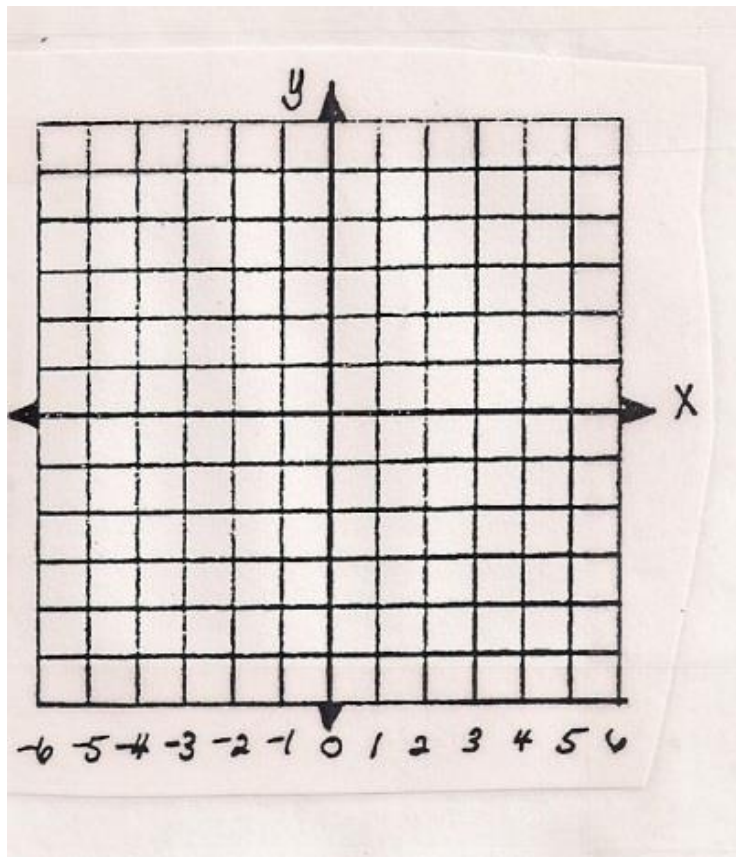# MATH 097 Brush-Up Lesson: Straight Lines
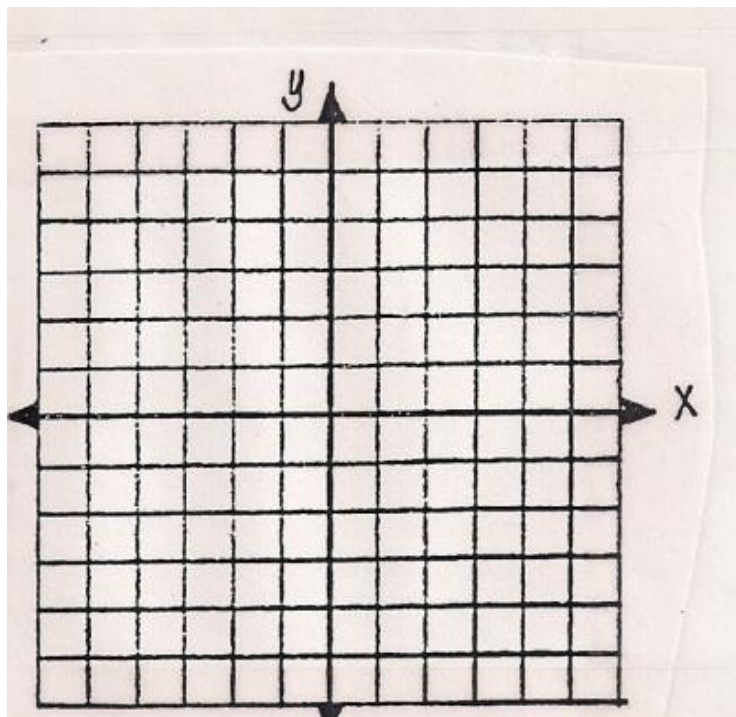
If you placed into MATH 97 or a higher-level course, this might be useful for you

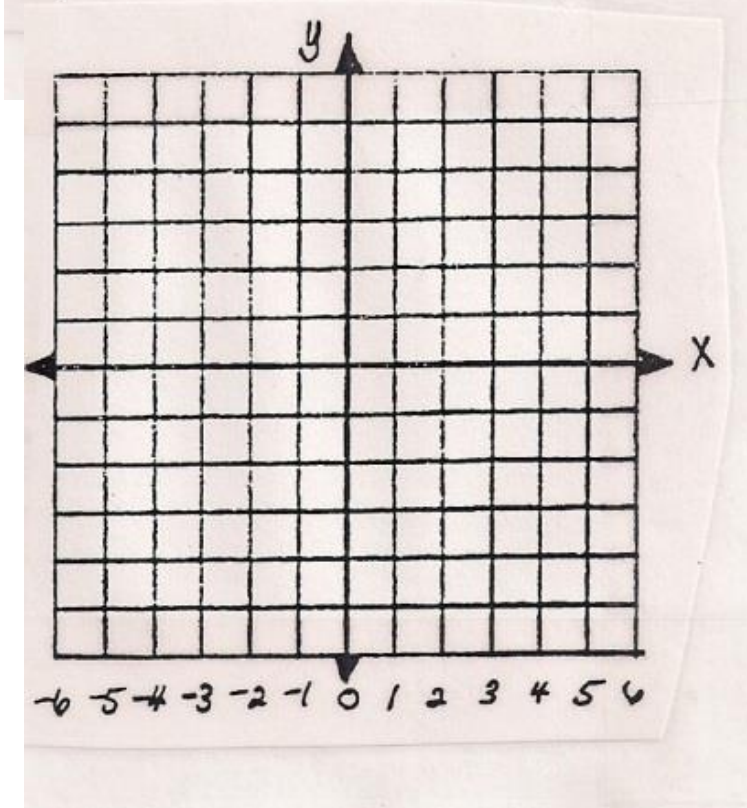1. For each equation, find the x and y intercepts, and graph the line.

a. $y = -2x + 6$

b. $2x - 3y = 6$

c. $y = 0.5x + 2$

2. For each pair of points, find the slope between the two points.
a. (2, –3) and (5, 9)

b. $(-7, 4)$ and $(3, -1)$

c. $(-2, -11)$ and $(5, 23)$

3. Find the Slope and y-intercept of the line.

a. $y = -2x + 6$ b. $2x - 3y = 6$

c. $y = 0.5x - 8$

4. Find the equation for the line given the information.

a. Slope $= 3$, y-intercept is $(0, -7)$

b. Slope $= -1.5$, contains the point $(-6, 11)$

5. Find the equation of the line containing the two points.
a. $(2, -3)$ and $(5, 9)$

b. $(-7, 4)$ and $(3, -1)$

6. Determine if the pair of lines is: Parallel, Perpendicular, or Neither.

a. $y = 2x - 3$ $y - x = 3$

b. $y = -3x + 1$ $6x + 2y = 8$

c. $y = -x + 7$ $y - x = 3$