



Nombre de alumno: Hector Elián Alejandro Villarreal

Nombre del profesor: Jorge Enrique Albores

Nombre del trabajo: Ecuaciones Simultaneas

Materia: Algebra

Grado: 1RO

Grupo: A

Hector Elian Alejandro villorreal

Por el metodo de reduccion resuelva la siguiente ecuacion de 3x3:

$$\begin{aligned} x+y+z &= 2 \\ 2x+3y+5z &= 11 \\ x-5y+6z &= 29 \end{aligned}$$

$$\begin{aligned} (1) \quad x+y+z &= 2 \\ (4) \quad 2x+3y+5z &= 11 \end{aligned}$$

$$\begin{aligned} -2x-2y-2z &= -4 & (1) \\ \underline{2x+3y+5z} &= 11 \\ \hline 4y+3z &= 7 \end{aligned}$$

$$\begin{aligned} (2) \quad 2x+3y+5z &= 11 \\ (3) \quad x-5y+6z &= 29 \end{aligned}$$

$$\begin{aligned} 2x+3y+5z &= 11 \\ -2x+10y-12z &= -58 \\ \hline 13y-7z &= -47 \end{aligned}$$

$$\begin{aligned} (3) \quad y+3z &= 7 \\ 13y-7z &= -47 \\ -13y+39z &= -91 \\ \hline 13y-7z &= -47 \\ \hline 1-46z &= -138 \end{aligned}$$

$$\begin{aligned} z &= +138 \\ \hline 46 \\ z &= 3 \end{aligned}$$

$$\begin{aligned} y+3z &= 7 \\ y+3(3) &= 7 \\ y+9 &= 7 \\ y &= 7-9 \\ y &= -2 \end{aligned}$$

$$\begin{aligned} (5) \quad x+y+z &= 2 \\ x+(-2)+3 &= 2 \\ x-2+3 &= 2 \\ x &= 2+2-3 \\ x &= 4-3 \quad x=1 \end{aligned}$$

$$\begin{aligned} (6) \quad x+y+z &= 2 \\ (1)+(-2)+(3) &= 2 \\ 1-2+3 &= 2 \\ 4-2 &= 2 \\ z &= 2 \end{aligned}$$

$$\begin{aligned} (7) \quad x &= 1 \\ y &= -2 \\ z &= 3 \end{aligned}$$

Por el metodo de reduccion e igualacion resuelva los siguientes ejercicios.

Resolver los siguientes sistemas de ecuaciones de 2x2:

$$\begin{aligned} 1. \quad \begin{cases} 8x-5=7y-9 \\ 6x=3y+6 \end{cases} & \quad \begin{cases} 6x=3y+6 \\ 6x-3y=6 \\ -6 \div (8x-7y=-4) \end{cases} & \quad \begin{cases} 9/4y=9 \\ y=9 \quad 4/9 \\ y=4 \end{cases} & \quad \begin{cases} 6x-3 \cdot 4= \\ 6x=6+12 \\ 6x=18 \\ x=18/6 \\ x=3 \end{cases} \end{aligned}$$

Hector Elian Alejandro villarreal

$$2. \begin{cases} x-1=y+1 \\ x-3=3y-7 \end{cases}$$

$$x=y+1+1$$

$$x=3y-7+3$$

$$x=y+2$$

$$y=3y-4$$

$$y+2=3y-4$$

$$y-3y=-4-2$$

$$-2y=-6$$

$$y=-6/-2$$

$$y=3$$

$$3. \begin{cases} 3(x+2)=2y \\ 2(y+5)=7x \end{cases}$$

$$1. \begin{cases} x-2y=-6 \\ -7x+2y=-10 \end{cases}$$

$$2. \begin{cases} 3x=-6 \\ -7x=-10 \end{cases}$$

$$3x=-6$$

$$-7x=-10$$

$$-4x=-16$$

$$x=16/4$$

$$x=4$$

$$x=y+2=3+2$$

$$x=3+2=5$$

$$x=5$$

$$3(4)-2y=-6$$

$$12-2y=-6$$

$$-2y=-6-12$$

$$y=18/2$$

$$y=9$$