

## Example 1

Write the augmented matrix for the given system of equations.

$$x + 2y - z = 3$$

$$2x - y + 2z = 6$$

$$x - 3y + 3z = 4$$

## Example 2

Solve the given system by Gaussian elimination.

$$2x + 3y = 6$$

$$x - y = \frac{1}{2}$$

## Example 3

Solve the system of equations.

$$5x + 3y + 9z = -1$$

$$-2x + 3y - z = -2$$

$$-x - 4y + 5z = 1$$