Lesson 3 Solving Systems Using Elimination

Steps

1. Arrange the equations with like terms in columns.
2. Use multiplication/division to make the coefficients of *x* or *y* the same value.
3. Add/subtract the equations to eliminate one variable and solve for the remaining variable.
4. Substitute the value obtained in Step 3 into either of the original equations and solve for the other variable.
5. Check the solution in each of the original equations. (optional)

Example 1

Solve, algebraically.

$x + 2y = 10$

$-2x + 3y = 15$

Example 2
Solve, algebraically.
$2y + 4x = 1$
$3y + 3x = 3$

Example 3
Solve, algebraically.
$y = 2.5x - 3$
$2y = 5x + 4$

Example 4

Solve, algebraically.

$2y = 6x + 4$

$y = 3x + 2$