

Name: _____

Solving Linear Systems Using Elimination

We have learned how to solve systems of linear equations by graphing and by substitution. There is a third method that we will explore called elimination. In the elimination method, you can add or subtract equations to get rid of (or eliminate!) a variable.

Sometimes it is easy to see which variable can be eliminated. For example, consider the system:

$$5x - 6y = -32$$

$$3x + 6y = 48$$

answer: _____

Sometimes, you have to multiply one or both of the equations by a nonzero number to make the coefficients work out. For example, consider the system

$$2x + 5y = -22$$

$$10x + 3y = 22$$

Try some on your own...

1. $2x - 3y = 61$
 $2x + y = -7$

#1 answer: _____

2. $2x + 5y = 17$
 $6x - 5y = -9$

#2 answer: _____

3. $3x + 6y = -6$
 $-5x - 2y = -14$

#3 answer: _____