NAME _____ DATE _____

**Module 10** Solving Systems of Linear Equations and Inequalities

**Lesson 3** Solving Systems of Linear Equations by Substitution

guided notes

## Lesson Objective

- Solve systems of linear equations by substitution.

Methods of solving systems of linear equations:

- _____
- _____
- _____

An ordered pair $(x, y)$ is the solution to a system of two linear equations if it satisfies _____ equations.

A system of linear equations has either zero, _____, or _____ solutions.

If two expressions are _____, one can be substituted for the other in any _____.

**1** Solve by substitution:

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

_____

**2** Solve by substitution:

$$\begin{cases} y = x - 3 \\ x + y = 5 \end{cases}$$

_____

**3** Solve by substitution:

$$\begin{cases} 3x + 4y = 18 \\ 2x - y = 1 \end{cases}$$

_____

**4** Solve by substitution:

$$\begin{cases} 3x + y = 2 \\ 6x + 2y = 7 \end{cases}$$

_____

**5** Solve by substitution:

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

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