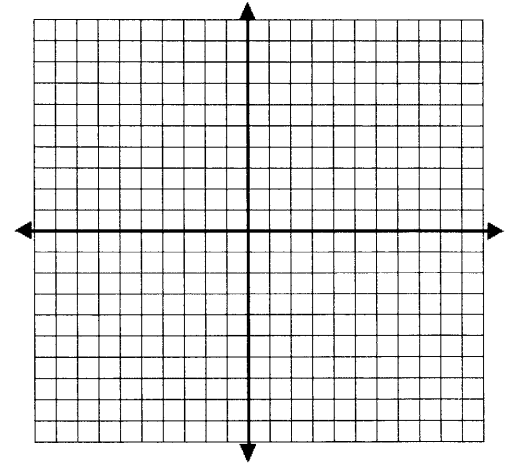


Chapter 5.2/5.3 – The Rectangular Coordinate System

Section 1 Graphs

1. Label or Undersand the following “Parts” of a Cartesian Graph

- a. x – axis _____
- b. y – axis _____
- c. Origin _____
- d. Scale _____
- e. Quadrants _____
- f. Ordered Pair _____
- g. Abscissa _____
- h. Ordinate _____



2. Plot and Label the following Ordered Pair on the graph in #1.

- a. A(4, 1) c. C(-3, 4) e. E(6, -4)
- b. B(1, 4) d. D(-5, -2) f. F(0, 0)

3. Consider Points in Each of the Quadrants on the Cartesian Plane.

- Quadrant I: _____ x _____ y _____
- Quadrant II: _____ x _____ y _____
- Quadrant III: _____ x _____ y _____
- Quadrant IV: _____ x _____ y _____

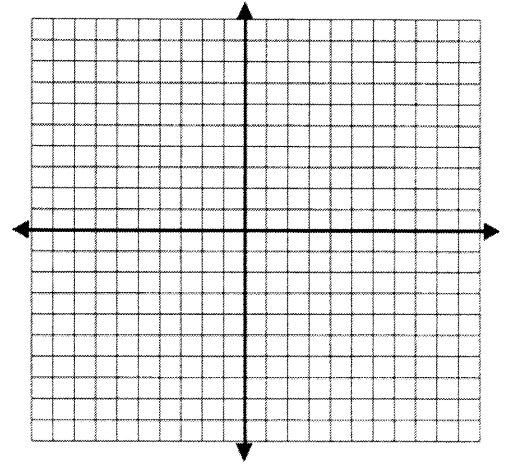
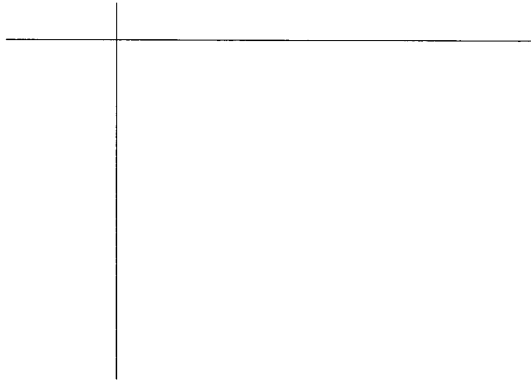
4. Determine (yes or no), if the Ordered Pair belongs to the Given Equation.

- a. (0, 2), $2x + 3y = 6$ b. (1, 1) $y = x^2 + x - 1$

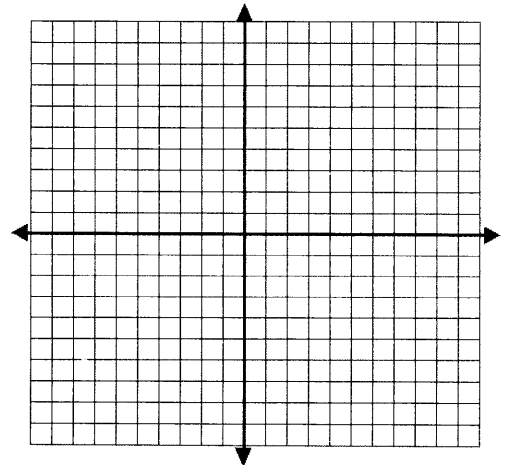
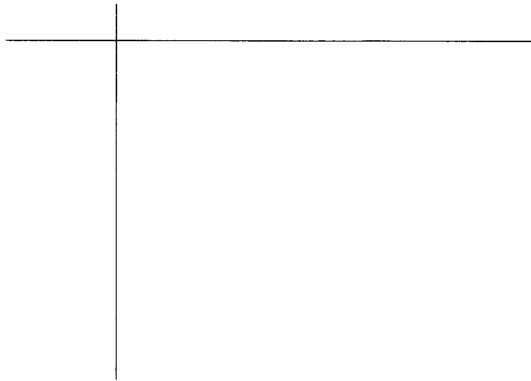
Section 2. Graphing 1st Degree (Linear) Equations. The “Plug and Chug” Technique.

3. Graph the Equation on the Graph Provided. Label the Answer.

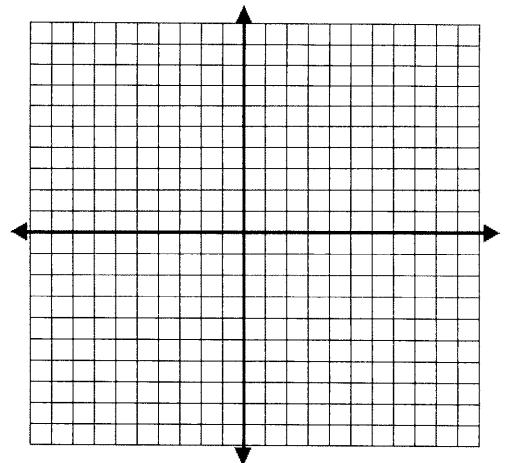
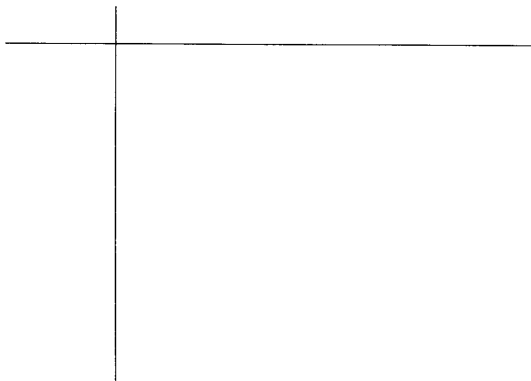
a. $y = -2x + 1$



b. $y = |x| - 2$



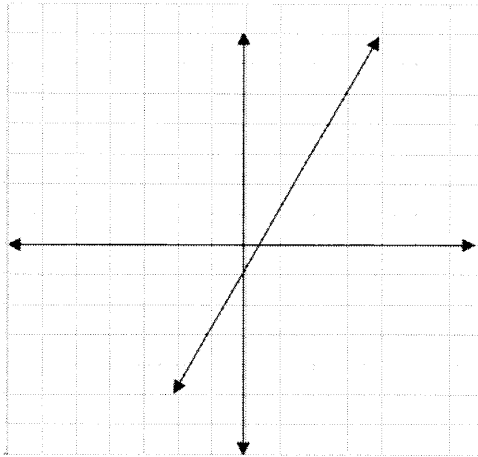
c. $y = -\frac{1}{3}x + 2$



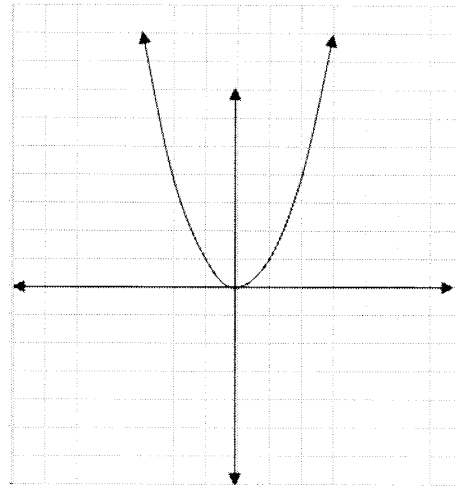
Section 3. Understanding Graphic Representations

1. Linear (1st Degree) and Quadratic (2nd Degree) Equations – Graphic Representation.

Linear Equation – Graph: $y = mx + b$



Quadratic Equation – Graph: $y = ax^2 + bx + c$



2. The “Parts” of the Quadratic Equation: Knowing the Axis of Symmetry and a “Domain” for the Graph:

- a. Axis of Symmetry: _____
- b. Domain: _____

- c. NOTE: The expression $-b$ is read “_____”

Practice Section

a. $y = x^2 + 6x + 5$ $a =$ _____ $b =$ _____ $c =$ _____ $x =$ _____

a. $y = x^2 + 3x + 2$ $a =$ _____ $b =$ _____ $c =$ _____ $x =$ _____

a. $y = x^2 - 6x + 8$ $a =$ _____ $b =$ _____ $c =$ _____ $x =$ _____

a. $y = x^2 - 3x - 24$ $a =$ _____ $b =$ _____ $c =$ _____ $x =$ _____

a. $y = x^2 - 7x - 8$ $a =$ _____ $b =$ _____ $c =$ _____ $x =$ _____

Section 4. Graphing 2nd Degree (Quadratic) Equations. The “Plug and Chug” Technique.

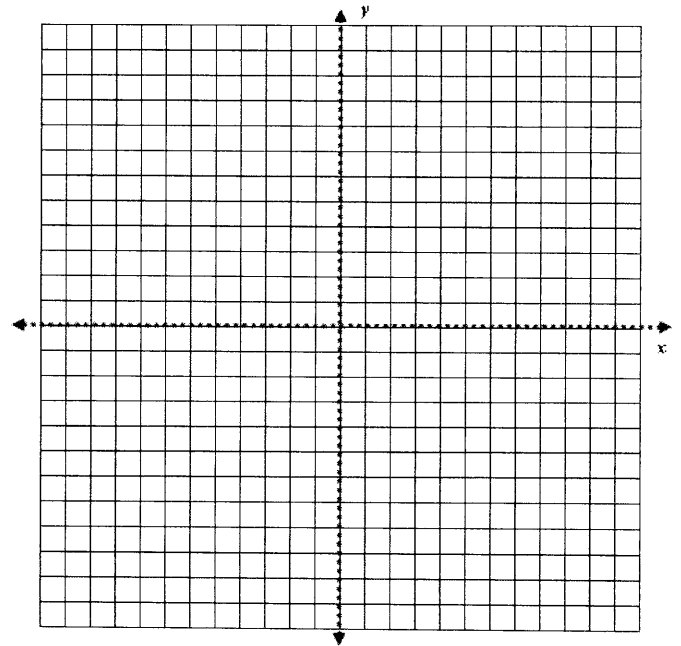
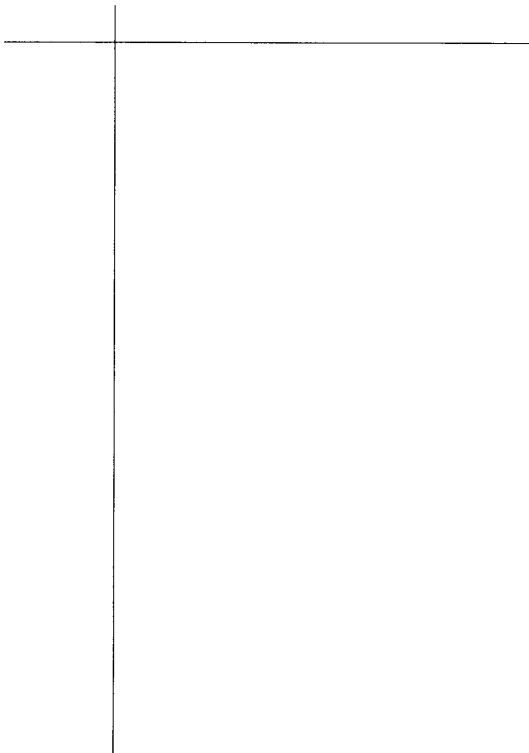
Step 1: _____

Step 2: _____

Step 3: _____

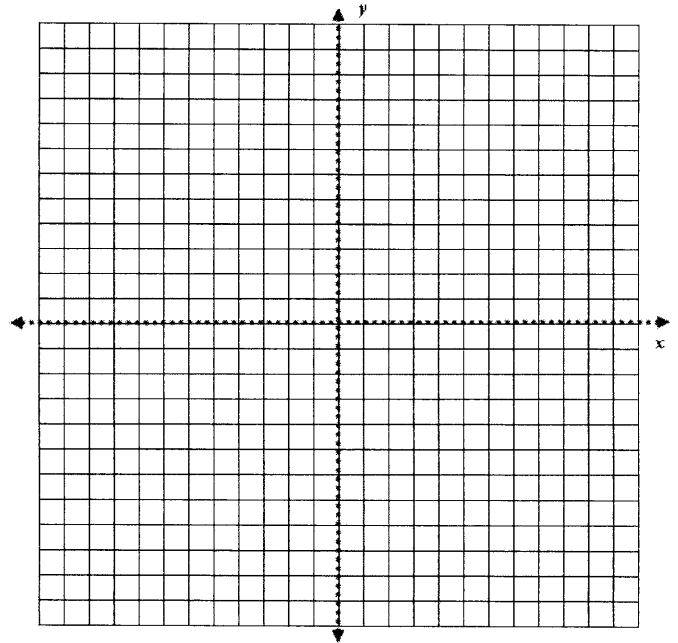
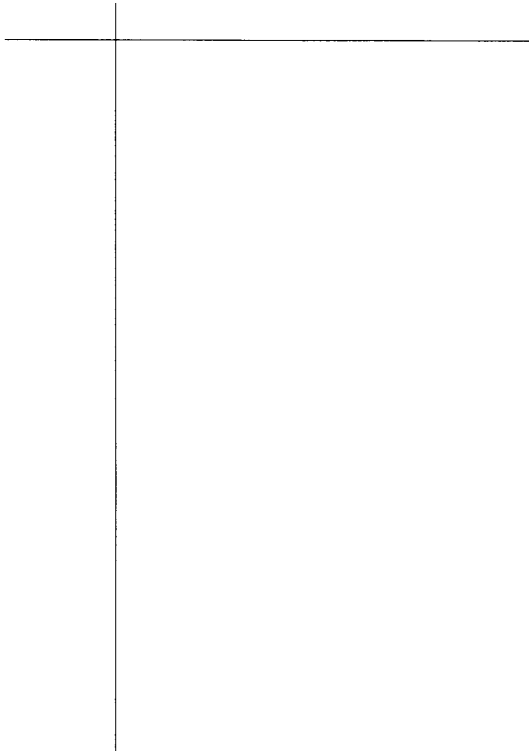
4. Graph the Equation on the Graph Provided. Label the Answer.

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



5. Graph the Equation on the Graph Provided. Label the Answer.

a. $y = -x^2 - 4x - 3$



Homework Section

Page(s)	Section (s)	Problem(s)
162	5.1	13, 14, 21, 23
166	5.2	17, 21, 23, 25,
178	5.3	1, 5, 9, 13, 15, 17, 16*