

## Solving Linear Systems Using Elimination: Part 2

### Warm-Up

Solve the following linear systems using an efficient technique.

a)  $3x + y = -2$   
 $2x - 3y = 17$

b)  $2x + 3y = 11$   
 $4x - 3y = -5$

### Elimination

In many instances, linear equations need to be multiplied by a constant so that the elimination technique can be applied.

#### Examples

Solve each linear system using elimination.

a)  $2x + 4y = 20$   
 $3x - 2y = -18$

b)  $5x - 2y = 22$   
 $2x + 6y = 2$

## Practice

Solve each linear system using the elimination technique.

a)  $2x + 4y = -2$

$$3x + 4y = 1$$

b)  $3x + 2y = 2$

$$2x + 3y = 8$$

c)  $x - 2y = 10$

$$2x + 5y = 2$$

d)  $5x + 2y = 0$

$$3x - 3y = 21$$

Answers:

a) (3, -2)

b) (-2, 4)

c) (6, -2)

d) (2, -5)