DIGITAL

NAME _____

DATE _____

Module 10 Solving Systems of Linear Equations
          and Inequalities
Lesson 2 Solving Systems of Linear Equations
          by Elimination

guided
notes

Lesson Objective

• Solve systems of equations using the elimination method.

A solution to a system of equations is an

ordered pair (x, y) that satisfies _____

the equations in the system.

1 ▶ Solve:

$$\begin{cases} x - 8y = -1 \\ 4x - 8y = 8 \end{cases}$$

_____

2 ▶ Solve:

$$\begin{cases} x + 3y = -20 \\ -x + y = 0 \end{cases}$$

_____

3 ▶ Solve:

$$\begin{cases} 7x - y = 0 \\ 2x + 2y = 0 \end{cases}$$

_____

Elimination Method:

• Make sure the equations have like terms

   aligned in _____.

• _____ one or both

   equations by different numbers to eliminate

   a variable.

• Make the coefficients of either x or y

   _____.

• Add the equations to _____

   one of the variables.

• _____ for the remaining

   variable.

• Substitute that value into either of the

   _____ equations.

• Solve for the other variable.

• Check the solution by making sure

   that the ordered pair satisfies

   _____ equations in the

system.

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If a system of equations is solved by elimination and the result is a false

statement containing no variables, the system of equations has

_____solution.

If a system of equations is solved by elimination and the result is a true

statement containing no variables, the system of equations has an

_____ number of solutions.

4 ▶ Solve:

$$\begin{cases} 5x - 2y = 3 \\ 2x + 7y = 48 \end{cases}$$

_____

5 ▶ Solve:

$$\begin{cases} x - y = 4 \\ 2x - 2y = 8 \end{cases}$$

_____

6 ▶ Solve:

$$\begin{cases} x + 2y = 3 \\ 2x + 4y = 8 \end{cases}$$

_____

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