

# Ejercicios

Resuleva siguientes ejercicios con comprobacion:

1.  $3x+5=5x-13$

$$\begin{aligned}3x+5 &= 5x-13 \\3x-5x &= -13-5 \\-2x &= -18 \\x &= 9\end{aligned}$$

**Comprobación:**

$$\begin{aligned}3(9)+5 &= 5(9)-13 \\27+5 &= 45-13 \\32 &= 32\end{aligned}$$

2.  $5(7-x)=31-x$

$$\begin{aligned}35-5x &= 31-x \\-5x+x &= 31-35 \\-4x &= -4 \\x &= 1\end{aligned}$$

**Comprobación:**

$$\begin{aligned}5(7-1) &= 31-1 \\5(6) &= 30 \\30 &= 30\end{aligned}$$

3.  $4(2-3x)=-2x-27$

$$\begin{aligned}8-12x &= -2x-27 \\-12x+2x &= -27-8 \\-10x &= -35 \\x &= 3.5\end{aligned}$$

**Comprobación:**

$$\begin{aligned}4(2-3(3.5)) &= -2(3.5)-27 \\4(2-10.5) &= -7-27 \\4(-8.5) &= -34 \\-34 &= -34\end{aligned}$$

4.  $6x-8=4(-2x+5)$

$$\begin{aligned}6x-8 &= -8x+20 \\6x+8x &= 20+8 \\14x &= 28 \\x &= 2\end{aligned}$$

**Comprobación:**

$$\begin{aligned}6(2)-8 &= 4(-2(2)+5) \\12-8 &= 4(-4+5) \\4 &= 4\end{aligned}$$

5.  $3(2x-2)=2(3x+9)$

$$\begin{aligned}6x-6 &= 6x+18 \\-6 &= 18 \text{ (No hay solución)}\end{aligned}$$

La ecuación no tiene solución.

6.  $3(4x+7)=4x-25$

$$\begin{aligned}12x+21 &= 4x-25 \\12x-4x &= -25-21 \\8x &= -46 \\x &= -5.75\end{aligned}$$

**Comprobación:**

$$\begin{aligned}3(4(-5.75)+7) &= 4(-5.75)-25 \\3(-23+7) &= -23-25 \\-48 &= -48\end{aligned}$$

7.  $7x+15=3(3x-7)$

$$\begin{aligned}7x+15 &= 9x-21 \\7x-9x &= -21-15 \\-2x &= -36 \\x &= 18\end{aligned}$$

**Comprobación:**

$$\begin{aligned}7(18)+15 &= 3(3(18)-7) \\126+15 &= 3(54-7) \\141 &= 141\end{aligned}$$