

⑥

$X \rightarrow n^{\circ}$ gallinas

pico: X

patas: $2X$

crestas: X

$$X + 2X + X = 88$$

$$4X = 88$$

$$\frac{4X}{4} = \frac{88}{4}$$

$$X = 22 \text{ gallinas}$$

⑦

1 Kg de cerezas: $X + 2$

1 Kg de peras: X

$$3X + 1 \cdot (X + 2) = 8$$

$$3X + X + 2 = 8$$

$$4X + 2 = 8$$

$$\frac{4X}{4} = \frac{6}{4} \Rightarrow X = \frac{6}{4} = \frac{3}{2} = 1.5 \text{ €}$$

Las cerezas cuestan 3.5 €/kg

1.5 + 2 = 3.5
Cuesta 1 kg de peras

Ej. 1

$$a) 13X - 5(X+2) = 4(X-1) + 2$$

$$13X - 5X - 10 = 4X - 4 + 2$$

CASA X

CASA n°

$$13X - 5X - 4X = 10 + 2 - 4$$

$$\frac{4X}{4} = \frac{8}{4} \Rightarrow X = 2$$

5

$$Ex: 2 \quad X = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$a) \quad x = \frac{-(-6) \pm \sqrt{6^2 - 4 \cdot 8 \cdot 1}}{2 \cdot 8}$$

$$x = \frac{+6 \pm \sqrt{36 - 32}}{16}$$

$$x = \frac{+6 \pm \sqrt{4}}{16}$$

$$x = \frac{+6 \pm 2}{16} \Rightarrow \begin{cases} x_1 = \frac{+6+2}{16} \Rightarrow \frac{8}{16} = \boxed{\frac{1}{2}} \\ x_2 = \frac{+6-2}{16} \Rightarrow \frac{4}{16} = \boxed{\frac{1}{4}} \end{cases}$$

a: 8
b: -6
c: +1

Ej. 3

a) Kg de naranjas: X
Kg de manzanas: $X + 0,5$

$$3X + 2(X + 0,5) = 7$$

$$3X + 2X + 1 = 7$$

CASA X CASA n2

$$3X + 2X = 7 - 1$$

$$5X = 6$$

$$\frac{6}{5} = \frac{6}{5} \rightarrow X = 1,2 \text{ € que cuestan las naranjas.}$$

$$\text{Manzanas} = 1,2 + 0,5 = 1,7 \text{ € que cuestan las manzanas.}$$

Ej. 4

(a)

$X \rightarrow n^{\circ}$ desconocido

$$\frac{17}{17} = 1$$

$$X \cdot (2X + 3) = 35$$

$$2X^2 + 3X = 35$$

$$2X^2 + 3X - 35 = 0 \rightarrow \begin{matrix} a = 2 \\ b = 3 \\ c = -35 \end{matrix}$$

$$X = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-3 \pm \sqrt{9 - 4 \cdot 2 \cdot (-35)}}{4} = \frac{-3 \pm \sqrt{9 + 280}}{4}$$

$$= \frac{-3 \pm \sqrt{289}}{4} = \frac{-3 \pm 17}{4}$$

$$\rightarrow \begin{matrix} X_1 = \frac{14}{4} = 3,5 \\ X_2 = \frac{-20}{4} = -5 \end{matrix} \leftarrow \text{Solución}$$