

1. Izpiši koeficiente enočlenikov:

Rešitve

enočlenik	$-7x^2$	$8ab^2$	$\frac{1xy^2}{5}$	a^3	$-\frac{x^2}{5}$
koeficient	-7	8	$\frac{1}{5}$	1	$-\frac{1}{5}$

2. Enočleniku $2x^3y^2$ poišči podobne enočlenike. Obkroži jih.

$$-8x^3y^2$$

$2y^2$

$2x^2y^2$

$$-x^3y^2$$

$$\frac{6x^3y^2}{5}$$

$\frac{7}{x^3y^2}$

3. Poenostavi.

$$a) \frac{2}{5}x^3 \cdot \left(-\frac{5}{7}xy\right) \cdot 2x^5 = \underline{-\frac{4}{7}x^9y}$$

$$\frac{2 \cdot 5 \cdot 2}{5 \cdot 7}$$

$$b) -(3a + 4b) + (-5a - 6b) + (-7ab) =$$

$$= -3a - 4b - 5a - 6b - 7ab =$$

$$= \underline{-8a - 7ab - 10b}$$

$$c) -(30x - (15x + 8y)) - (-5x + 4y) =$$

$$= -(30x - 15x - 8y) + 5x - 4y =$$

$$= \underline{-30x + 15x + 8y + 5x - 4y} =$$

$$= \underline{-10x + 4y}$$

$$d) (6a - 5)(-4a + 3) - (2a + 1) \cdot (-5a) =$$

$$= -24a^2 + 18a + 20a - 15 - (-10a^2 - 5a) =$$

$$= \underline{-24a^2 + 38a - 15 + 10a^2 + 5a} =$$

$$= \underline{-14a^2 + 43a - 15}$$

4. Izpostavi največji skupni faktor.

$$a) 7x^3 - 14x^2 + 21x = 7x^2(x - 2 + 3x)$$

$$b) 10a^3b^3 - 5ab + 20a^4b^4 = 5ab(2a^2b^2 - 1 + 4a^3b^3)$$

5. V izraz $3x^3 - 4x^2 + 5$ vstavi za $x = -2$ in izračunaj vrednost izraza.

$$\begin{aligned} & 3x^3 - 4x^2 + 5 = \\ & = 3 \cdot (-2)^3 - 4 \cdot (-2)^2 + 5 = \\ & = 3 \cdot (-8) - 4 \cdot 4 + 5 = \\ & = -24 - 16 + 5 = -40 + 5 = \underline{\underline{-35}} \end{aligned}$$

6. Poenostavi izraz

$$\begin{aligned} & 20x^2 - (4x + 4)(5x - 9) - (20x - 36) = \\ & = 20x^2 - (20x^2 - 36x + 20x - 36) - 20x + 36 = \\ & = \cancel{20x^2} - \cancel{20x^2} + 36x - 20x + 36 = \underline{20x + 36} = \\ & = 16x - 20x + 72 \\ & = \underline{\underline{-4x + 72}} \end{aligned}$$

7. Poenostavi zapis:

$$\begin{aligned} & a - 2a(a - b) - 2(a + b) - (a - 2(a - b) - 2(a + b)) = \\ & = a - 2a^2 + 2ab - 2a - 2b - (a - 2a + 2b - 2a - 2b) = \\ & = \cancel{a} - \underline{2a^2} + \underline{2ab} - \cancel{2a} - 2b - \cancel{a} + \underline{2a} - \cancel{2b} + \underline{2a} + \cancel{2b} = \\ & = \underline{\underline{-2a^2 + 2ab + 2a - 2b}} \end{aligned}$$