

24. 3. 2020

Př. 1: Z trojčlenu $-6xy^4 + 8x^2y^3 - 10x^3y^2$ vytkněte:

- a) jednočlen $2xy^2$
- b) číslo -1
- c) jednočlen $-2xy^2$

Př. 2: Rozlož na součin:

$$3(r + 2) + s(r + 2) = (r + 2)(3 + s)$$

$$-9r(5r - 7s) - 4s(5r - 7s) = (5r - 7s)(-9r - 4s)$$

$$6s(s - r) + 5r(r - s) = 6s(s - r) - 5r(s - r) = (s - r)(6s - 5r)$$

$$r + 2t(r - s) - s = 2t(r - s) + (r - s) = (r - s)(2t + 1)$$

$$-9c + 4b + 3a(9c - 4b) = 3a(9c - 4b) - 9c + 4b = 3a(9c - 4b) - (9c - 4b) = (9c - 4b)(3a - 1)$$

$$-6c - 5a(3c - b) + 2b = -5a(3c - b) - 6c + 2b = -5a(3c - b) - 2(3c - b) = (3c - b)(-5a - 2)$$

$$5a(b - 2c) - b + 2c = 5a(b - 2c) - (b - 2c) = (b - 2c)(5a - 1)$$

$$c + 4b(a - c) - a = 4b(a - c) - a + c = 4b(a - c) - (a - c) = (a - c)(4b - a)$$

Př. 3: Rozložte na součin pomocí postupného vytýkání:

$$7x - 14 + xy - 2y = 7(x - 2) + y(x - 2) = (x - 2)(7 + y)$$

$$xy - x - y + 1 = x(y - 1) - (y - 1) = (y - 1)(x - 1)$$

$$x^3 + x^2 + x + 1 = x^2(x + 1) + (x + 1) = (x + 1)(x^2 + 1)$$

$$4x^3 + x^2 - 12x - 3 = x^2(4x + 1) - 3(4x + 1) = (4x + 1)(x^2 - 3)$$

$$4x + ay + ax + 4y = 4x + 4y + ax + ay = 4(x + y) + a(x + y) = (x + y)(4 + a)$$

$$4x - ay + ax - 4y = 4x - 4y + ax - ay = 4(x - y) + a(x - y) = (x - y)(4 + a)$$

$$4x - ay - ax + 4y = 4x + 4y - ax - ay = 4(x + y) - a(x + y) = (x + y)(4 - a)$$

$$5k - 15 - k(k - 3) = 5(k - 3) - k(k - 3) = (k - 3)(5 - k)$$

$$7a - 2ab + 7b - 2a^2 = 7a + 7b - 2a^2 - 2ab = 7(a + b) - 2a(a + b) = (a + b)(7 - 2a)$$

$$-x^2 - xy + 10y + 10x = -x(x + y) + 10(y + x) = (x + y)(-x + 10)$$

$$2(3r - 5) + 3r^2 - 5r = 2(3r - 5) + r(3r - 5) = (3r - 5)(2 + r)$$