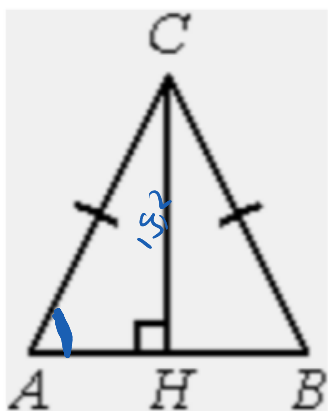


10/11/5

1	2	3	4	5	6	7	8	9	10	11	12
+	+		+	+	+	+	+		8	12	42
20	71	5	0,9	0,12	67	12	3	✓	+	+	+

1.



$$\cos A = \frac{AH}{AC}$$

$$\sin A = \frac{CH}{AC}$$

$$\frac{19,2}{AC} = \frac{24}{25}$$

$$\sin A = \sqrt{\frac{625}{625} - \frac{48}{625}} =$$

$$= \frac{24}{25} \cdot 25 \cdot 19,2 = 24 AC$$

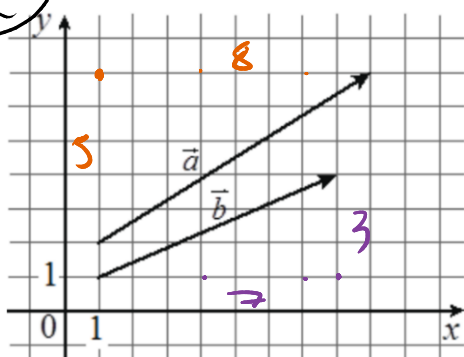
$$1480 = 24 AC \Rightarrow AC = 20$$

Quäb: 20

ah 8,59; 8,7; 33

$$\vec{a} \cdot \vec{b} = 56 + 15 = 71$$

Quäb: 71



③ $S_y = 5\sqrt{2}$; $h = r$

$$c = 2\pi r$$

$$S_y = c \cdot h$$

$$2\pi r \cdot r = 2\pi r^2$$

④

0,97; Quäb: 0,97

⑤

$$36 - 11 = 25$$

$$\begin{matrix} 3 & 5 \\ 4 & 4 \\ 5 & 3 \end{matrix}$$

$$\frac{3}{25} = 0,12$$

Quäb: 0,12

⑥ $\sqrt[3]{x-3} = 4$

$$x - 3 = 64$$

$$x = 67$$

Quäb: 67

⑦ $\left(\frac{3}{4}\right)^{\frac{1}{8}} \cdot 4^{\frac{1}{4}} \cdot (3 \cdot 4)^{\frac{7}{8}}$

$$\frac{3^{\frac{1}{8}} \cdot 3^{\frac{7}{8}} \cdot 4^{\frac{1}{4}} \cdot 4^{\frac{7}{8}}}{4^{\frac{1}{8}}} = 3 \cdot 4 = 12$$

Quäb: 12

⑧ Quäb: 3

9

$$g = c \cdot \frac{f - f_0}{f + f_0}$$

$$12 = 1500 \cdot \frac{f - 217 \cdot 10^6}{f + 217 \cdot 10^6}$$

$$12 \cdot f + 12 \cdot 217 \cdot 10^6 = 1500 \cdot (f - 217 \cdot 10^6)$$

$$12f + 2604 \cdot 10^6 = 1500f - 325500 \cdot 10^6$$

$$12f - 1500f = -325500 \cdot 10^6 - 2604 \cdot 10^6$$

$$-1488f = -35104 \cdot 10^6$$

$$1488f = 35104 \cdot 10^6$$

10

	проезд	время	общая
I	$x+2$	$\frac{60}{x+2}$	60
II	x	$\frac{80}{x}$	80

$$\frac{80}{x} - \frac{60}{x+2} = 4$$

$$\frac{80}{x} - \frac{60}{x+2} = 4$$

$$80x + 160 - 60x = 4x^2 + 8x$$

$$20x + 160 = 4x^2 + 8x \quad | :4$$

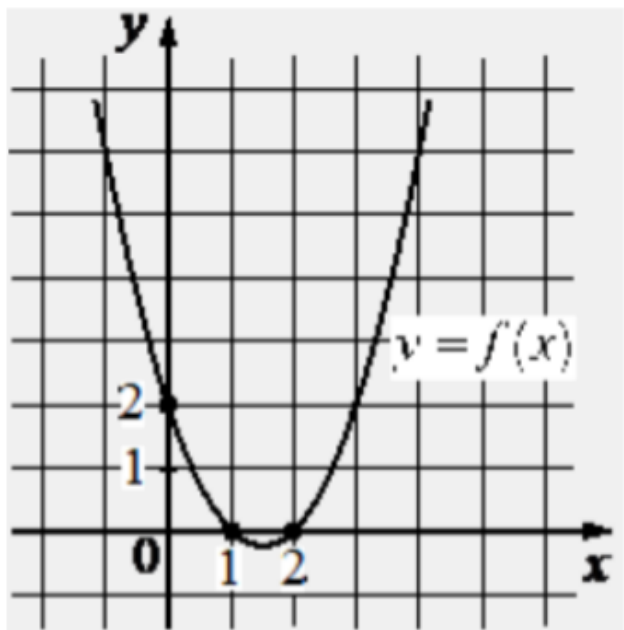
$$5x + 40 = x^2 + 2x$$

$$x^2 - 3x - 40 = 0$$

$$x_1 = 8 \quad ; \quad x_2 = -5 \text{ не подходит по условию!}$$

Ответ: 8

11



$$y = ax^2 + bx + c \quad c = 2$$

$$\begin{cases} 0 = 4a + 2b + 2 \\ 0 = a + b + 2 \end{cases}$$

$$a = -2 - b$$

$$0 = 4(-2 - b) + 2b + 2$$

$$0 = -8 - 4b + 2b + 2$$

$$0 = -6 - 2b$$

$$b = -3$$

$$a = -2 + 3 = 1$$

$$y = x^2 - 3x + 2$$

$$y(-2) = 4 + 6 + 2 = 12$$

Отв: 12

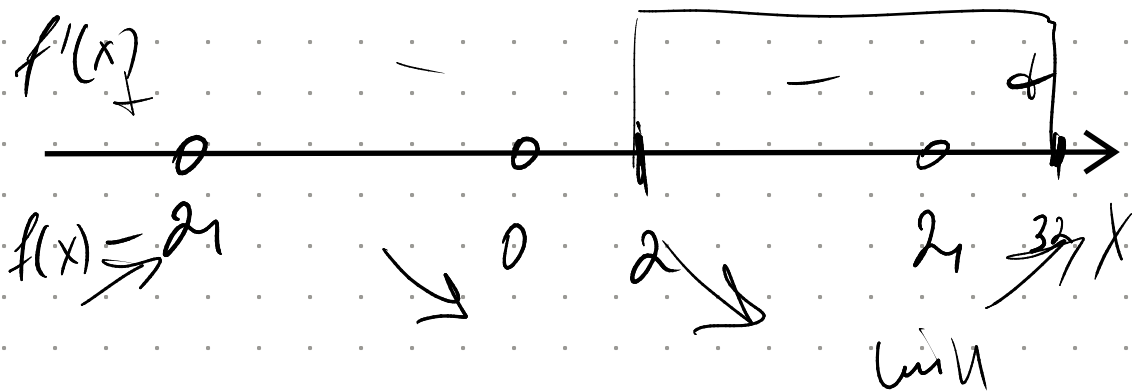
12

$$y = \frac{x^2 + 441}{x}$$

$$y_{\min}^{[2; 32]} = ?$$

$$y' = \frac{2x^2 - (x^2 + 441)}{x^2}; \quad \frac{x^2 - 441}{x^2} = 0; \quad x = -21; x_2 = 21$$

$x \neq 0$ краем



$$y(21) = \frac{441 + 441}{21} = 42$$

Отв: 42