

$$a * x^2 + b * x + c = 0$$

$$D=b^2-4ac \geq 0$$

$$x1=(-b+\sqrt{D})/(2a)$$

$$x2=(-b-\sqrt{D})/(2a)$$

$$1) 2 * x^2 - 3 * x - 5 = 0$$

$$D = (-3)^2 + 40 = 49$$

$$x1 = (3+7)/4 = 10/4 = 5/2 = 2.5$$

$$x2 = (3-7)/(4) = -4/4 = -1$$

$$2) -10x^2 + 1 = 9 * x / *10$$

$$-10x^2 - 9x + 1 = 0 / *1$$

$$10x^2 + 9x - 1 = 0$$

$$D = (9)^2 + 40 = 121$$

$$x1 = (-9+11)/20 = 2/20 = 1/10$$

$$x2 = (-9-11)/20 = -20/20 = -1$$

$$3) 2 * x^2 - 10 * x + 90 = 0 / 2$$

$$x^2 - 5x + 45 = 0$$

$$D = (-5)^2 - 180 = -155$$

решения нет

4) Решить уравнение золотого сечения

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

$$D = (-3)^2 - 4 = 5$$

$$x1 = (3+\sqrt{5})/2$$

$$x2 = (3-\sqrt{5})/2$$

$$д) 4x^2 - 7x - 7,5 = 0$$

$$D = 49 - 4 * 4 * (-7,5) = 169$$

$$x1 = (7+13)/(8) = 20/8 = 10/4 = 5/2$$

$$x2 = (7-13)/(8) = -5/8$$

$$е) 25x^2 + 10x + 1 = 0$$

$$D = 100 - 4 * 25 * 1 = 0$$

$$x1 = (-10+0)/(50) = -10/50 = -1/5$$

$$x2 = x1$$

$$ж) 3x^2 - 3x + 4 = 0$$

$$D = 9 - 4 * 3 * 4 = -39$$

решения нет

$$з) -5x^2 + x + 1 = 0$$

$$D = 1 - 4 * (-5) * 1 = 21$$

$$x1 = (-1+\sqrt{21})/(-10)$$

$$x2 = (-1-\sqrt{21})/(-10)$$

$$а) -2x^2 + 5x + 3 = 0$$

$$D = 25 - 4 * (-2) * 3 = 1$$

$$x1 = (-5+1)/(-4) = 1$$

$$x2 = (-5-1)/(-4) = 3/2$$

$$б) x^2 - 5x + 3 = 0$$

$$D = 25 - 4 * 1 * 3 = 13$$

$$x1 = (5-\sqrt{13})/2$$

$$x2 = (5+\sqrt{13})/2$$

$$в) x^2 + 7x + 2 = 0$$

$$D = 49 - 4 * 1 * 2 = 41$$

$$x1 = (-7+\sqrt{41})/2$$

$$x2 = (-7-\sqrt{41})/2$$

$$г) x^2 - 5x + 6 = 0$$

$$D = 25 - 4 * 1 * 6 = 1$$

$$x1 = (5+1)/(2) = 6/2 = 3$$

$$x2 = (5-1)/(2) = 4/2 = 2$$

6. Решите квадратное уравнение:

$$а) -2x^2 + 5x + 3 = 0;$$

$$б) x^2 - 5x + 3 = 0;$$

$$в) x^2 + 7x + 2 = 0;$$

$$г) x^2 - 5x + 6 = 0;$$

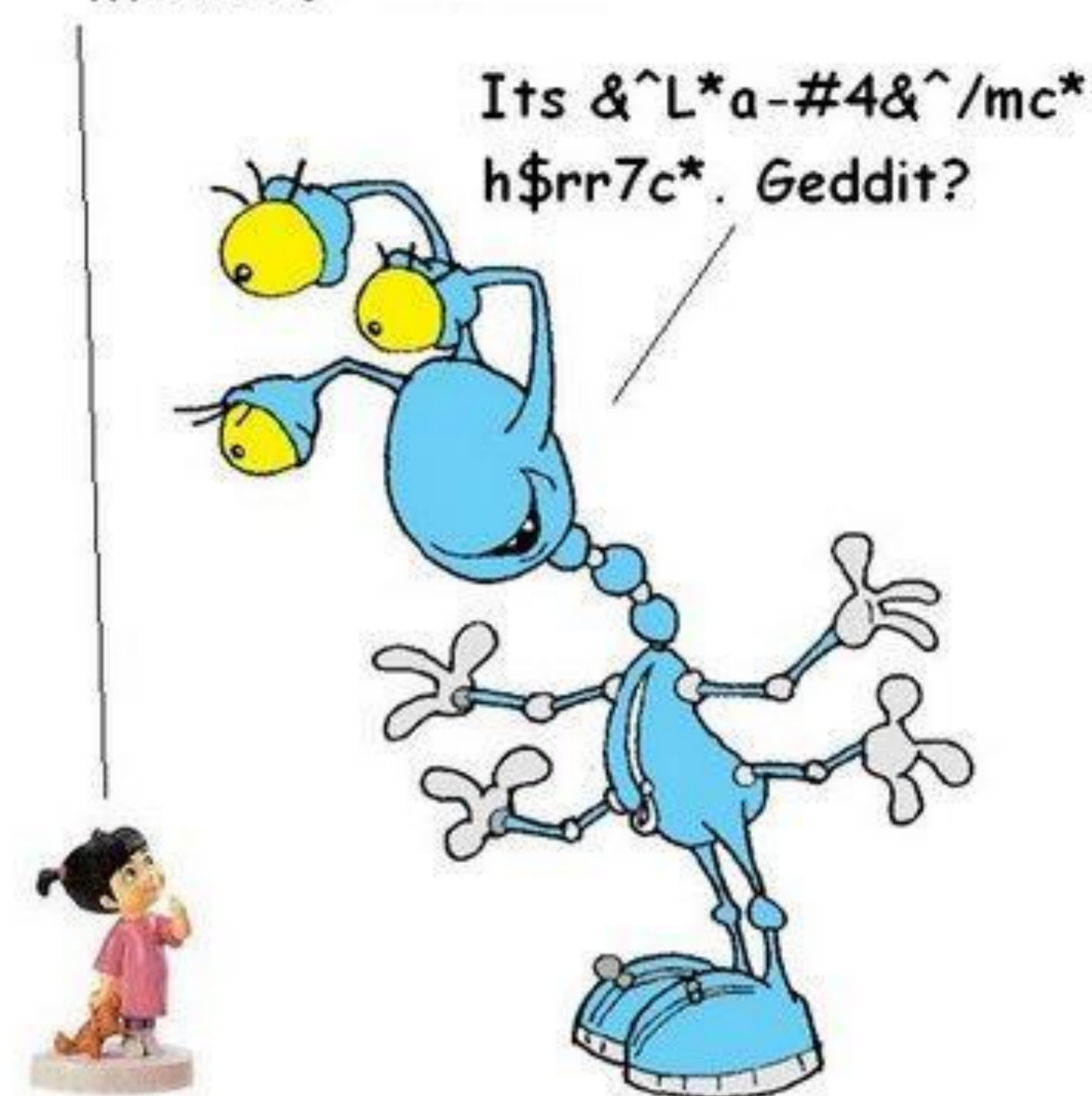
$$д) 4x^2 - 7x - 7,5 = 0;$$

$$е) 25x^2 + 10x + 1 = 0;$$

$$ж) 3x^2 - 3x + 4 = 0;$$

$$з) -5x^2 + x + 1 = 0.$$

Ма-ма ?



Попытка введения квадратного уравнения в программу детского сада.

$$2 \frac{1}{3}$$

$$1/3 + 1/7 = 0.333.... + 0,14285714285...$$

$$1/3 + 1/7 = (7+3)/21 = 10/21$$

$$PI = 3,1415926535...$$