

Να βρείτε το Ε.Κ.Π. και το Μ.Κ.Δ. των παραστάσεων:

α) $6(x^2 - y^2)$, $4(x - y)^2$, $12(x - y)^3$

$$\alpha) \quad 6(x^2 - y^2) = 2 \cdot 3(x - y)(x + y)$$

$$4(x - y)^2 = 2^2(x - y)^2$$

$$12(x - y)^3 = 2^2 \cdot 3(x - y)^3$$

$$\text{Ε.Κ.Π.} = 2^2 \cdot 3(x - y)^3(x + y)$$

β) $a^2 - 3a + 2$, $a^2 - 4$, $a^3 - 4a$

$$\beta) \quad a^2 - 3a + 2 = (a - 1)(a - 2)$$

$$a^2 - 4 = (a - 2)(a + 2)$$

$$a^3 - 4a = a(a^2 - 4) = a(a - 2)(a + 2)$$

$$\text{Ε.Κ.Π.} = a(a - 1)(a - 2)(a + 2)$$

γ) $a^3 - a^2$, $(a^2 - a)(a^2 - 1)$, $a^3 - 2a^2 + a$

$$\gamma) \quad a^3 - a^2 = a^2(a - 1)$$

$$(a^2 - a)(a^2 - 1) = a(a - 1)(a - 1)(a + 1) = a(a - 1)^2(a + 1)$$

$$a^3 - 2a^2 + a = a(a^2 - 2a + 1) = a(a - 1)^2$$

$$\text{Ε.Κ.Π.} = a^2(a - 1)^2(a + 1)$$