

## I. Linear Equations –

1. in one variable:  $Ax + B = C$

*e.g.*,  $2x + 5 = -7$

$x = -6$  is the (only) solution

2. in two variables (p.199):  $Ax + By = C$

*e.g.*,  $2x + 5y = -7$

$x = -6$  &  $y = 1$  is one solution (of infinitely many)

This solution may be expressed as the  
“ordered pair”  $(-6, 1)$ ; other solutions  
include  $(4, -3)$ ,  $(-11, 3)$ ,  $(-3\frac{1}{2}, 0)$ , etc.

## II. Examples (p.204): Exercises #2, 4, 8, 12, 16, 26

### III. Graphing $Ax + By = C$ :

Find and plot enough ordered pair solutions until you recognize the “pattern” (or shape) represented by the plotted points...

### IV. Examples (pp.204-205): Exercises #28,38

### V. Two Anomalous Lines (p.203):

#### (i) Horizontal Line

$y$ -intercept:  $(0,b)$

$x$ -intercept: none

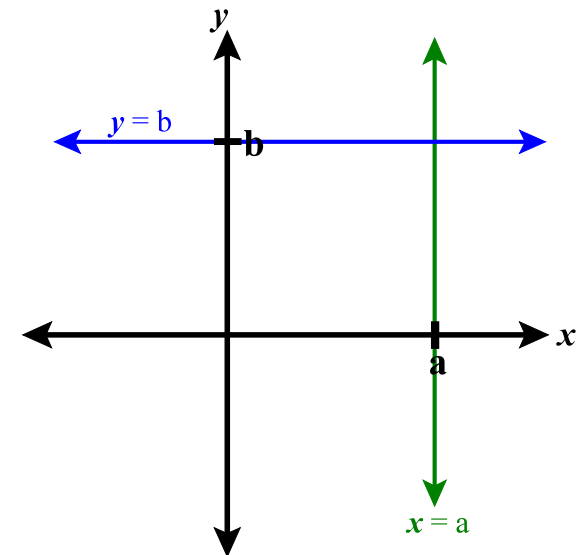
Equation form,  $y = b$

#### (ii) Vertical Line

$y$ -intercept: none

$x$ -intercept:  $(a,0)$

Equation form,  $x = a$



## VI. Examples (p.205): Exercises #58,60

HW: pp.204-206 / #1-35(odd),41,47,53,57-69(odd),  
73

Read pp.209-213 (section 3.3)