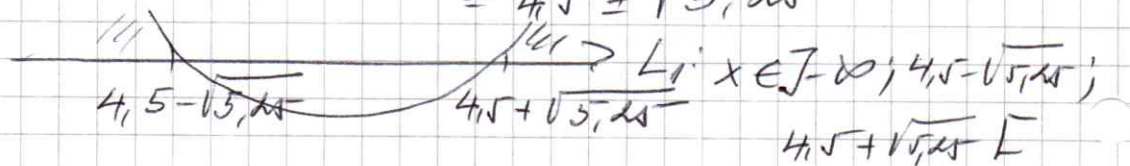


$$f) f(x) = \frac{2}{\sqrt{\log(x^2 - 9x + 15)}} + \frac{1}{x^2 - 64}$$

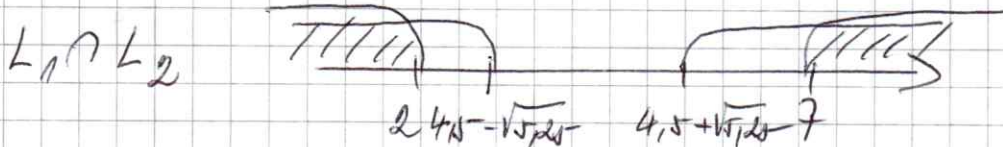
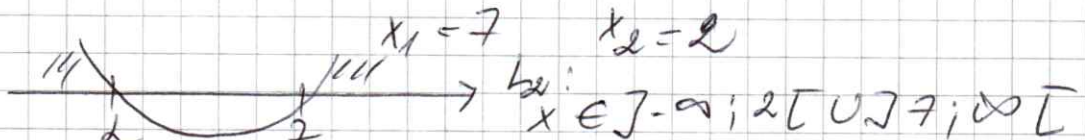
$$\begin{cases} x^2 - 64 \neq 0 \Rightarrow x \neq \pm 8 \\ x^2 - 9x + 15 > 0 \text{ logaritmitaruva tugiinus} \\ \log(x^2 - 9x + 15) > 0 \Rightarrow x^2 - 9x + 15 > 1 \\ x^2 - 9x + 15 > 0 \text{ minima tugiinus} \end{cases}$$

$$x^2 - 9x + 15 = 0 \quad x_{1,2} = 4,5 \pm \sqrt{20,25 - 15} = 4,5 \pm \sqrt{5,25}$$



$$x^2 - 9x + 14 > 0$$

$$x^2 - 9x + 14 = 0 \quad x_{1,2} = 4,5 \pm \sqrt{20,25 - 14} = 4,5 \pm \sqrt{6,25}$$



$$X = ]-\infty; 2[ \cup ]7; \infty[ \setminus \{-8; 8\}$$

$$2) y = 4x + 9 \quad k = 4$$

$$y = x^2 + 7x - 4$$

$$y' = 2x + 7 \quad y'(x_0) = 4$$

$$2x_0 + 7 = 4$$

$$2x_0 = -3 \quad | :2$$

$$x_0 = -1,5$$

Punkti koordinaadid leitakse algvõrrandist!

$$y_0 = (-1,5)^2 + 7 \cdot (-1,5) - 4 = -12,25$$

V. Punkt on  $(-1,5; -12,25)$

paralleelseks sirgetel võrded formula.