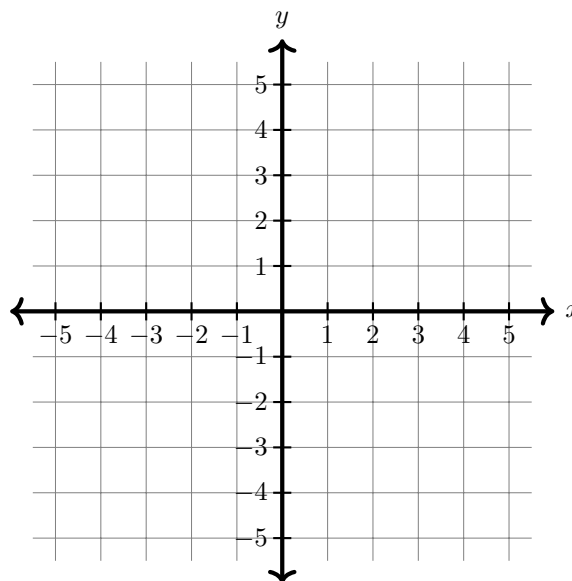Name: _____   Date: _____

MA 162

Week 2 Recitation Worksheet (Thursday)

You must show all work to receive full credit.

1. Graph the line $4x - 9y = 18$ by finding the intercepts.
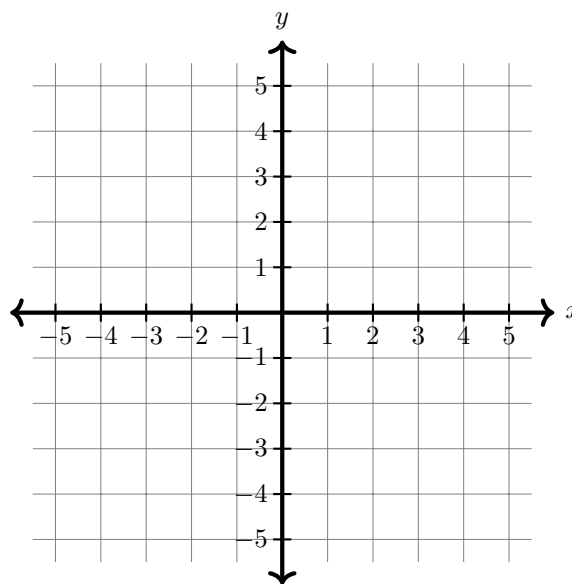
   x-intercept: _____
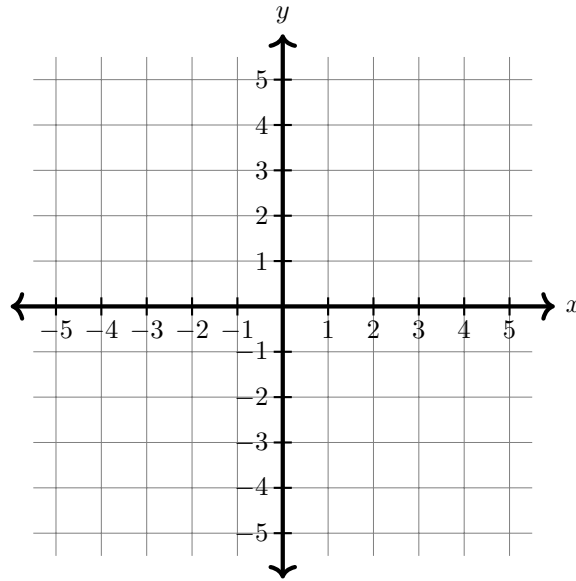
   y-intercept: _____

2. Graph the line $2x + 3y = 0$ by first determining two points that satisfy the equation.

   Point 1: _____

   Point 2: _____

3. Graph the line that passes through the point $(-2, 1)$ and has slope $m = -\dfrac{4}{3}$.

4. Find the slope of the line passing through the points $(6, 3)$ and $(4, -2)$.

5. A line with slope $m = -\dfrac{2}{7}$ passes through the points $(4, 19)$ and $(x, 15)$. What is the value of x?

6. Find the slope and y-intercept of the line with equation

$$11x - 5y + 1 = -4x + 7y + 2.$$

7. Find the slope-intercept form of the line that passes through the points $(-2, 9)$ and $(6, -15)$.

8. Are the points $(-1, -2)$ and $(9, -6)$ on the same side of the line $3x + 5y = -7$? How do you know?