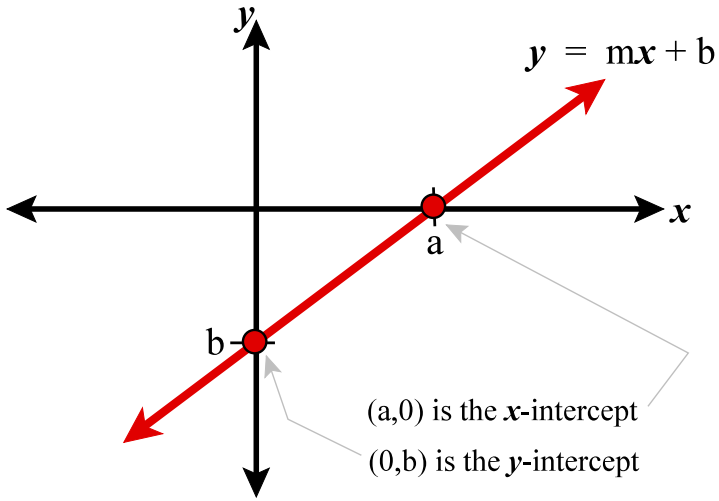
I. *x*- and *y*-intercepts of a line...

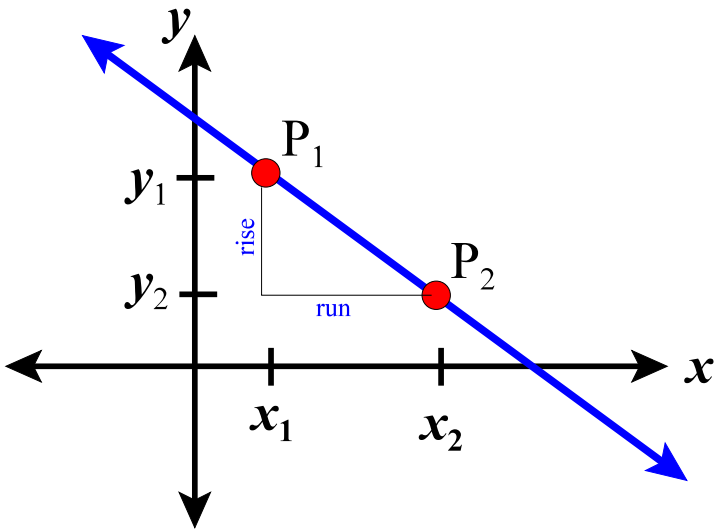


...to find these two points...

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. Slope of a line (p.138): quantitative measure of how steep a line is tilted, usually denoted "m"



For any two points on a line,

$P_1(x_1,y_1)$ & $P_2(x_2,y_2)$...

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

☜ "rise" (vertical change) over the "run" (horizontal change)

III. Equation Forms of a Line:

1. $y = mx + b$ slope-intercept form
2. $Ax + By = C$ standard form

IV. Examples (pp.151-152): Exercises #4,16,22,26,30

V. Two Anomalous Lines (p.145):

	Type of Line	Equation Form	x- and y-Intercepts	Slope of line
1.	Horizontal	$y = b$	none & (0,b)	m = 0
2.	Vertical	$x = a$	(a,0) & none	m is undefined

VI. Examples (p.152): Exercises #52,60

VII. Application Example (p.153): Exercise #80

HW: pp.151-153 / Exercises #7,11,15,19,
21-61(every other odd),77,81
Read pp.136-150 (section 2.4)