

Να βρεθεί το ΕΚΠ των παραστάσεων:

1. $15\alpha^3\beta^2xy, -12\alpha^2\beta^3x^2\omega, 36\alpha\beta x\omega^3, -5\alpha^2\beta x^3\omega^2y^2$

2. $6(x+y)^2, 8(x^2-y^2), 3(x-y)^2$

3. $x^2-1, x^2+1, x^4-1, x^8-1$

1) $15\alpha^3\beta^2xy$
 $-12\alpha^2\beta^3x^2\omega$
 $36\alpha\beta x\omega^3$
 $-5\alpha^2\beta x^3\omega^2y^2$ $\text{ΕΚΠ}(15, 12, 36, 5) = 180$
 $\text{ΕΚΠ} = 180 \alpha^3 \beta^3 x^3 \omega^3 y^2$

2) $6(x+y)^2 = 2 \cdot 3 (x+y)^2$
 $8(x^2-y^2) = 2^3 (x-y)(x+y)$
 $3(x-y)^2 = 3 (x-y)^2$
 $\text{ΕΚΠ} = 2^3 \cdot 3 (x-y)^2 (x+y)^2$
 $= 24 (x-y)^2 (x+y)^2$

3) $x^2-1 = (x-1)(x+1)$
 x^2+1
 $x^4-1 = (x^2-1)(x^2+1) = (x-1)(x+1)(x^2+1)$
 $x^8-1 = (x^4-1)(x^4+1) = (x-1)(x+1)(x^2+1)(x^4+1)$
 $\text{ΕΚΠ} = (x-1)(x+1)(x^2+1)(x^4+1)$