

ЛИСТ ОТВЕТА

$$x^2 + |x| = 3$$

$$x^2 + x = 3$$

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

$$D = 1 + 12 = 13$$

$$x_1 = \frac{-1 + \sqrt{13}}{2}$$

$$x_2 = \frac{-1 - \sqrt{13}}{2}$$

$$\frac{1 + \sqrt{13}}{2} + 1$$

$$\lg(90 + \arcsin \lg 3)$$

$$\frac{x\sqrt{x} - 8y\sqrt{y} - 6\sqrt{xy}(\sqrt{x} - 2\sqrt{y})}{\sqrt{x} - 2\sqrt{y}}$$

$$\frac{x\sqrt{x} - (8y + 6\sqrt{x}(\sqrt{x} - 2\sqrt{y})) \cdot \sqrt{y}}{\sqrt{x} - 2\sqrt{y}}$$

$$x\sqrt{x} - 8y\sqrt{y} -$$

$$6\sqrt{x} \cdot \sqrt{y} - 6x \cdot \sqrt{xy} - 12y \cdot \sqrt{x}$$

$$x\sqrt{x} - 8y\sqrt{y} - 6x \cdot \sqrt{x} \cdot \sqrt{y} - 12y \cdot \sqrt{xy}$$

$$\frac{x(x-5)}{\frac{2}{x-14} - \frac{1}{x-11}} \geq \frac{24}{\frac{2}{x-14} + \frac{1}{11-x}}$$

$$\frac{x(x-5) - 24}{\frac{2}{x-14} - \frac{1}{x-11}} \geq 0$$

$$\frac{x(x+5) - 24}{2x - 22 - x - 14} \geq 0$$

$$\frac{(x^2 + 5x - 24)(x^2 - 25 + 154)}{x - 26} \geq 0$$

$$x^2 - 25x + 154$$

$$6 \cdot 25 - 616 = 9$$

$$(x-14)(x-11)$$

$$x^2 - 11x - 14x + 154$$

$$x^2 - 25x + 154$$

$$11 + 14 = 25$$

$$x^2 + 5x - 24 = 0$$

$$D = 25 + 96 = 121$$

$$x_1 = \frac{-5 - 11}{2} = -8$$

$$x_2 = \frac{-5 + 11}{2} = 3$$

$$x_1 = \frac{25 - 3}{2}$$

$$\frac{154}{616}$$

$$x_2 = \frac{25 + 3}{2}$$

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$$2\sqrt{2}x^2 - 16x + 9 = 0$$

$$D = 256 - 72\sqrt{2}$$

$$x_1 = \frac{16 - 256 + 72\sqrt{2}}{2\sqrt{2}}$$

$$x_2 = \frac{16 + 256 - 72\sqrt{2}}{2\sqrt{2}}$$

$$\frac{16 - 256 + 72\sqrt{2}}{2\sqrt{2}}$$

$$\frac{16 - 256 - 72\sqrt{2}}{2\sqrt{2}} \cdot \frac{16 - 256 + 72\sqrt{2}}{2\sqrt{2}}$$

$$2$$

$$\frac{16 \cdot 16}{2\sqrt{2}} = \frac{192}{2\sqrt{2}} = \frac{4\sqrt{2}}{2\sqrt{2}} = 2$$

$$\begin{cases} 4ax + 9y = -27 \\ x + 4ay = 16a^2 \end{cases}$$

$$\begin{cases} 3x + 9y = -27 \\ x + 3y = 16 \end{cases}$$

$$\begin{cases} 3x + 9y = -27 \\ x = 9 - 3y \end{cases}$$

$$27 - 9y + 9y = -27$$

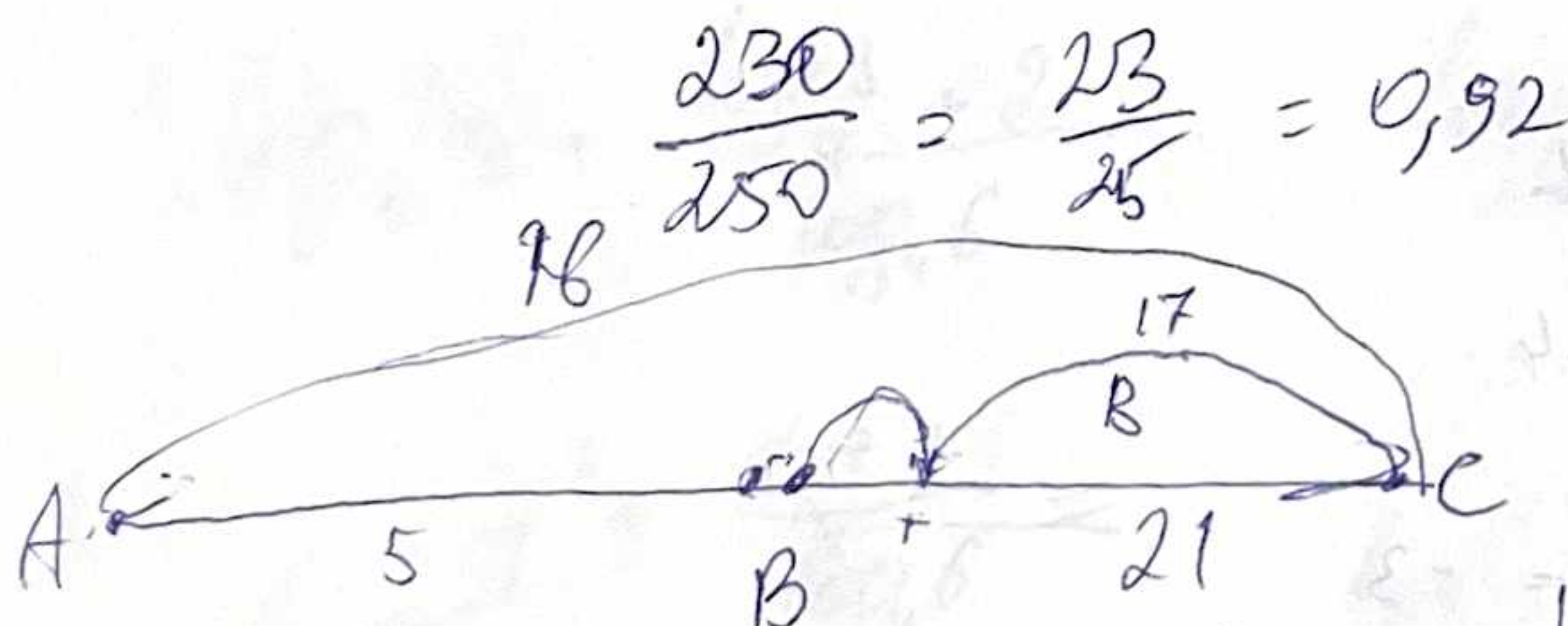
$$\begin{cases} -3x + 9y = -27 \\ x - 3y = 9 \end{cases}$$

$$\begin{matrix} \sin & \frac{1}{2} & \frac{\sqrt{2}}{2} & \frac{\sqrt{3}}{2} \\ \cos & \frac{\sqrt{3}}{2} & \frac{\sqrt{2}}{2} & \frac{1}{2} \end{matrix}$$

$$-27 - 9y + 9y = -27$$

$$50 \text{ km} - 6^\circ \quad I) \quad \frac{30 \text{ km}}{50} \cdot 100\%$$

$$\frac{180}{100}$$



$$\frac{230}{250} = \frac{23}{25} = 0,92$$

$$\frac{26}{104}$$

$$4 \cdot \frac{26}{17} = \frac{104}{17} \approx 6$$

$$\frac{17}{26} \quad \frac{26}{17}$$

$$5 \cdot \frac{180}{17} \approx 7$$

ЛИСТ ОТВЕТА

$$(0,6)^{x^2} \cdot (1,5)^{-x^2} = (0,6)^{2x+1}$$

$$\left(\frac{0,6}{1,5}\right)^{x^2} = (0,4)^{2x+1}$$

$$\left(\frac{2}{5}\right)^{x^2} = \left(0,4\left(\frac{2}{5}\right)\right)^{2x+1}$$

$$\frac{2x-3}{x-1} \geq \frac{9}{3-x}$$

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

$$(x-1)(3-x) \quad 20x^2 - 2x - 1 = 0$$

$$D = 4 + 4 = 8$$

$$x_1 = \frac{2 - 2\sqrt{2}}{2} = 1 - \sqrt{2}$$

$$x_2 = \frac{2 + 2\sqrt{2}}{2} = 1 + \sqrt{2}$$

$$\frac{(2x-3)+3}{(x-1)(3-x)} \cdot (3-x) = -0,4; 2,4$$

$$\frac{2x-3+3}{(x-1)} \geq 0$$

$$\frac{2x}{x-1} \geq 0$$

$$f(x)' = 6x^3 - 4x^2 + 2x$$

$$f(x) = 4x - 4$$

$$4x - 4 = -3$$

$$4x = 1 \quad x = \frac{1}{4}$$

$$\log_4 |x| - \log_4^2(x) = 4$$

$$4t - t^2 = 4$$

$$t^2 - 4t + 4 = 0$$

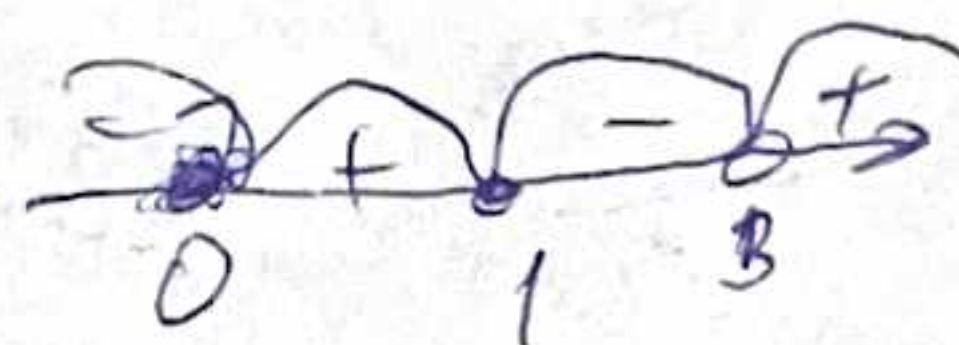
$$D = 16 - 16 = 0$$

$$t = \frac{4}{2} = 2$$

$$\log_4 |x| = 2$$

$$x = 16$$

$$x = 16$$



ЛИСТ ОТВЕТА

$$\sqrt{31 + 8\sqrt{15}} (20 - 5\sqrt{15}) \left(31 + 8 \cdot 15^{\frac{1}{2}} \right)^{\frac{1}{2}} (20 - 5 \cdot 15^{\frac{1}{2}})$$

$$\sqrt{400 - 375} = \sqrt{25}$$

$$\sqrt{(31 + 8\sqrt{15}) \cdot 25} = \sqrt{31 \cdot 25 + 200\sqrt{15}} =$$

$$= \sqrt{775 + 200\sqrt{15}}$$

и 20

$$20\sqrt{5} - 5\sqrt{3} \cdot \sqrt{5}$$

$$\sqrt{5} (2 - 5\sqrt{3})$$

$$\begin{array}{r} \times 25 \\ 15 \\ \hline 125 \\ 25 \\ \hline 375 \end{array}$$

$$\begin{array}{r} 31 \cdot \\ \times 25 \\ \hline 155 \\ 62 \\ \hline 775 \end{array}$$

$$xy(x+y)=6$$

$$xy(x-y)=2$$

$$x^2y + xy^2 = 6 \quad y$$

$$x^2 \pm xy = \frac{6}{y}$$

$$\begin{array}{l} x=2 \\ y=1 \end{array}$$

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

$$(x-4)(x+4)$$

$$x^2 - 4x + 4x - 16$$

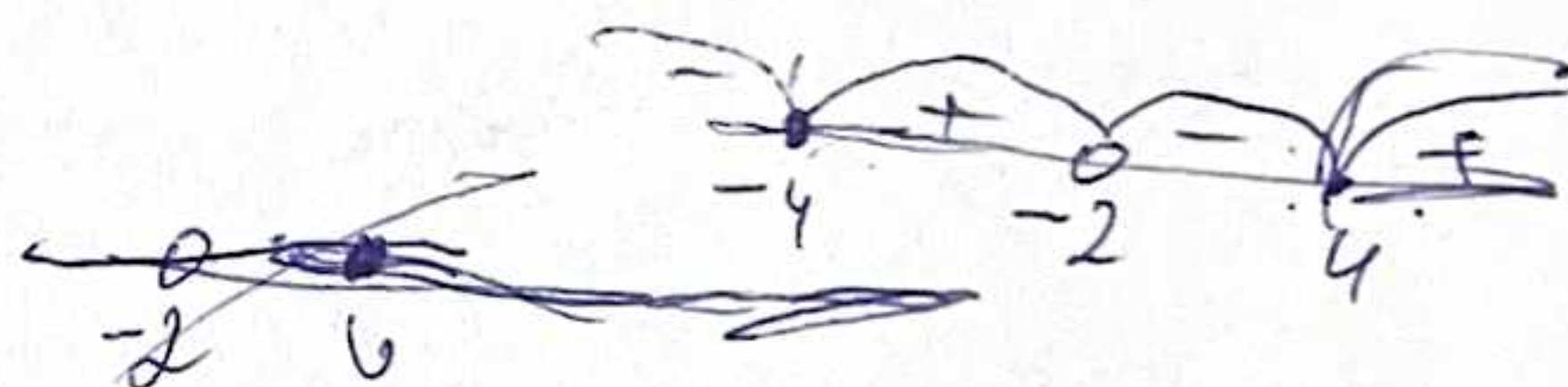
$$\frac{(x+1)^2 - 2x - 17}{(x+2)^2} \geq 0$$

$$\frac{x^2 + 2x + 1 - 2x - 17}{(x+2)^2}$$

$$\frac{x^2 - 16}{(x+2)^2} \geq 0$$

$$\frac{(x-4)(x+4)}{(x+2)^2} \geq 0$$

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$$(x-3) [(x-1)^3 + (3-x)(x-2)^3] = 7(x-3)$$

$$(x-3) (x-1)^3 - (x-3) (2-x)^3 = 7(x-3) \quad | : x-3$$

$$(x-1)^3 - (2-x)^3 = 7$$

$$x^3 - 3x^2 + 3x - 1$$

$$-4; -3; 2; 4; 5; 6$$

$$(x-1)(x-1)(x-1)^2 \cdot (x-1)$$

$$(x^2 - 2x + 1) \cdot (x-1)$$

$$x^3 - 2x^2 + x - x^2 + 2x - 1$$

$$x^3 - 3x^2 + 3x - 1$$

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Ответ на _____ стр.

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$$|3x-4|+6 \leq 8$$

$$|3x-4|-2 \leq 0$$

$$3x-4 \leq 2$$

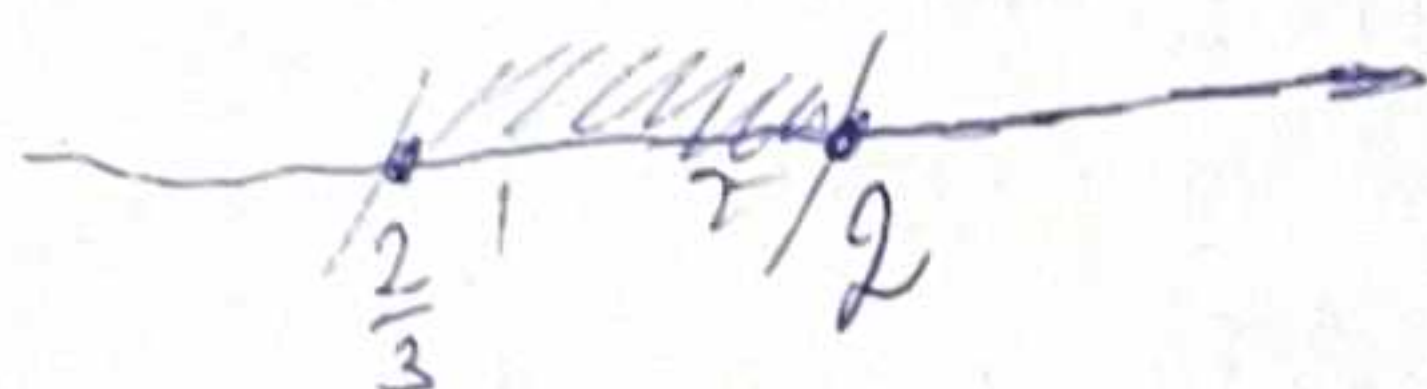
$$3x-6 \leq 0$$

$$x \leq 2$$

$$-3x+4 \leq 2$$

$$-3x \leq -2$$

$$x \leq \frac{2}{3}$$



$$\frac{2 \cdot 5(5-1)}{5^2+5} = \frac{2 \cdot (5^2-5)}{5^2+5} = \frac{10(5-1)}{5^2+5} = \frac{40}{125} = \frac{8}{15}$$

$$\frac{40}{30} = \frac{4}{3}$$

$$\log_6^2 9 + \frac{\log_6 324}{\log_4 6}$$

$$\log_6^2 9 + \frac{\log_6 9 + \log_6 36}{\log_4 6}$$

$$\log_6^2 9 + \frac{\log_6 9 + 2}{\log_4 6}$$

$$\log_{36} \cdot \frac{\log_6^2 9 + \log_6 9 + 2}{2 \log_2 6}$$

$$\frac{1^2 + \frac{1+2}{\log_4 6}}{\log_4 6}$$

$$\log_6^2 9 + \frac{2 \log_6 9 + 4}{\log_2 6}$$

$$\frac{\log_6^4}{\log_6^6}$$

$$\log_6^2 9 + \frac{\log_6 9 + \log_6 36}{\log_6 4}$$

$$\log_6 \left(\frac{9 \cdot 9 \cdot 36}{4} \right) = \log_6$$

$$\sqrt{x-1} + \sqrt{3x+1} = x+3$$

$$\sqrt{(x-1)(3x+1)} = x+3$$

$$\sqrt{3x^2 - 3x + x - 1} = x+3$$

$$\sqrt{3x^2 - 2x - 1} = x+3$$

$$3x^2 - 2x - 1 = x^2 + 6x + 9$$

$$2x^2 - 8x - 10 = 0$$

$$D = 64 + 80 = 144$$

$$x_1 = \frac{8-12}{4} = -1$$

$$x_2 = \frac{8+12}{4} = 5$$