

Β ΛΥΚΕΙΟΥ ΘΕΤΙΚΟΣ ΠΡΟΣΑΝΑΤΟΛΙΣΜΟΣ

5.8 1)

$$\vec{\alpha} \cdot \vec{\beta} = 2 \Leftrightarrow 2 \cdot x + 3 \cdot (x-1) = 2 \Leftrightarrow 2x + 3x - 3 = 2 \Leftrightarrow 5x = 5 \Leftrightarrow x = 1$$

5.8 1)

$$\vec{\alpha} \cdot \vec{\beta} = 9 \Leftrightarrow 2 \cdot 6x + (3x-1)(-3) = 9 \Leftrightarrow 12x - 9x + 3 = 9 \Leftrightarrow 3x = 6 \Leftrightarrow x = 2$$

5.8 1)

$$\vec{\alpha} \cdot \vec{\beta} = -12 \Leftrightarrow (4x-2) \cdot 2 + 6(x+1) = -12 \Leftrightarrow 8x - 9 + 3x + 6 = -12 \Leftrightarrow 14x = -14 \Leftrightarrow x = -1$$

5.8 1)

$$\vec{\alpha} \cdot \vec{\beta} = 1 \Leftrightarrow x \cdot x - (x+1) = 1 \Leftrightarrow x^2 - x - 2 = 0 \Leftrightarrow x = -1 \text{ ή } x = 2$$

5.8 1)

$$\begin{aligned} \vec{\alpha} \cdot \vec{\beta} = 10 &\Leftrightarrow (x-2)(x+3) + (x+1)(x-2) = 10 \Leftrightarrow x^2 + 3x - 2x - 6 + x^2 - 2x + x - 2 = 10 \Leftrightarrow \\ &\Leftrightarrow 2x^2 = 18 \Leftrightarrow x^2 = 9 \Leftrightarrow x = 3 \text{ ή } x = -3 \end{aligned}$$