Solving Systems of Equations by the Simple Elimination Method

Elimination is the method of combining two equations in standard form in order to:

Step One: Select which variable to eliminate.

Step Two: Multiply the equations (if necessary) to ensure the variable will cancel out.

Step Three: **ELIMINATE** one of the variables by combining the two equations.

Step Four: Solve for the variable.

Step Five: Solve for the second variable using substitution.

Solve each of the following by the Elimination Method.

1. $x + y = 0$ 2. $x - y = 6$
        $x - y = -14$ $x - y = -18$

3. $4x + y = 13$ 4. $-10x + 5y = 25$
        $3x - y = 1$ $10x - 2y = -16$

5. $7x + 5y = -6$

        $4x + 3y = -4$

6. $5x + y = 23$

        $3x - 2y = 6$

7. $x + 8y = 24$

        $2x + 16y = 48$

8. $5x - 2y = 10$

        $-10x + 4y = 16$