Coleman Math 060 Name_____
Reading Guide 8.1 Due Date:

Chapter 8: Systems of Linear Equations

In this chapter, a student will learn about two-by-two linear systems of equations. The three types of linear systems - Dependent, Independent, and Inconsistent - are described and solved graphically and algebraically. Linear systems are also used to solve application problems involving money, D = r*t, mixtures, or amounts and costs.

Section 8.1: Solving Systems of Linear Equations by Graphing

Objectives

- Determine if given points lie on both lines in specified systems of equations.
- Estimate, by graphing, the coordinates of the intersection of a system of linear equations with one solution.
- Use a graphing calculator to solve a system of linear equations. 5

Instruct

Click on the word **graphically**, when available, to see the graph of the lines.

1. A solution of a system of linear equations is an ordered pair (or point) that

2. To determine whether a particular ordered pair is _____, substitute

_____. If the result for _____

_____.

3. What do you know about the slope of two lines that form an inconsistent system?

4. A linear system of equations that has infinite solutions is called a(n) _____ system.

5. A linear system of equations that has only one solution is called a(n) _____ system.

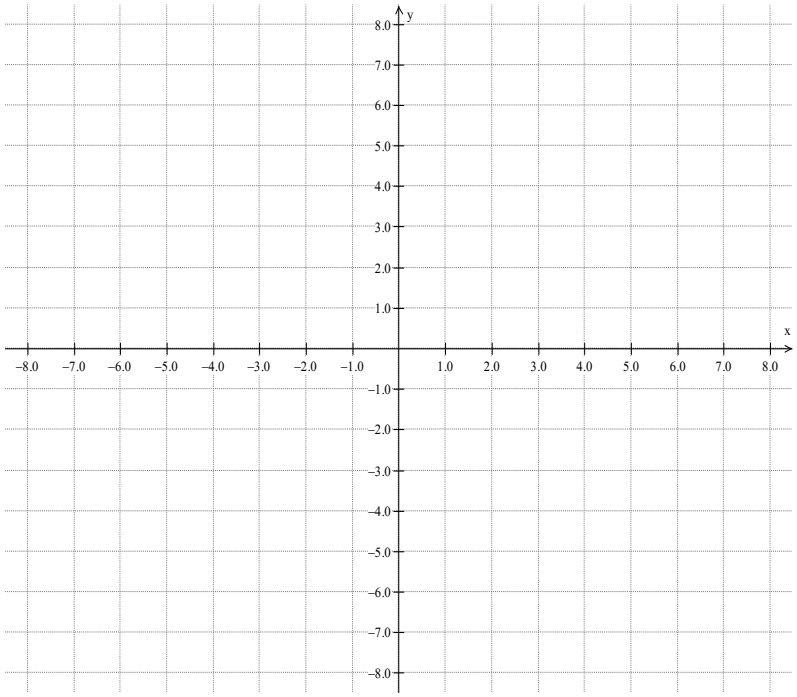
6. A linear system of equations that has no solution is called a(n) _____ system.

Practice

1. Graphically solve the following system of linear equations.

$y = x - 2$

$2y = x + 1$

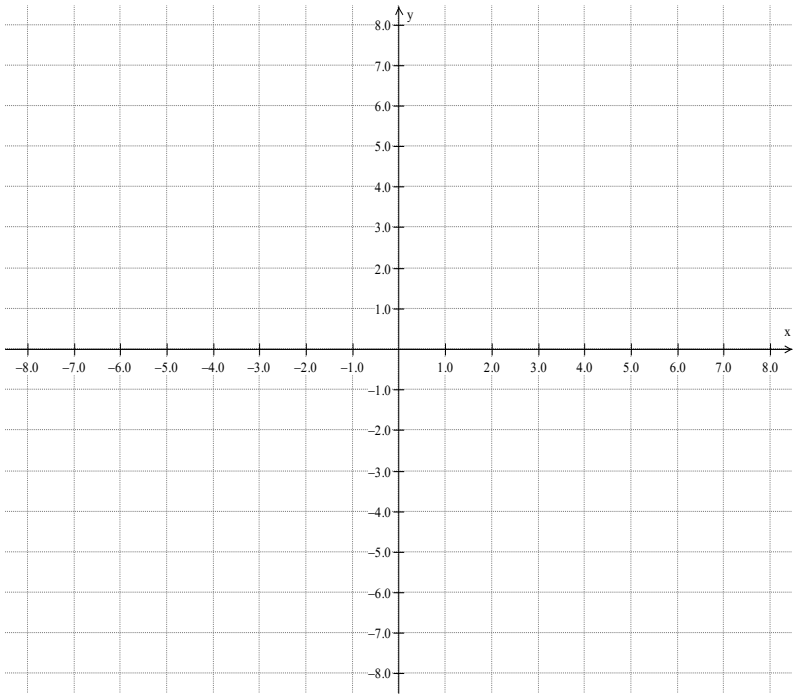


Solution is:

2. Graphically solve the following system of linear equations.

$y = -\frac{1}{2}x + 4$

$y = 6$



Solution is: