

Деление на  $x^2$

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

$$1) (2x - 3 + 1/x)(2x + 5 + 1/x) = 9$$

$$2x + 1/x = y$$

$$1) (y - 3)(y + 5) = 9$$

$$y^2 + 2y - 15 = 9$$

$$y^2 + 2y - 24 = 0$$

$$y_1 = -6$$

$$y_2 = 4$$

$$2x + 1/x = -6$$

$$2x + 1/x + 6 = 0$$

$$2x^2 + 6x + 1 = 0$$

$$d = 36 - 8 = 28$$

$$x_1 = (-6 + \sqrt{28})/4$$

$$x_2 = (-6 - \sqrt{28})/4$$

$$2x + 1/x = 4$$

$$2x - 4 + 1/x = 0$$

$$2x^2 - 4x + 1 = 0$$

$$d = 16 - 8 = 8$$

$$x_1 = (2 + \sqrt{2})/2$$

$$x_2 = (2 - \sqrt{2})/2$$



TIGER (TORA)

$$(x + 2)(x + 3)(x + 8)(x + 12) = 4x^2$$

$$(x^2 + 14x + 24)(x^2 + 11x + 24) = 4x^2$$

$$(x + 14 + 24/x)(x + 11 + 24/x) = 4$$

$$y = x + 24/x$$

$$(y + 14)(y + 11) = 4$$

$$y^2 + 25y + 154 = 4$$

$$y^2 + 25y + 150 = 0$$

$$y_1 = -15$$

$$y_2 = -10$$

$$x + 24/x = -15$$

$$x + 15 + 24/x = 0$$

$$x^2 + 15x + 24 = 0$$

$$d = 225 - 96 = 129$$

$$x_1 = (-15 + \sqrt{129})/2$$

$$x_2 = (-15 - \sqrt{129})/2$$

$$x + 24/x = -10$$

$$x + 10 + 24/x = 0$$

$$x^2 + 10x + 24 = 0$$

$$x_1 = -6$$

$$x_2 = -4$$

ОТВЕТЫ:  $-6, -4, (-15 - \sqrt{129})/2, (-15 + \sqrt{129})/2$ .