

Β ΛΥΚΕΙΟΥ ΘΕΤΙΚΟΣ ΠΡΟΣΑΝΑΤΟΛΙΣΜΟΣ

4.28 1)

Είναι $\vec{\alpha} + 2\vec{\beta} = (-2, 3) + 2(1, -1) = (-2, 3) + (2, -2) = (0, 1)$. Οπότε $|\vec{\alpha} + 2\vec{\beta}| = \sqrt{0^2 + 1^2} = 1$

4.28 2)

Είναι $2\vec{\alpha} - \vec{\beta} = 2(3, -2) - (2, -1) = (6, -4) - (2, -1) = (4, -3)$

Οπότε $|2\vec{\alpha} - \vec{\beta}| = \sqrt{4^2 + (-3)^2} = \sqrt{16 + 9} = \sqrt{25} = 5$

4.28 3)

Είναι $4\vec{\alpha} - 2\vec{\beta} = 4(5, 1) - 2(7, -2) = (20, 4) - (14, -4) = (6, 8)$

Οπότε $|4\vec{\alpha} - 2\vec{\beta}| = \sqrt{6^2 + 8^2} = \sqrt{36 + 64} = \sqrt{100} = 10$

4.28 4)

Είναι $-\vec{\alpha} - 3\vec{\beta} = (0, -6) - 3(3, 2) = (0, -6) - (9, 6) = (-9, -12)$

Οπότε $|\vec{-\alpha} - 3\vec{\beta}| = \sqrt{9^2 + 12^2} = \sqrt{81 + 144} = \sqrt{225} = 15$