

Solving Systems with Three Variables

The Approach

Eq 1 in ate_x from the EQ2 and EQ3

Eliminate *any* from EQ3

$E \sim \text{in} \text{ in} \text{ a} \text{ t} \text{ e} \text{ z}$ from $EQ2$ and $EQ1$

$E \sim \text{iminately from } EQ1$

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

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

$$6x + 5y + 9z = -4$$

Solving Systems with Three Variables

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

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

$$6x + 5y + 9z = -4$$

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

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

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

$$6(5 + 2y - z) + 5y + 9z = -4$$

The Approach

Eliminate x from the EQ2 and EQ3

Eliminate y from EQ3

Eliminate z from EQ2 and EQ1

Eliminate y from EQ1