

α) Είναι:

$$A \cdot B = (2 - \sqrt{3})(2 + \sqrt{3}) = 2^2 - \sqrt{3}^2 = 4 - 3 = 1$$

β) Ισχύει ότι:

$$\begin{aligned} \Pi &= A^2 + B^2 = \\ &= (2 - \sqrt{3})^2 + (2 + \sqrt{3})^2 = \\ &= 2^2 - 2\sqrt{3} + \sqrt{3}^2 + 2^2 + 2\sqrt{3} + \sqrt{3}^2 = \\ &= 4 + 3 + 4 + 3 = 14 \end{aligned}$$