

IZRAZI

1. Odpravi oklepaje in poenostavi!

$$\begin{aligned} & -4a^2 + 5a(2b - a) + 9b(2b - 5a) \\ & a^3 - 5a^2 + a(2b - a^2) + 7b(3b - a) \\ & a^3 + 2a^2 - a(a^2 - 4b) - 3b(b - 2a) \\ & (4a + 3)(a^2 + 3a - 5) \\ & (y^2 - 3y + 2)(y^2 + 5y - 2) \\ & (w^2 + 5w - 1)(-w^2 + 2w + 7) \end{aligned}$$

2. Potenciraj!

$$\begin{aligned} & (3b + 1)^2 \\ & (3c - 7d)^2 \\ & (-x^5 + y^7)^2 \\ & (3 - v)^3 \\ & (2m + 3n)^3 \\ & (4x - 5y)^3 \\ & (3c^3d^2 - 4cd^4)^3 \end{aligned}$$

3. Razstavi!

$$\begin{aligned} & m^2 + 2mn + n^2 \\ & 25p^2 + 10pr + r^2 \\ & 16c^4 - 24c^2d^3 + 9d^6 \\ & 9m^4 - 24m^3 + 16m^2 \\ & a^2 - 9b^2 \\ & 16a^4 - 9b^2 \\ & 81 - x^4 \\ & 1 - 256u^8 \\ & 1 - 8m^3 \\ & a^9 - b^{12} \\ & 27x^3 + 8y^3 \\ & x^3 - 3x^2 - 9x + 27 \\ & (3x + y)^2 - x^2 \end{aligned}$$

4. Razstavi!

$$y^2 - 12y + 36$$

$$x^2 + 25x + 150$$

$$x^2 + 2x - 48$$

$$x^2 + x - 56$$

$$y^2 - 6y - 40$$

$$2x^2 - 4x - 6$$

$$5a^2 - 40a + 80$$

$$-4y^2 + 28y - 40$$

$$-4t^4 + 20t^3 - 16t^2$$

$$5a^3 - 75a^2 + 130a$$

5. Razstavi!

$$x^4 - 37x^2 + 36$$

$$x^4 - 20x^2 + 64$$

$$a^2 + 8ab + 7b^2$$

$$5x^2 - 20x + 20$$

$$2c^3 + 4c^2 - 30c$$

$$-4f^3 - 4f^2 + 288f$$

$$3a^2 - 3b^2$$

$$16a^7 + 54ab^3$$

$$3a^7b - 12a^3b^3$$

$$189b^5x^5 - 7b^2x^5$$

$$x^6 - 64$$

$$n^7 - n$$

$$2x^4 + 54xy^3$$

6. Izraz poenostavi, rezultat pa razstavi!

$$(4x + 5)(2x - 7) - 2(x + 5)(3x - 2) + 4(8x - 10) + 1$$

$$(5x - 2)(3x - 4) - 3(x + 1)(2x - 7) - 13(4x - 5) - 4$$

$$(x + 3)^3 - 8x(x + 7) - x(x - 5)(x + 5) + 6(x - 5)$$

$$(x - 2)^3 - 5x^2(x + 3) + 4x(x - 4)(x + 4) + 5x(4x + 8) + 6x$$

7. Reši enačbo!

$$x^2 - 2x = 0$$

$$x^4 + 4 = 5x^2$$

$$(x - 3)(x - 1) - x(x - 5) = (x - 4)(x + 3)$$

$$(x + 3)^3 - 6(x^2 + 3) - 7 = (x - 2)^3 + 8(x^2 - 5)$$