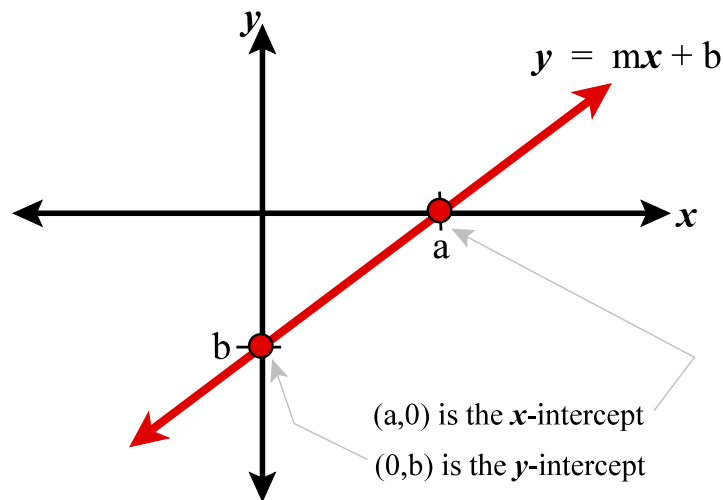# I. The x- and y-intercepts (p.209):

A typical line will intersect both the x- and y-axes once. The point at which the graph crosses the x-axis is called the x-intercept, while the point where the graph crosses the y-axis is known as the y-intercept...

$y = mx + b$

$(a,0)$ is the x-intercept
$(0,b)$ is the y-intercept

...to find these two points...

Let $x = 0$ in the equation, solve for $y = b$, then let $y = 0$ in the equation, solve for $x = a$.

x	y
0	b
a	0

# II. Examples (pp.214-216): #**2**,10,20,36,38,40,44

HW: pp.214-217 / #3-39(every other odd),43-57(odd)

I. Slope of a Line (p.220):

How steep a line is tilted or inclined is indicated by a quantity known as the **slope** of the line. It is frequently designated by the letter "**m**" and is defined as follows...
For any two points on a line, $P_1(x_1, y_1)$ & $P_2(x_2, y_2)$, its slope is given by the formula, m = $\dfrac{y_2 - y_1}{x_2 - x_1}$ ✐ "rise" (vertical change)

over the

✐ "run" (horizontal change)
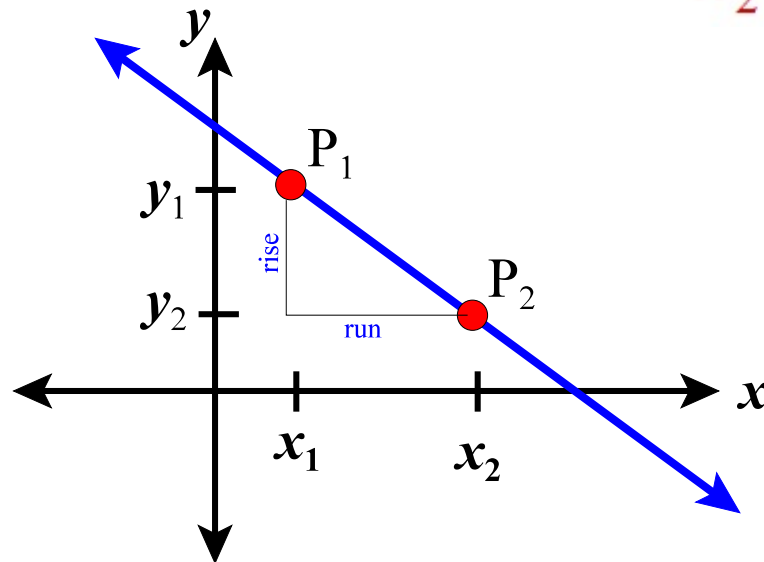
II. Examples (p.227): #**2**,8,14,34

HW: p.227 / #1-33 (every other odd)

Read pp.219-226 (section 3.4)