

Раскрытие квадратов

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

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

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

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

$$2x^3 + 10x = 12 / :2$$

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

$$x^3 + 5x - 5 - 1 = 0$$

$$x^3 + 5x - 5 - 1 + x^2 - x^2 + x - x = 0$$

$$(x^3 - x^2) + (5x - 5) + (x - 1) + (x^2 - x) = 0$$

$$x^2(x - 1) + 5(x - 1) + (x - 1) + x(x - 1) = 0$$

$$(x^2 + 5 + 1 + x)(x - 1) = 0$$

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

$$x^2 + 6 + x = 0 \quad x - 1 = 0$$

$$D < 0 \quad x = 1$$

корней нет

$$x^3 + 5x - 6 + x^2 - x^2 + 5 - 5 + 6x - 6x = 0$$

$$(x^3 - x^2) + (5x - 5) + (6x - 6) + x^2 + 5 - 6x = 0$$

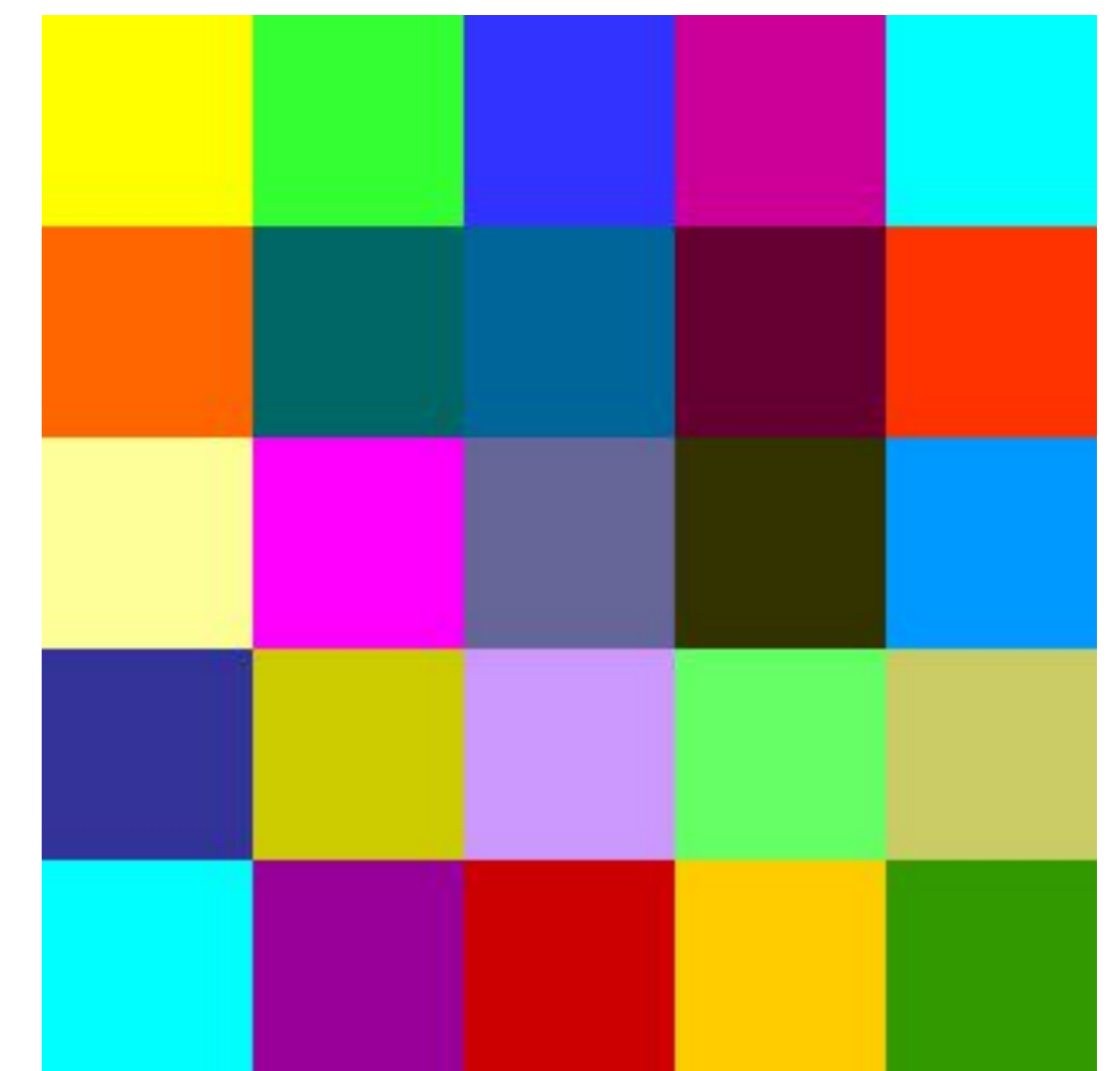
$$x^2(x - 1) + 5(x - 1) + 6(x - 1) + x^2 + 5 - 6x = 0$$

$$(x^2 + 5 + 6)(x - 1) + x^2 - 6x + 9 - 9 + 5 = 0$$

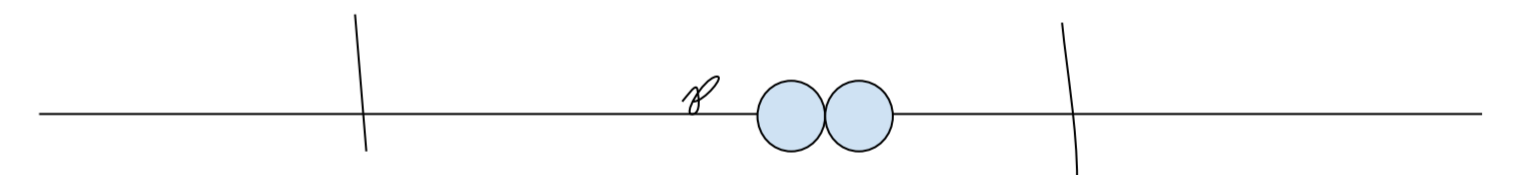
$$(x^2 + 5 + 6)(x - 1) + (x - 3)^2 - 9 + 5 = 0$$

$$x^3 + 5x - 5 - 1 = 0$$

$$x^3 - 1 + 5x - 5 = 0$$



СОСЕДНИЕ ТОЧКИ



1 квант = минимальная единица передачи энергии

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