

## Раскрытие квадратов

$$(x + 1)^2(x + 2) + (x - 1)^2(x - 2) = 12$$

$$(x^2 + 2x + 1)(x + 2) + (x^2 - 2x + 1)(x - 2) = 12$$

$$x^3 + 2x^2 + 2x^2 + 4x + x + 2 + x^3 - 2x^2 - 2x^2 + 4x + x - 2 = 12$$

$$2x^3 + 10x - 12 = 0$$

$$x^3 + 5x - 6 = 0$$

$$x^3 + 6x - x - 6 = 0$$

$$x(x^2 - 1) + 6(x - 1) = 0$$

$$x(x - 1)(x + 1) + 6(x - 1) = 0$$

$$(x - 1)(x(x + 1) + 6) = 0$$

$$(x - 1)(x^2 + x + 6) = 0$$

$$x_1 = 1$$

$$x_2 = \text{нету}$$

