MNOHOČLEN A JEHO ROZKLAD   (M-V-08-01)

Proveď rozklad mnohočlenů.

a) $-36m^4 + 36m^2 - 9 =$ **$- (6m^2 - 3)^2$**

b) $144k^8 - 100l^6 =$ **$(12k^4 - 10l^3) \cdot (12k^4 + 10l^3)$**

c) $2xy - 6x + 4y - 12 = 2x \cdot (y - 3) + 4 \cdot (y - 3) =$ **$(2x + 4) \cdot (y - 3)$**

d) $24a^2 + 56a - 18ab - 42b = 8a \cdot (3a + 7) - 6b \cdot (3a + 7) =$ **$(8a - 6b) \cdot (3a + 7)$**

e) $15x^2 + 5xy - 24xy - 8y^2 = 5x \cdot (3x + y) - 8y \cdot (3x + y) =$ **$(5x - 8y) \cdot (3x + y)$**

f) $16ab^2 - 8a^2b - 24bc + 12ac = 5x \cdot (3x + y) - 8y \cdot (3x + y) =$ **$(5x - 8y) \cdot (3x + y)$**

g) $-9a^2 + 3a^2b^3 + 6b^3 - 2b^6 = -3a^2 \cdot (3 - b^3) + 2b^3 \cdot (3 - b^3) =$ **$(-3a^2 + 2b^3) \cdot (3 - b^3)$**

h) $0,04a^2b^4 - 0,09c^{12} =$ **$(0,2ab^2 - 0,3c^6) \cdot (0,2ab^2 + 0,3c^6)$**

i) $12a^2 - 36a + 27 = 3 \cdot (4a^2 - 12a + 9) =$ **$3 \cdot (2a - 3) \cdot (2a - 3)$**

j) $-0,1z^2 - 0,6zv - 0,9v^2 = -(0,1z^2 + 0,6zv + 0,9v^2) = -0,1 \cdot (1z^2 + 6zv + 9v^2) =$
$= -0,1 \cdot (1z + 3v) \cdot (1z + 3v)$

k) $0,004a^2 + 0,016ab + 0,016b^2 = 0,1 \cdot (0,04a^2 + 0,16ab + 0,16b^2) =$
$= 0,1 \cdot (0,2a + 0,4b) \cdot (0,2a + 0,4b)$

l) $50x^2 - 98y^2 = 0,5 \cdot (25x^2 - 49y^2) =$ **$0,5 \cdot (5x - 7y) \cdot (5x + 7y)$**