

Solving a System of Linear Equations with Three Variables

Solve the following system. Look for the easiest equation and solve for easiest variable

$$\text{Eq1} \quad -2x + y + 3z = 20$$

$$\text{Eq2} \quad -3x + 2y + z = 21$$

$$\text{Eq3} \quad 3x - 2y + 3z = -9$$

Solve the following system. Look for the easiest equation and solve for easiest variable

$$\text{Eq1} \quad x + 2y + 5z = -1$$

$$\text{Eq2} \quad 2x - y + z = 2$$

$$\text{Eq3} \quad 3x + 4y - 4z = 14$$

Solve the following system. Look for ways to use the process of **elimination**.

$$\text{Eq1} \quad 5x - 6y + 2z = 21$$

$$\text{Eq2} \quad 2x + 3y - 3z = -9$$

$$\text{Eq3} \quad -3x + 9y - 4z = -24$$

Solve the following system. Look for ways to use the process of **elimination**.

$$\text{Eq1} \quad 7x - 10y + 8z = -50$$

$$\text{Eq2} \quad -2x - 5y + 12z = -90$$

$$\text{Eq3} \quad 3x + 4y + 4z = 26$$

Look for the easiest equation and solve for easiest variable
and **substitute** to other equations.

Look for ways to use the process of **elimination**.