

Β ΛΥΚΕΙΟΥ ΘΕΤΙΚΟΣ ΠΡΟΣΑΝΑΤΟΛΙΣΜΟΣ

5.5 1)

$$\vec{\alpha} \cdot \vec{\beta} = x_1 \cdot x_2 + y_1 \cdot y_2 = 5 \cdot 4 + (-2) \cdot 10 = 20 - 20 = 0. \text{ Επομένως } \vec{\alpha} \perp \vec{\beta}$$

5.5 2)

$$\vec{\alpha} \cdot \vec{\beta} = 16 \cdot (-3) + 4 \cdot 12 = -48 + 48 = 0. \text{ Επομένως } \vec{\alpha} \perp \vec{\beta}$$

5.5 3)

$$\vec{\alpha} \cdot \vec{\beta} = 6 \cdot (-2) + 4 \cdot 3 = -12 + 12 = 0. \text{ Επομένως } \vec{\alpha} \perp \vec{\beta}$$

5.5 4)

$$\vec{\alpha} \cdot \vec{\beta} = 1 \cdot \lambda + \lambda(-1) = \lambda - \lambda = 0. \text{ Επομένως } \vec{\alpha} \perp \vec{\beta}$$

5.5 5)

$$\vec{\alpha} \cdot \vec{\beta} = x \cdot y + y(-x) = xy - xy = 0. \text{ Επομένως } \vec{\alpha} \perp \vec{\beta}$$