Name: _____ Date: _____

MA 162

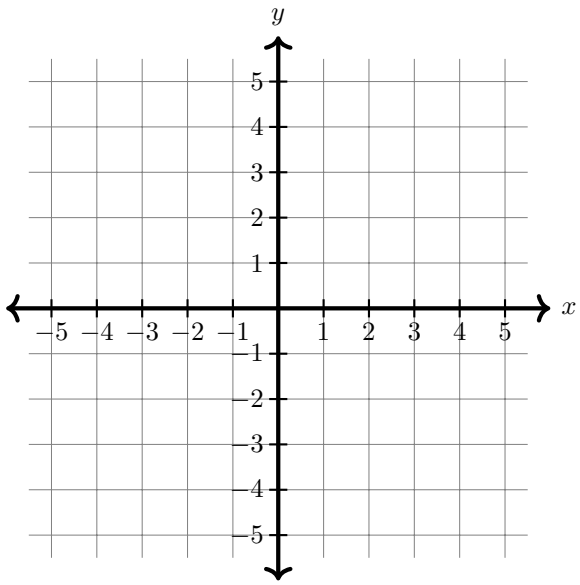
Week 2 Recitation Worksheet (Tuesday)

You must show all work to receive full credit.

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

x-intercept: _____

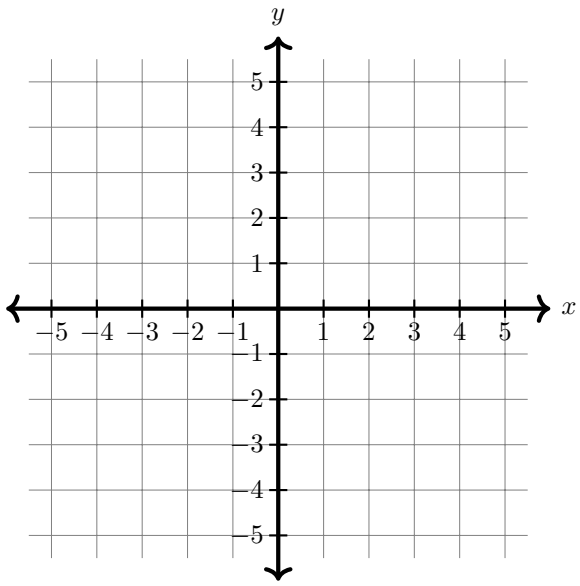
y-intercept: _____



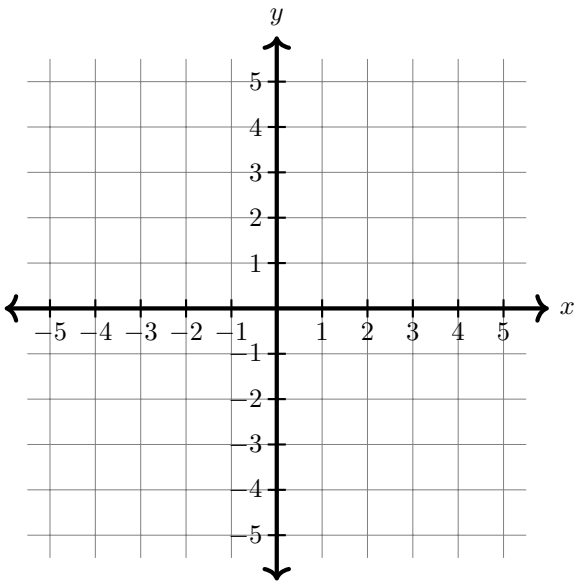
2. Graph the line $2x + 3y = 0$ by first determining two points that satisfy the equation.

Point 1: _____

Point 2: _____



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



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

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

6. So far we have worked with the *general form* of an equation of a line: $Ax+By=C$. However, equations of lines can be written in other useful forms. For instance, $-3x+2y=8$ and $y=\frac{3}{2}x+4$ describe the same line.

   (a) Determine the x-intercept and y-intercept of the line $-3x+2y=8$.

   (b) Use the intercepts to determine the slope of the line.

   (c) We often express lines in the form $y=mx+b$. Compare your answers from parts (a) and (b) with the equation $y=\frac{3}{2}x+4$. What do the values m and b represent?