

OPERACIONES CON POLINOMIOS

A partir de los siguientes polinomios

$$P(x) = 4x^3 + 3x^2 - x + 1; \quad Q(x) = -7x^3 - 5x^2 - 6x - 3; \quad R(x) = -2x^3 - 5x + 7$$

efectúa las operaciones indicadas:

$$P(x) + Q(x) = (4x^3 + 3x^2 - x + 1) + (-7x^3 - 5x^2 - 6x - 3)$$

$$\begin{array}{r} x^3 + \quad x^2 + \quad x + \\ x^3 + \quad x^2 + \quad x + \\ \hline x^3 + \quad x^2 + \quad x + \end{array}$$

$$P(x) - R(x) = (4x^3 + 3x^2 - x + 1) - (-2x^3 - 5x + 7)$$

$$\begin{array}{r} x^3 + \quad x^2 + \quad x + \\ x^3 + \quad x^2 + \quad x + \\ \hline x^3 + \quad x^2 + \quad x + \end{array}$$

$$P(x) - Q(x) + R(x) =$$

$$\begin{array}{r} x^3 + \quad x^2 + \quad x + \\ x^3 + \quad x^2 + \quad x + \\ x^3 + \quad x^2 + \quad x + \\ \hline x^3 + \quad x^2 + \quad x + \end{array}$$

$$[P(x) - Q(x) - R(x)] \cdot 2 =$$

$$\begin{array}{r} x^3 + \quad x^2 + \quad x + \\ x^3 + \quad x^2 + \quad x + \\ x^3 + \quad x^2 + \quad x + \\ \hline x^3 + \quad x^2 + \quad x + \end{array}$$

$$2P(x) - Q(x) + 3R(x) =$$

$$\begin{array}{r} x^3 + \quad x^2 + \quad x + \\ x^3 + \quad x^2 + \quad x + \\ x^3 + \quad x^2 + \quad x + \\ \hline x^3 + \quad x^2 + \quad x + \end{array}$$

$$P(x) \cdot Q(x) =$$

$$\begin{array}{r} x^3 + \quad x^2 + \quad x + \\ x^3 + \quad x^2 + \quad x + \\ \hline x^3 + \quad x^2 + \quad x + \\ x^4 + \quad x^3 + \quad x^2 + \quad x + \\ x^5 + \quad x^4 + \quad x^3 + \quad x^2 \\ x^6 + \quad x^5 + \quad x^4 + \quad x^3 \\ \hline x^6 + \quad x^5 + \quad x^4 + \quad x^3 + \quad x^2 + \quad x + \end{array}$$

$$3 \cdot [P(x) + Q(x)] - 4R(x) =$$

$$\begin{array}{r} x^3 + \quad x^2 + \quad x + \\ x^3 + \quad x^2 + \quad x + \\ x^3 + \quad x^2 + \quad x + \\ \hline x^3 + \quad x^2 + \quad x + \end{array}$$

$$Q(x) \cdot 2 \cdot R(x) =$$

$$\begin{array}{r} x^6 + \quad x^5 + \quad x^4 + \quad x^3 + \quad x^2 + \quad x + \\ \hline \end{array}$$