

Pag 54

9)  $R(x) = x^5 + 1 - 3 + 4x^5 - 3x - 2x = 5x^5 - 5x - 2$  opuesto  $\rightarrow \underline{\underline{-5x^5 + 5x + 2}}$

Pag 55

11) a)  $P(x) = 3x^6 + 2x^5 - 3x^4 - x^2 + 7x - 2 = 3 \cdot 0 + 2 \cdot 0 - 3 \cdot 0 - 0 + 7 \cdot 0 - 2 = \underline{\underline{-2}}$

11 b)  $P(x, y) = -x^4y - x^2y + 7xy - 2 = -1^4 \cdot 2 - 1^2 \cdot 2 + 7 \cdot 1 \cdot 2 - 2 = -2 - 2 + 14 - 2 = \underline{\underline{8}}$

Pag 55

12)  $P(x, y) = 3x^2y + xy - 7x + y - 2$

$P(0, 0) = 3 \cdot 0 \cdot 0 + 0 \cdot 0 - 7 \cdot 0 + 0 - 2 = \underline{\underline{-2}}$

$P(1, 1) = 3 \cdot 1 \cdot 1 + 1 \cdot 1 - 7 \cdot 1 + 1 - 2 = 3 + 1 - 7 + 1 - 2 = -4$

$Q(x, y) = -xy^2 + 4y^2 - 3x$

$Q(0, -1) = -0 \cdot (-1)^2 + 4 \cdot (-1)^2 - 3 \cdot 0 = 0 + 4 + 0 = \underline{\underline{4}}$

$Q(0, 2) = -0 \cdot 2^2 + 4 \cdot 2^2 - 3 \cdot 0 = 0 + 16 - 0 = \underline{\underline{+16}}$

13) a)  $P(x) = 4 - 3x^2 + x - x^2 + 1 = -4x^2 + x + 5 \rightarrow P(2) = -4 \cdot 2^2 + 2 + 5 = -16 + 7 = \underline{\underline{-9}}$

13 b)  $Q(x) = x^4 - 4 - 3x^2 + x - x^2 + 1 - 3x^4 - 3x = -2x^4 - 4x^2 - 2x - 3 =$

$Q(2) = -2 \cdot 2^4 - 4 \cdot 2^2 - 2 \cdot 2 - 3 = -32 - 16 - 4 - 3 = \underline{\underline{-55}}$

Pag 55

$$14) P(x) = 2x^2 - ax + 1 \rightarrow P(2) = 5$$

$$2 \cdot 2^2 - a \cdot 2 + 1 = 5 \quad // \quad 8 - 2a + 1 = 5 \quad //$$

$$9 - 2a = 5 \quad // \quad 9 = 5 + 2a \quad // \quad 2a = 9 - 5 = 4$$

$$2a = 4 \quad // \quad a = \frac{4}{2} = 2 \quad \underline{\underline{a = 2}}$$

$$15) P(x) = x^2 - 1 \left\{ \begin{array}{l} P(1) = 1^2 - 1 = 0 \\ P(-1) = -1^2 - 1 = 0 \end{array} \right\} \rightarrow \underline{\underline{1 y -1}} \text{ Son raíces de } P(x)$$

No hay más raíces

Pag 22

59j)

$$-\frac{6}{7} - 3 - \frac{7}{3} = -\frac{18}{21} - \frac{63}{21} - \frac{49}{21} = -\frac{130}{21}$$

Pag 23

73i)

$$\frac{19}{90} = \underline{\underline{0,2\bar{1}}}$$

Pag24

37)

$$a) 3.000 \cdot \frac{1}{5} = 600 \text{ € alquiler}$$

$$3.000 \cdot \frac{1}{60} = 50 \text{ € teléfono}$$

$$3.000 \cdot \frac{1}{8} = 375 \text{ € transporte y ropas}$$

$$\left. \begin{array}{l} \\ \\ \end{array} \right\} \text{total gasto} = \underline{\underline{1.025 \text{ €}}}$$

$$b) \frac{1}{5} = \frac{24}{120} \quad / \quad \frac{1}{6} = \frac{2}{120} \quad / \quad \frac{1}{8} = \frac{15}{120}$$

$$c) \frac{24}{120} + \frac{2}{120} + \frac{15}{120} = \frac{41}{120} \text{ (gastan)} \quad 1 - \frac{41}{120} = \frac{120}{120} - \frac{41}{120} = \frac{79}{120} \text{ Ahorraron}$$

$$3.000 \cdot \frac{79}{120} = \underline{\underline{1.975 \text{ €}}}$$