

# Solving Systems with Three Variables

$$x - 2y + z = 5$$

$$2y - 8z = -4$$

$$17(8z - 4)/2 + 3z = -34$$

## The Approach

Eliminate  $x$  from the EQ2 and EQ3

**Eliminate  $y$  from EQ3**

Eliminate  $z$  from EQ2 and EQ1

Eliminate  $y$  from EQ1

# Solving Systems with Three Variables

$$x - 2y + z = 5$$

$$2y - 8z = -4$$

$$17(4z - 2) - 3z = -34$$

## The Approach

Eliminate  $x$  from the EQ2 and EQ3

**Eliminate  $y$  from EQ3**

Eliminate  $z$  from EQ2 and EQ1

Eliminate  $y$  from EQ1