

Module 5 – Systems of Linear Equations and Inequalities

Lesson 3 – Systems of Linear Equations in Two Variables

Name _____

Fill in the blanks.

1. The three methods for solving a system of linear equations are the _____, _____, and _____ methods.
2. The system with parallel lines and no solution is called an _____ system.
3. If two lines are exactly the same, the system is called a _____ system and has _____ number of solutions.
4. A system with one solution and graphs that intersect is called a _____ system.

Find the solution of each system using the graphical method.

1.
$$\begin{cases} x - 5y = 5 \\ x - 2y = -4 \end{cases}$$

2.
$$\begin{cases} 2x + y = 4 \\ 3x + y = -6 \end{cases}$$

Find the solution of each system using the elimination method.

1.
$$\begin{cases} 5x + 2y = -1 \\ 2x - y = 5 \end{cases}$$

2.
$$\begin{cases} 6x + y = 3 \\ x - 5y = -15 \end{cases}$$

Find the solution of each system using the substitution method.

1.
$$\begin{cases} 3x + 2y = 7 \\ y = x + 1 \end{cases}$$

2.
$$\begin{cases} x - 2y = 7 \\ 3x + 4y = 11 \end{cases}$$