

Σ151/A3

π άνω

x

 $f(x) =$ $x^3 - 2$, όταν $x < 0$ $x \in (-\infty, 0) = A_1$ $2x + 3$, όταν $x \geq 0$ $x \in [0, +\infty) = A_2$

$$A_f = A_1 \cup A_2 = (-\infty, 0) \cup [0, +\infty) = (-\infty, +\infty) = \mathbb{R}$$

 $1 \in A_2$

$$f(1) = 2 \cdot 1 + 3 = 2 + 3 = 5$$

$$f(-1) = (-1)^3 - 2 = -1 - 2 = -3$$

$$f(0) = 2 \cdot 0 + 3 = 0 + 3 = 3$$

$$f(2) = 2 \cdot 2 + 3 = 4 + 3 = 7$$

$$f(-2) = (-2)^3 - 2 = -8 - 2 = -10$$

$$f\left(\frac{5}{2}\right) = 2 \cdot \frac{5}{2} + 3 = 5 + 3 = 8$$

$$f(3) = 2 \cdot 3 + 3 = 6 + 3 = 9$$

$$f(-3) = (-3)^3 - 2 = -27 - 2 = -29$$

$$\left(\begin{array}{l} (-4)^3 = \\ -4 \cdot (-4) \cdot (-4) = \\ -4 \cdot (16) = -64 \end{array} \right) \quad \begin{array}{l} -27 - 2 = -29 \\ +27 - 2 = +25 \\ +27 + 2 = +29 \end{array}$$

$$f(4) = 2 \cdot 4 + 3 = 8 + 3 = 11$$

$$f(-4) = (-4)^3 - 2 = -64 - 2 = -66$$

$$f\left(-\frac{1}{2}\right) = \left(-\frac{1}{2}\right)^3 - 2 = -\frac{1}{8} - 2 = -\frac{1}{8} - \frac{16}{8} = -\frac{17}{8}$$

$$\Sigma 151 / A4 \quad f(x) = (x+1) \cdot 4 + x^2 = 4x + 4 + x^2 = x^2 + 2 \cdot x \cdot 2 + 2^2 = (x+2)^2$$

$$f(0) = (0+2)^2 = 2^2 = 4$$

$$f(0) = (0+1) \cdot 4 + 0^2 = 1 \cdot 4 + 0 = 4 + 0 = 4$$

$$f(0) = 0^2 + 4 \cdot 0 + 4 = 0 + 0 + 4 = 4$$

$$f(1) = (1+2)^2 = 3^2 = 9$$

$$f(2) = (2+1) \cdot 4 + 2^2 = 3 \cdot 4 + 4 = 12 + 4 = 16$$

$$f(3) = 3^2 + 4 \cdot 3 + 4 = 9 + 12 + 4 = 25$$

$$\Sigma 1171 \quad f(-1), f(-2), f(-3), f(5)$$

$\{ \begin{array}{l} \text{Το } y \text{ αντιστοιχεί στο } x \\ \text{Αν } x=0 \Rightarrow y=f(0)=4 \\ \text{Οπότε } y=4 \end{array} \right.$