

Aplicar Ruffini:

$$a) (3x^2 - 2x^3 + x^4 - 2x) : (3x + 1)$$

$$\text{Rta: } Q(x) = \frac{1}{3}x^3 - \frac{7}{9}x^2 + \frac{34}{27}x - \frac{88}{81} \quad \text{Resto: } \frac{88}{81}$$

$$b) (x^4 - 2x^3 + 3x^2 - 2x - 1) : (2x - 1)$$

$$\text{Rta: } Q(x) = \frac{1}{2}x^3 - \frac{3}{4}x^2 + \frac{9}{8}x - \frac{7}{16} \quad \text{Resto: } -\frac{23}{16}$$

$$c) (x^5 - 2x^3 + 3x^2 - 2x - 1) : (3x - 1)$$

$$\text{Rta: } Q(x) = \frac{1}{3}x^4 + \frac{1}{9}x^3 - \frac{17}{27}x^2 + \frac{64}{81}x - \frac{98}{243} \quad \text{Resto: } -\frac{341}{243}$$

$$d) (-2x - 1 + 3x^2 - x^3 + x^5) : (2x - 1)$$

$$\text{Rta: } Q(x) = \frac{1}{2}x^4 + \frac{1}{4}x^3 - \frac{3}{8}x^2 + \frac{21}{16}x - \frac{11}{32} \quad \text{Resto: } -\frac{43}{32}$$

$$e) (x^3 - x^2 + 3x^4 - 2x - 1) : (2x + 1)$$

$$\text{Rta: } Q(x) = \frac{3}{2}x^3 - \frac{1}{4}x^2 - \frac{3}{8}x - \frac{13}{16} \quad \text{Resto: } -\frac{3}{16}$$

$$f) (-2x^2 + 3x^4 - 2x + 1) : (2x + 2)$$

$$\text{Rta: } Q(x) = \frac{3}{2}x^3 - \frac{3}{2}x^2 + \frac{1}{2}x - \frac{3}{2} \quad \text{Resto: } 4$$

$$g) (-x^2 + 3x^4 - 2x + 1 + x^5) : (2x + 2)$$

$$\text{Rta: } Q(x) = \frac{1}{2}x^4 + x^3 - x^2 + \frac{1}{2}x - \frac{3}{2} \quad \text{Resto: } 4$$



Resolver x el método de Ruffini:

$$a) (4x^3 + 5x - 3) : (x+2) \quad \text{Rta: } C(x) = 4x^2 - 8x + 21 \\ \text{Resto} = -45$$

$$b) (x^3 + 4x^2 - 5) : (x+5) \quad \text{Rta: } C(x) = x^2 - x + 5 \\ \text{Resto} = -30$$

$$c) (x^3 + 4x^2 - 5) : (x-3) \quad \text{Rta: } C(x) = x^2 + 7x + 21 \\ \text{Resto} = 58$$

$$d) (2x^3 + 5x^2 - x - 5) : (x+2) \quad \text{Rta: } C(x) = 2x^2 + x - 3 \\ \text{Resto} = 1$$

$$e) (x^4 - 3x^2 + 2) : (x-3) \quad \text{Rta: } C(x) = x^3 + 3x^2 + 6x + 18 \\ \text{Resto} = 56$$

$$f) (2x^4 - 3x^3 + 5x^2 - 6x + 10) : (x-2) \quad \text{Rta: } C(x) = 2x^3 + x^2 + 7x + 8 \\ \text{Resto} = 26$$

$$g) (x^5 + x^4 - x^3 + x^2 - 3x + 5) : (x-1) \quad \text{Rta: } C(x) = x^4 + 2x^3 + x^2 + 2x - 1 \\ \text{Resto} = 4$$

$$h) (3x^5 + 2x + 4) : (x+2) \quad \text{Rta: } C(x) = 3x^4 - 6x^3 + 12x^2 - 24x + 50 \\ \text{Resto} = -96$$