

1. Izpiši koeficiente enočlenikov:

Rešitve!

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

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

$$\textcircled{-8x^3y^2} \quad 2y^2 \quad 2x^2y^2 \quad \textcircled{-x^3y^2} \quad \textcircled{\frac{6x^3y^2}{5}} \quad \frac{7}{x^3y^2}$$

3. Poenostavi.

$$a) \frac{2}{3}x^2 \cdot \left(-\frac{3}{7}xy\right) \cdot 7x^3 = \underline{\underline{-2x^6y}}$$

$$\frac{2 \cdot \cancel{3} \cdot \cancel{7} \cdot 1 \cdot 1}{\cancel{3} \cdot \cancel{7} \cdot 1 \cdot 1 \cdot 1}$$

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

$$= \underline{-2a} - \underline{3b} - \underline{7a} - \underline{4b} - \underline{9ab} =$$

$$= -9a - 9ab - 7b$$

$$c) -(32x - (16x + 68y)) - (-10x + 2y) =$$

$$= -(32x - 16x - 68y) + 10x - 2y =$$

$$= \underline{-32x} + \underline{16x} + \underline{68y} + \underline{10x} - \underline{2y} =$$

$$= \underline{-6x} + \underline{66y}$$

$$d) (2a - 5)(-3a + 6) - (9a + 7) \cdot (-3a) =$$

$$= -6a^2 + 12a + 15a - 30 - (-27a^2 - 21a) =$$

$$= \underline{-6a^2} + \underline{12a} + \underline{15a} - \underline{30} + \underline{27a^2} + \underline{21a} =$$

$$= 21a^2 + 48a - 30$$

4. Izpostavi največji skupni faktor.

$$a) 5x^3 - 20x^2 + 15x = 5x^2(x - 4 + 3x)$$

$$b) 27a^2b^3 - 3ab + 9a^4b^4 = 3ab(9ab^2 - 1 + 3a^3b^3)$$

5. V izraz $2x^3 - 5x^2 + 1$ vstavi za $x = -2$ in izračunaj vrednost izraza.

$$\begin{aligned} & 2 \cdot (-2)^3 - 5 \cdot (-2)^2 + 1 = \\ & = 2 \cdot (-8) - 5 \cdot 4 + 1 = \\ & = -16 - 20 + 1 = \\ & = -36 + 1 = \underline{\underline{-35}} \end{aligned}$$

6. Poenostavi izraz

$$\begin{aligned} & 6x^2 - (2x + 4)(3x - 9) - (18x - 36) = \\ & = 6x^2 - (6x^2 - 18x + 12x - 36) - 18x + 36 = \\ & = \underline{6x^2} - \underline{6x^2} + \underline{18x} - \underline{12x} + \underline{36} - \underline{18x} + \underline{36} = \\ & = \underline{\underline{-12x + 72}} \end{aligned}$$

7. Poenostavi zapis:

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