

Rešitve

1. Izpiši koeficiente enočlenikov:

enočlenik	$4x^2$	$-7ab^2$	$\frac{8xy^2}{9}$	$-a^3$	$-\frac{x^2}{6}$
koeficient	4	-7	$\frac{8}{9}$	-1	$-\frac{1}{6}$

1t

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

$2x^3$

$-6x^3y^2$

$2x^2y^2$

$x^2y^3$

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

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

1t

3. Poenostavi.

$$a) \frac{2}{3}x^4 \cdot \left(-\frac{3}{7}xy\right) \cdot 4x^3 = \underline{\underline{-\frac{8}{7}x^8y}}$$

$$\frac{2 \cdot 3 \cdot 4}{3 \cdot 7}$$

1t

$$b) -(3a + 4b) + (-2a - 3b) + (-4ab) =$$

$$= -3a - 4b - 2a - 3b - 4ab =$$

$$= \underline{\underline{-5a - 4ab - 7b}}$$

1t

$$c) -(24x - (6x + 9y)) - (-3x + 9y) =$$

$$= -(24x - 6x - 9y) + 3x - 9y =$$

$$= \underline{\underline{-24x + 6x + 9y + 3x - 9y}}$$

$$= \underline{\underline{-15x}}$$

1t

$$d) (6a - 2)(-3a + 4) - (7a + 2)(-5a) =$$

$$= -18a^2 + 24a + 6a - 8 - (-35a^2 - 10a) =$$

$$= \underline{\underline{-18a^2 + 30a - 8 + 35a^2 + 10a}}$$

$$= \underline{\underline{17a^2 + 40a - 8}}$$

1t

4. Izpostavi največji skupni faktor.

$$\text{a) } 24x^3 - 16x^2 + 8x^4 = 8x^2(3x - 2 + x^2) \quad \checkmark$$

$$\text{b) } 35a^2b^3 - 7ab + 14a^4b^4 = 7ab(5ab^2 - 1 + 2a^3b^3) \quad \checkmark$$

5. V izraz  $4x^3 - 5x^2 + 6$  vstavi za  $x = -2$  in izračunaj vrednost izraza.

$$\begin{aligned} & 4 \cdot (-2)^3 - 5 \cdot (-2)^2 + 6 = \\ & = 4 \cdot (-8) - 5 \cdot 4 + 6 = \checkmark \\ & = -32 - 20 + 6 = \\ & = -52 + 6 = \underline{\underline{-46}} \quad \checkmark \end{aligned}$$

6. Poenostavi izraz

$$\begin{aligned} & 15x^2 - (5x + 4)(3x - 7) - (18x - 28) = \\ & = 15x^2 - (15x^2 - 35x + 12x - 28) - 18x + 28 = \\ & = \cancel{15x^2} - \cancel{15x^2} + \underline{35x} - \underline{12x} + 28 - 18x + 28 = \checkmark \\ & = \underline{\underline{5x + 56}} \quad \checkmark \end{aligned}$$

7. Poenostavi zapis:

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