

7.3-7.4 Solve Systems of Equations by Eliminating a Variable:

- Be able to add or subtract equations to eliminate a variable in order to solve a system

$$\begin{array}{l} \text{Ex: } 4x - 3y = 5 \\ \quad -2x + 3y = -7 \end{array}$$

$$\begin{array}{l} \text{Ex: } 6x - 4y = 14 \\ \quad 3x - 4y = 1 \end{array}$$

$$\begin{array}{l} \text{Ex: } 3x + 4y = -6 \\ \quad 2y = 3x + 6 \end{array}$$

- Be able to multiplying equations first, then eliminate a variable, in order to solve a system

$$\begin{array}{l} \text{Ex: } x + y = 2 \\ \quad 2x + 7y = 9 \end{array}$$

$$\begin{array}{l} \text{Ex: } 4x - 3y = 8 \\ \quad 5x - 2y = -11 \end{array}$$

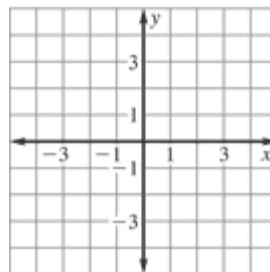
7.5: Special Types of Linear Systems:

- Be able to identify when a system of equations has one solution, no solution or infinite solutions by solving using any method.

Ex: Solve by graphing:

$$3x + 2y = 10$$

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



Ex: Solve by substitution:

$$x - 2y = -4$$

$$y = \frac{1}{2}x + 2$$

Ex: Solve by elimination:

$$2x - 3y = 6$$

$$2x - 3y = -4$$

- Be able to identify the number of solutions to system without actually solving it

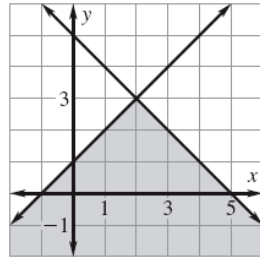
$$\begin{array}{l} \text{Ex: } 5x + 3y = 6 \\ \quad -5x - 3y = 3 \end{array}$$

$$\begin{array}{l} \text{Ex: } y = 2x - 4 \\ \quad -6x + 3y = -12 \end{array}$$

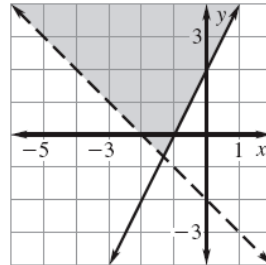
7.6: Solve Systems of Linear Inequalities:

- Be able to identify a solution to a system of linear inequalities

Ex: Is (2, 1) a solution?

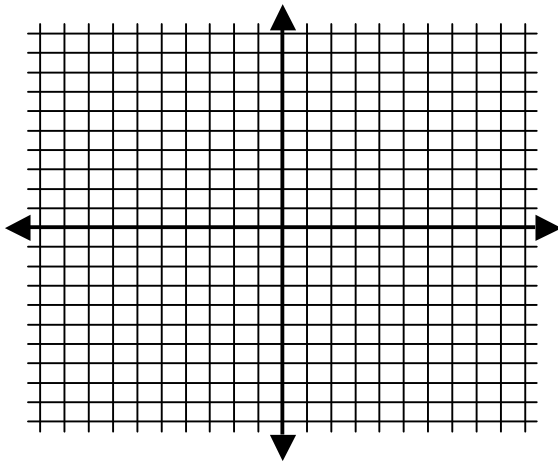


Ex: Is (-2, 0) a solution?

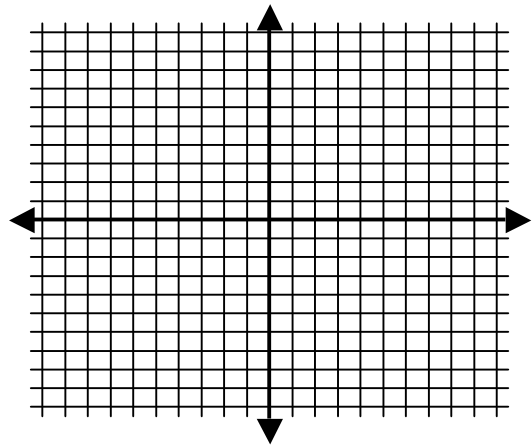


- Be able to graph a system of linear inequalities and identify solutions

Ex: $x < 8$
 $x - 4y \leq -8$

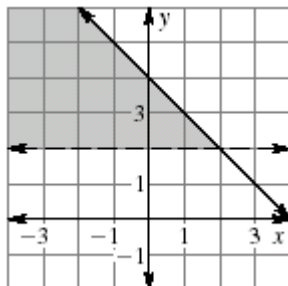


Ex: $x \geq 0$
 $y \geq 0$
 $6x - y < 10$

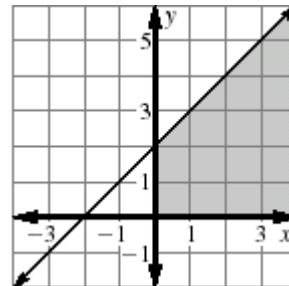


- Be able to write a system of linear inequalities given the graph

Ex:



Ex:



Extra Practice:

Where to find:

- Page 441: 1 – 9
- Page 450: 50 – 52
- Page 457: 1 – 12
- Page 471 – 472: 36 – 41
- Page 472: 48 – 53, 1 – 9
- Page 473: 1 – 7
- Page 475 – 479:

Topics Covered:

- Graphing/Substitution
- Graphing
- Elimination
- Systems of Inequalities Word Problems
- Special Types of Systems
- Graphing Systems of Inequalities
- Systems Practice (General)
- Word problem practice
- Entire Chapter Review/Test