

3 Addition Method (also known as The Elimination Method)

To Solve a System of Linear Equations by Addition

1. Write the equations one under the other so that like terms are aligned.
2. Eliminate one variable.
If necessary, multiply both sides of one or both equations by an appropriate number so that the coefficients of one variable are opposites.
Add the new equations to form a single equation in one variable.
Solve the equation
3. Substitute the value found in Step 1 into either of the original equations and solve.
4. Check your answer.

Example 5: Use the addition method to solve the systems of linear equations. State whether each system is consistent, inconsistent, or dependent.