

# Resolution des equations $x_{div}_a+b=c$

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10:18 PM

## Resolution des equations $x/a+b=c$

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1) UN MODELE :

$$\frac{x}{3} + 4 = 7$$

$$\boxed{\frac{x}{3}} + \begin{array}{cc} 1 & 1 \\ 1 & 1 \end{array} = \begin{array}{ccc} 1 & 1 & 1 \\ 1 & 1 & 1 \end{array} \boxed{1}$$

+

$$\begin{array}{cc} -1 & -1 \\ -1 & -1 \end{array} \quad \begin{array}{cc} -1 & -1 \\ -1 & -1 \end{array}$$

||

$$\boxed{\frac{x}{3}} = \begin{array}{ccc} 1 & 1 & 1 \end{array}$$

$$\frac{x}{3} = 3$$

$\times 3 \quad \times 3$

Alors  $\boxed{x=9}$

$$x$$
$$\boxed{\frac{x}{3}} \quad \boxed{\frac{x}{3}} \quad \boxed{\frac{x}{3}}$$

; Verification:  $\frac{9}{3} + 4 = 7$   
 $3 + 4 = 7 \checkmark$

## 2) SOLUTION ALGÈBRE :

exemple 1

$$\frac{x}{7} - 18 = 4$$
$$+ 18 \quad + 18$$

Etape 1  $\left\{ \begin{array}{l} \text{Je vois : soustraction} \\ \text{Je fais : addition} \end{array} \right.$

$$\frac{x}{7} = 5$$
$$\times 7 \quad \times 7$$

Etape 2  $\left\{ \begin{array}{l} \text{Je vois : division} \\ \text{Je fais : multiplication} \end{array} \right.$

$$\frac{x}{7} \times 7 = 5 \times 7$$

$$x = 5 \times 7$$

$$x = 35$$

Verification :  $\frac{35}{7} = 5 \checkmark$

exemple 2

$$\frac{-x}{21} - 5 = -2$$
$$+ 5 \quad + 5$$

Etape 1  $\left\{ \begin{array}{l} \text{Je vois : soustraction} \\ \text{Je fais : addition} \end{array} \right.$

$$\frac{-x}{21} = 3$$
$$\times 21 \quad \times 21$$

Etape 2  $\left\{ \begin{array}{l} \text{Je vois : division} \\ \text{Je fais : multiplication} \end{array} \right.$

$$\frac{-x}{21} \times 21 = 3 \times 21 \quad \text{Alors } -x = 63$$

$$x = -63$$

Verification :  $\frac{-(-63)}{21} - 5 = \frac{63}{21} - 5 = 3 - 5 = -2 \checkmark$