

## Suma y resta de polinomios

### 1 EJERCICIO GUIADO

Sean los polinomios  $A = 5x^4 - 3x^2 - 6x + 5$        $B = 4x^3 - 2x^2 + 2x - 7$

- Calcula  $A + B$

$$\begin{array}{r}
 A \rightarrow 5x^4 + 0x^3 - 3x^2 - 6x + 5 \\
 B \rightarrow \phantom{5x^4} + 4x^3 - 2x^2 + 2x - 7 \\
 \hline
 A + B \rightarrow \boxed{\phantom{00}}x^4 + \boxed{\phantom{00}}x^3 - \boxed{\phantom{00}}x^2 - \boxed{\phantom{00}}x - \boxed{\phantom{00}}
 \end{array}
 \left\{ \begin{array}{l} \text{Observa: los términos} \\ \text{que faltan se completan} \\ \text{con ceros.} \end{array} \right.$$

- Calcula  $A - B$

$$\begin{array}{r}
 A \rightarrow 5x^4 + 0x^3 - 3x^2 - 6x + 5 \\
 B \rightarrow \phantom{5x^4} - 4x^3 + 2x^2 - 2x + 7 \\
 \hline
 A + (-B) = A - B \rightarrow \boxed{\phantom{00}}x^4 - \boxed{\phantom{00}}x^3 - \boxed{\phantom{00}}x^2 - \boxed{\phantom{00}}x + \boxed{\phantom{00}}
 \end{array}
 \left\{ \begin{array}{l} \text{Observa: se cambia de signo} \\ \text{al sustraendo y, después, se} \\ \text{realiza una suma.} \end{array} \right.$$

### 2 EJERCICIO GUIADO

Considera los polinomios  $C = 2x^4 + 5x^3 - 3x^2 + 8$        $D = x^4 - 6x^3 + 4x^2 - 5x + 1$

Calcula  $C + D$  y  $C - D$ .

$$\begin{array}{r}
 C \rightarrow 2x^4 + 5x^3 - 3x^2 + 0x + 8 \\
 D \rightarrow \phantom{2x^4} + x^4 - 6x^3 + 4x^2 - 5x + 1 \\
 \hline
 C + D \rightarrow \dots\dots\dots
 \end{array}
 \qquad
 \begin{array}{r}
 C \rightarrow 2x^4 + 5x^3 - 3x^2 + 0x + 8 \\
 -D \rightarrow \phantom{2x^4} - x^4 + 6x^3 - 4x^2 + 5x - 1 \\
 \hline
 C - D \rightarrow \dots\dots\dots
 \end{array}$$

**3** Sean los polinomios:

$$A = 3x^4 - 5x^3 + 2x - 7$$

$$B = 2x^4 + 7x^3 + 5x^2 - 3x - 1$$

$$C = x^3 + 6x^2 + 4x + 3$$

Calcula:

$$A + B$$

$$A - B$$

$$B - C$$

$$A + B + C$$