

Β ΛΥΚΕΙΟΥ ΘΕΤΙΚΟΣ ΠΡΟΣΑΝΑΤΟΛΙΣΜΟΣ

5.9 1)

$$\text{Πρέπει } \vec{\alpha} \cdot \vec{\beta} = 0 \Rightarrow x \cdot 8 + 4(x - 3) = 0 \Leftrightarrow 8x + 4x - 12 = 0 \Leftrightarrow 12x = 12 \Leftrightarrow x = 1$$

5.9 2)

$$\text{Πρέπει } \vec{\alpha} \cdot \vec{\beta} = 0 \Leftrightarrow 2(-3x) + (1 - x)(-4) = 0 \Leftrightarrow -6x - 4 + 4x = 0 \Leftrightarrow 2x = -4 \Leftrightarrow x = -2$$

5.9 3)

$$\text{Πρέπει } \vec{\alpha} \cdot \vec{\beta} = 0 \Leftrightarrow (x + 1)(-4) + 10(x - 2) = 0 \Leftrightarrow -4x - 4 + 10x - 20 = 0 \Leftrightarrow 6x = 24 \Leftrightarrow x = 4$$

5.9 4)

$$\begin{aligned} \text{Πρέπει } \vec{\alpha} \cdot \vec{\beta} = 0 &\Leftrightarrow (x - 3)(-3x + 9) + (4x - 1)(x - 3) = 0 \Leftrightarrow \\ &\Leftrightarrow -3x^2 + 9x + 9x - 27 + 4x^2 - 12x - x + 3 = 0 \Leftrightarrow x^2 + 5x - 24 = 0 \Leftrightarrow x = 3 \quad \text{ή} \quad x = -8 \end{aligned}$$

5.9 5)

$$\begin{aligned} \text{Πρέπει } \vec{\alpha} \cdot \vec{\beta} = 0 &\Leftrightarrow x \cdot (2x + 2) + (x + 2)(1 - 2x) = 0 \Leftrightarrow 2x^2 + 2x + x + 2 - 2x^2 - 4x = 0 \Leftrightarrow \\ &\Leftrightarrow -x = -2 \Leftrightarrow x = 2 \end{aligned}$$