

Urči hodnotu daných výrazů:

- a) $x - 5$ (pro $x = -3$)
- b) $4 + 7a$ (pro $a = 2$)
- c) $y^2 - 4$ (pro $y = 7$)
- d) $2a + b$ (pro $a = 4, b = -1$)
- e) $-2x \cdot y$ (pro $x = 5, y = 0$)

VÝRAZY

-sčítání, odčítání

$$20 - 18$$

$$\underline{-6} \quad \underline{+4} \quad \underline{+8} \quad \underline{-10} \quad \underline{+3} \quad \underline{-2} \quad \underline{+5} = \underline{-18} + \underline{20} = \underline{\underline{2}}$$

$$\underline{-2a} \quad \underline{+4a} \quad \underline{-1a} \quad \underline{+2a} = \underline{-3a} + \underline{6a} = \underline{\underline{3a}}$$

$$\underline{-2\delta} + \underline{4\delta} - \underline{\delta} + \underline{2\delta} = \underline{\underline{3\delta}}$$

$$4x - \cancel{2x} + x + \cancel{2x} - 5x = \underline{\underline{0}}$$

$$12b^2 + 3b^2 - 10b^2 + b^2 = \underline{\underline{6b^2}}$$
$$16b^2 - 10b^2$$

$$3t + 2t - 1t = \underline{\underline{4t}} \quad t = 1t$$

$$\underline{\underline{4a}} - \underline{\underline{a}} + \underline{\underline{b}} - \underline{\underline{3a}} + \underline{\underline{5b}} - \underline{\underline{4b}} = \underline{\underline{0 + 2b}} = \underline{\underline{2b}}$$

$$\underline{\underline{2x}} - \underline{\underline{4}} - \underline{\underline{9x}} - \underline{\underline{8}} + \underline{\underline{x}} = \underline{\underline{-6x - 12}} \quad 2x - 9x + x - 4 - 8$$

$$\underline{\underline{y}} - \underline{\underline{1}} + \underline{\underline{2}} - \underline{\underline{2y}} + \underline{\underline{4y}} - \underline{\underline{5}} = \underline{\underline{3y - 4}} \quad y - 2y + 4y - 1 + 2 - 5$$

$$\underline{\underline{-6m}} + \underline{\underline{2}} - \underline{\underline{9m}} - \underline{\underline{1}} + \underline{\underline{5m}} - \underline{\underline{7}} = -6m - 9m + 5m + 2 - 1 - 7 = \underline{\underline{-10m - 6}}$$

$$\underline{\underline{3a}} - \underline{\underline{5b}} + \underline{\underline{6c}} - \underline{\underline{2a}} - \underline{\underline{4c}} - \underline{\underline{7b}} = \underline{\underline{1a - 12b + 2c}}$$

$$\underline{\underline{6x^2}} + \underline{\underline{3xy}} - \underline{\underline{1}} - \underline{\underline{3x^2}} + \underline{\underline{2xy}} - \underline{\underline{4y^2}} + \underline{\underline{5}} = \underline{\underline{3x^2 + 5xy - 4y^2 + 4}} \\ 6x^2 - 3x^2 + 3xy + 2xy - 1 + 5 - 4y^2$$

$$19cd + \cancel{8cd} - \cancel{7cd} + 11cd - \cancel{cd} = \underline{\underline{30cd}}$$

$$3x + 9 + 2x - 5 = \underline{\underline{5x + 4}}$$

$$\underline{8a} - \underline{9b} + 11 - \underline{10a} + \underline{8b} - 13 = \underline{\underline{-2a - b - 2}}$$

$$\underline{7a^2} - 40 + \underline{3b^2} - 1 + \underline{3a^2} + \underline{a} - \underline{b^2} + 5 = \underline{\underline{10a^2 + a + 2b^2 - 36}}$$

$$10a - 5b^2 + 4 - 3a + 2b^2 - 6 = \underline{\underline{7a - 3b^2 - 2}}$$

$$-5a^2 - 15a + 25 + 6a^2 + 15 + 9a =$$

$$5x - 2x + 4 - 5x + 2x - 4 =$$

$$6a - 5b - 0,5 + 6,9 + a - b =$$

$$\underline{9u} - \underline{7v} - \underline{13} + \underline{6v} - \underline{3u} + \underline{17} =$$

$$-(x - 5y + 1) = \underline{\underline{-x + 5y - 1}}$$

**znaménko MÍNUS před závorkou
MĚNÍ VŠECHNA ZNAMÉNKU
v závorce !!!**

$$+(x - 5y + 1) = \underline{\underline{x - 5y + 1}}$$

$$(5a^2 - ab + b^2) + (3a^2 + 2ab - 3b^2) = \underline{\underline{5a^2 - ab + b^2 + 3a^2 + 2ab - 3b^2}} = \underline{\underline{8a^2 + ab - 2b^2}}$$

$$(5a^2 - ab + b^2) \textcircled{-} (3a^2 + 2ab - 3b^2) = \underline{\underline{5a^2 - ab + b^2 - 3a^2 - 2ab + 3b^2}} = \underline{\underline{2a^2 - 3ab + 4b^2}}$$

$$\textcircled{-}(5a^2 - ab + b^2) + (3a^2 + 2ab - 3b^2) = \underline{\underline{-5a^2 + ab - b^2 + 3a^2 + 2ab - 3b^2}} = \underline{\underline{-2a^2 + 3ab - 4b^2}}$$

$$-(5a^2 - ab + b^2) - (3a^2 + 2ab - 3b^2) =$$

$$= \underline{\underline{-5a^2 + ab - b^2 - 3a^2 - 2ab + 3b^2}} =$$

$$= \underline{\underline{-8a^2 - ab + 2b^2}}$$

Zjednoduš:

a) $2x - 5x =$

b) $-3a + 2a - a =$

c) $7x^2 + 2x^2 - 3x^2 - 3x^2 =$

d) $-4ab + ab + 8ab - 2ab =$

e) $9m - 3m + 2m - 6m - 2m =$

a) $-3x$; b) $-2a$; c) $3x^2$; d) $3ab$; e) 0

$$m^2 + 2 - 4m + 5m^3 - 3m^2 + 6m =$$

$$-3r^3 - 4r + 7r^2 + 11r - 7r^2 - 4r^3 - 9r =$$

$$6n^3 - 8 + 2m^4 - 3m^2 + m - 7 + 4m^2 + 5 =$$

$$15 - k + 3k^2 - 6,6 - 5k^2 + 3,3 + 4k^2 + 7k =$$

$$5m^3-2m^2+2m+2 ; -7r^3-2r ; 2m^4+m^2+m+6n^3-10 ; 2k^2+6k+11,7$$

$$3x + 2y - 5x + y =$$

$$-4a - 3b + 5b + 7a =$$

$$6x^2 - 2x + 3 - 4x^2 + x - 1 =$$

$$5x - 2y + 4 - 5x + 2y - 4 =$$

$$7a^2 - 40 + 3b^2 - 1 + 3a^2 + a - b^2 + 5 =$$

$$-2x + 3y ; 3a + 2b ; 2x^2 -x+2 ; 0 ; 10a^2+a+2b^2-36$$

$$9a - (5a + 6) =$$

$$(5b + 4) - (2b + 3) =$$

$$(8a - 9b - 12) - (3a - 4b + 7) =$$

$$(2a - 3) + (4a + 9) - (5a + 7) =$$

$$(5x - 3y) - (2x - 8y) + (-4x + y) =$$

$$-(3m + 2n) + 6m - (2n - 3) + 1 =$$

$$3 - (5x + 7y) - 11y - (8 - 12x - y) =$$

$$4a-6 ; 3b+1 ; 5a-5b-19 ; a-1 ; -x+6y ; 3m-4n+4 ; 7x-17y-5$$

$$5a - (3a + 2) =$$

$$(3x + 5) - (x - 1) =$$

$$(2a - 3) + (4a + 9) - (5a + 7) =$$

$$-(2y - 3) + y - (2y + 1) =$$

$$4 - (5x + 2) + 8x - (2x + 3) =$$

2a-2 ; 2x+6 ; a-1 ; -3y+2 ; x-1