

$>$ strictement plus grand que

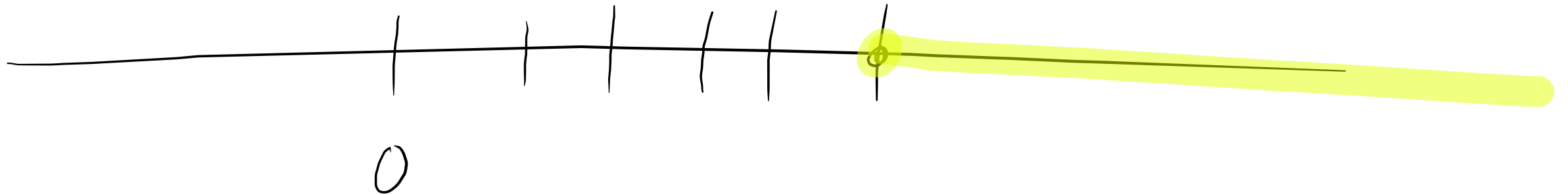
$<$ strictement plus petit que

\geq plus grand ou égal

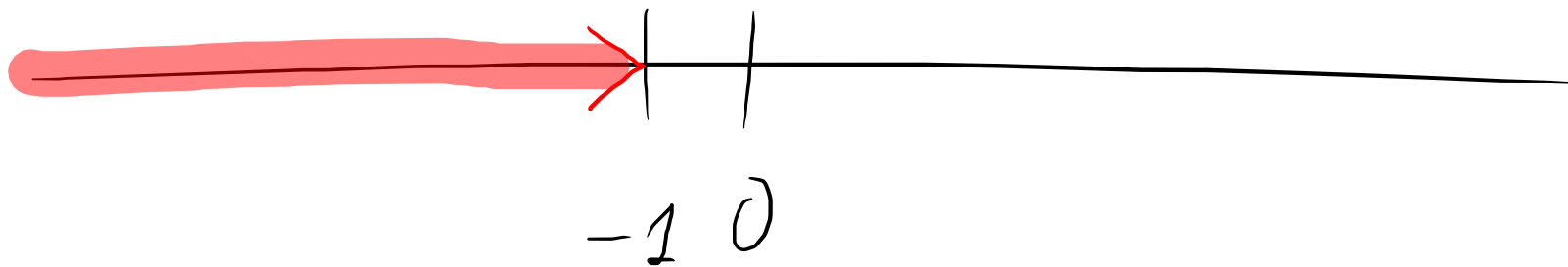
\leq plus petit ou égal

$$1 > 0 \quad / \quad 1 \geq 1 \quad / \quad 2 < 5 \quad / \quad \sqrt{2} \leq \sqrt{2}$$

$$x \geq 5$$



$$x < -1$$



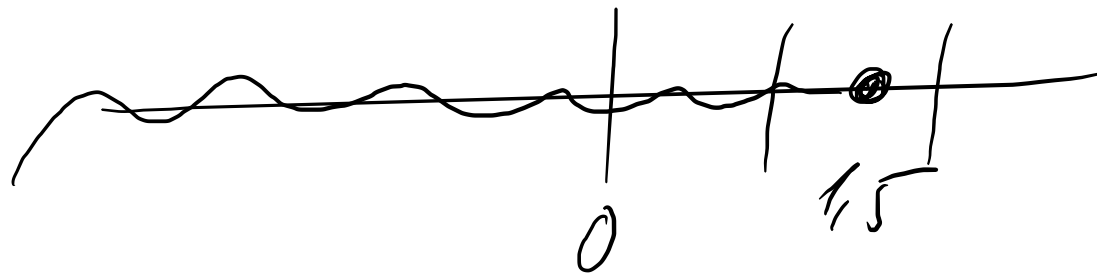
$$3x - 5 \leq 1 - x$$

↓ + x

$$3x + x - 5 \leq 1$$

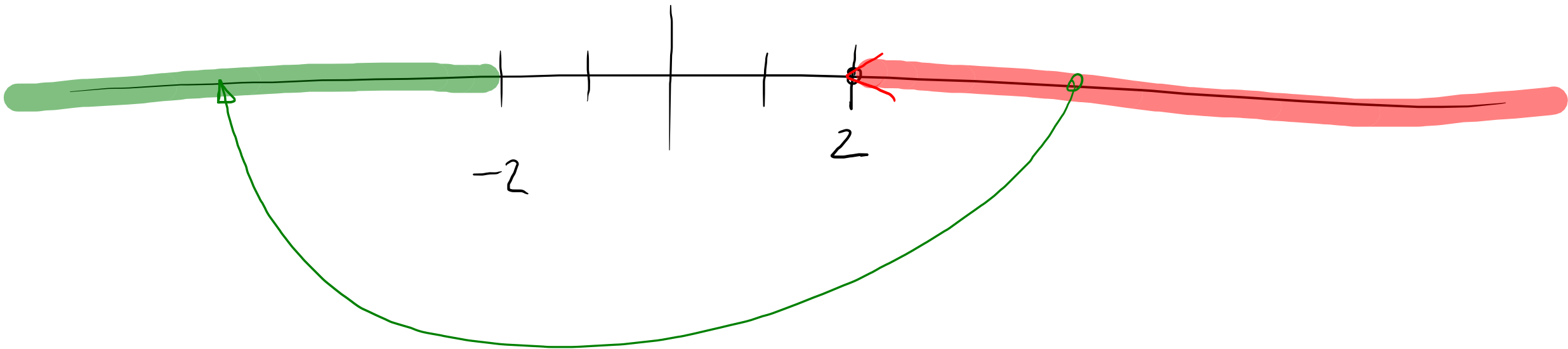
$$4x \leq 6$$

$$x \leq 1,5$$



$$\begin{array}{l} x > 2 \\ \cdot (-1) \\ \hline -x < -2 \end{array}$$

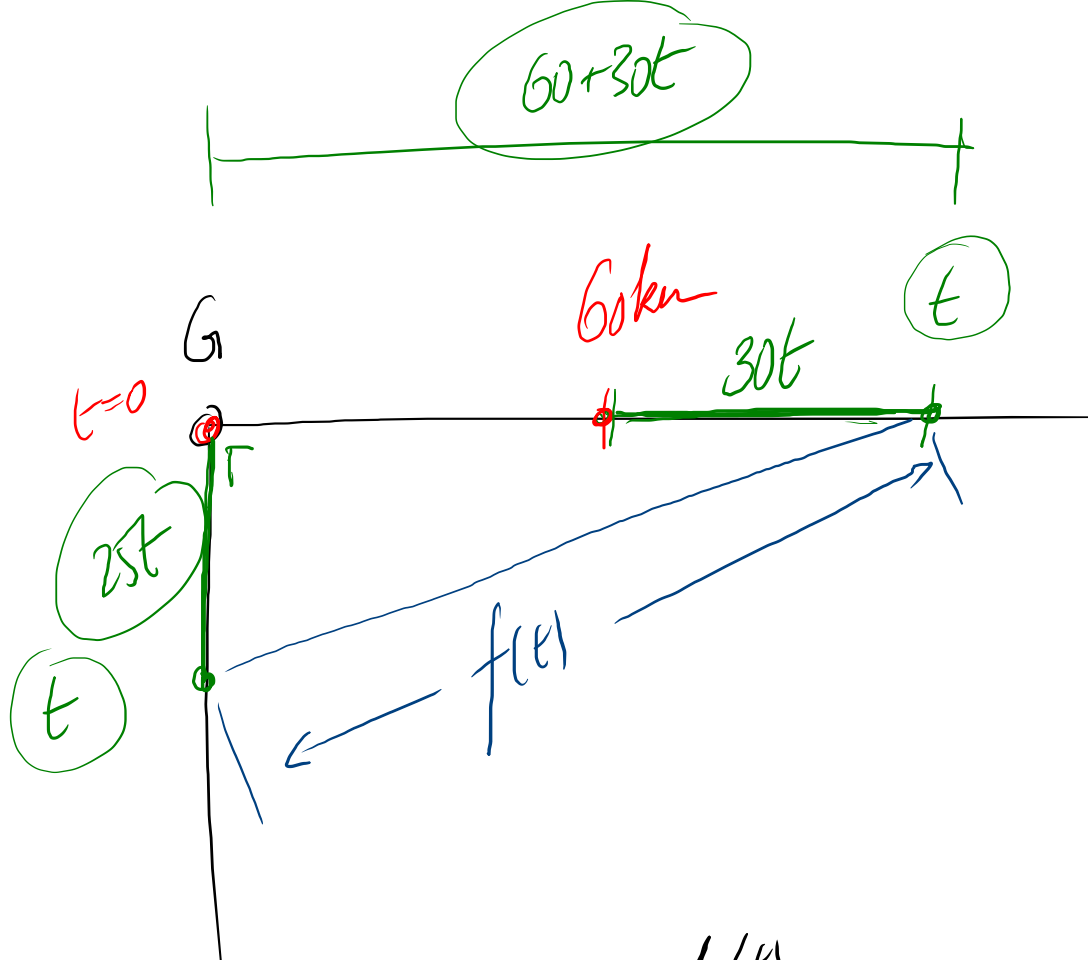
$$\begin{array}{l} -3x \leq 8 \\ \hline -8 \leq 3x \\ \hline 3x \geq -8 \end{array}$$



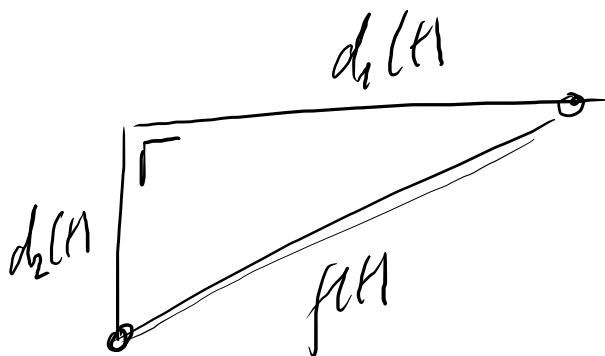
14h: $t=0$

25 km/h speed t h

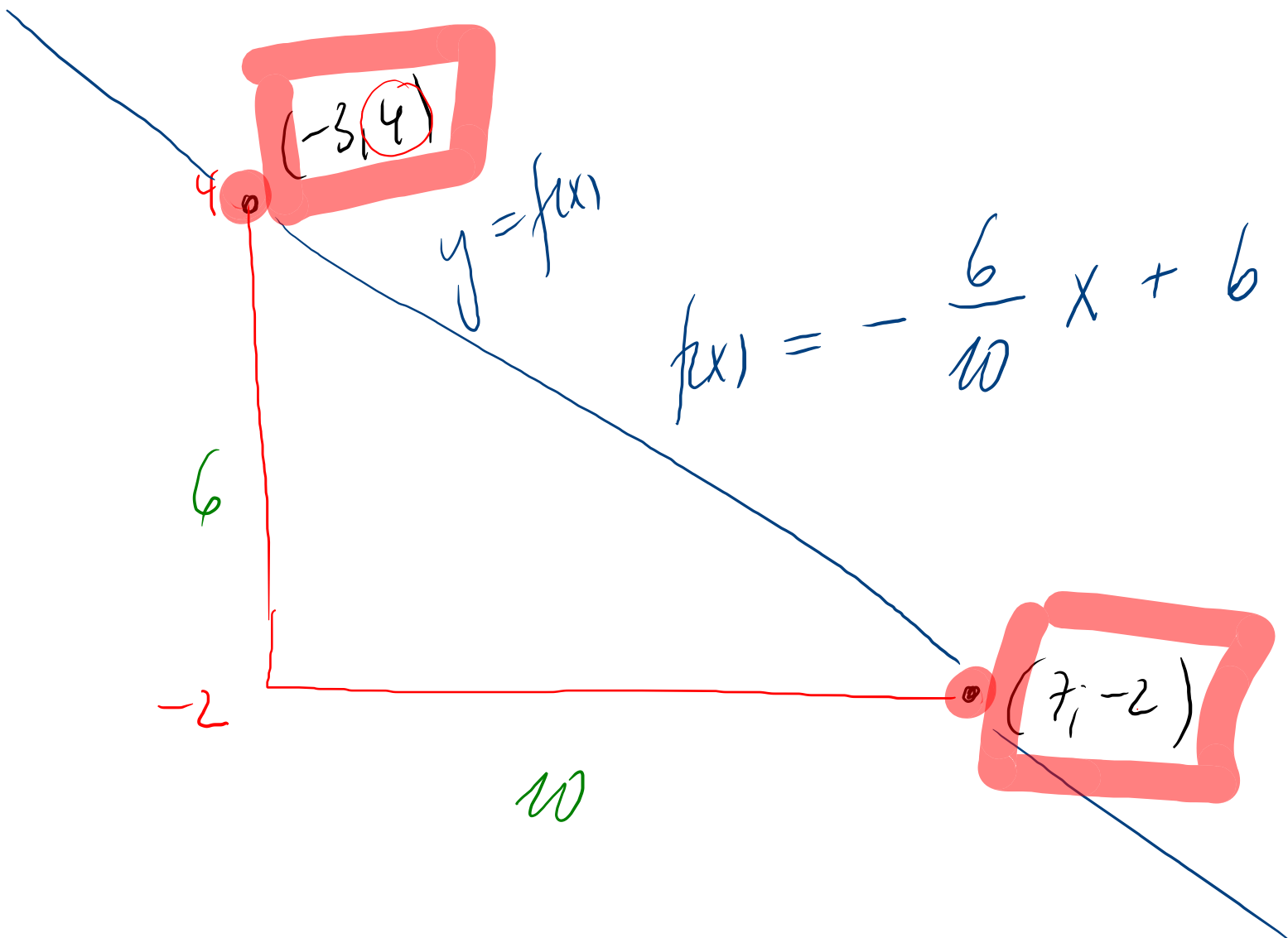
$$v = \frac{d}{t}$$
$$d = v \cdot t$$



$$\sqrt{(60+30t)^2 + (25t)^2} = f(t)$$



$$f(t)^2 = d_1(t)^2 + d_2(t)^2$$



$(-3, 4)$ est sur le graphe
 $(7, -2)$

$$4 = -\frac{3}{5}(-3) + b$$

$$b = 4 - \frac{9}{5} = \frac{11}{5}$$

$$f(x) = -0,6x + 2,2$$

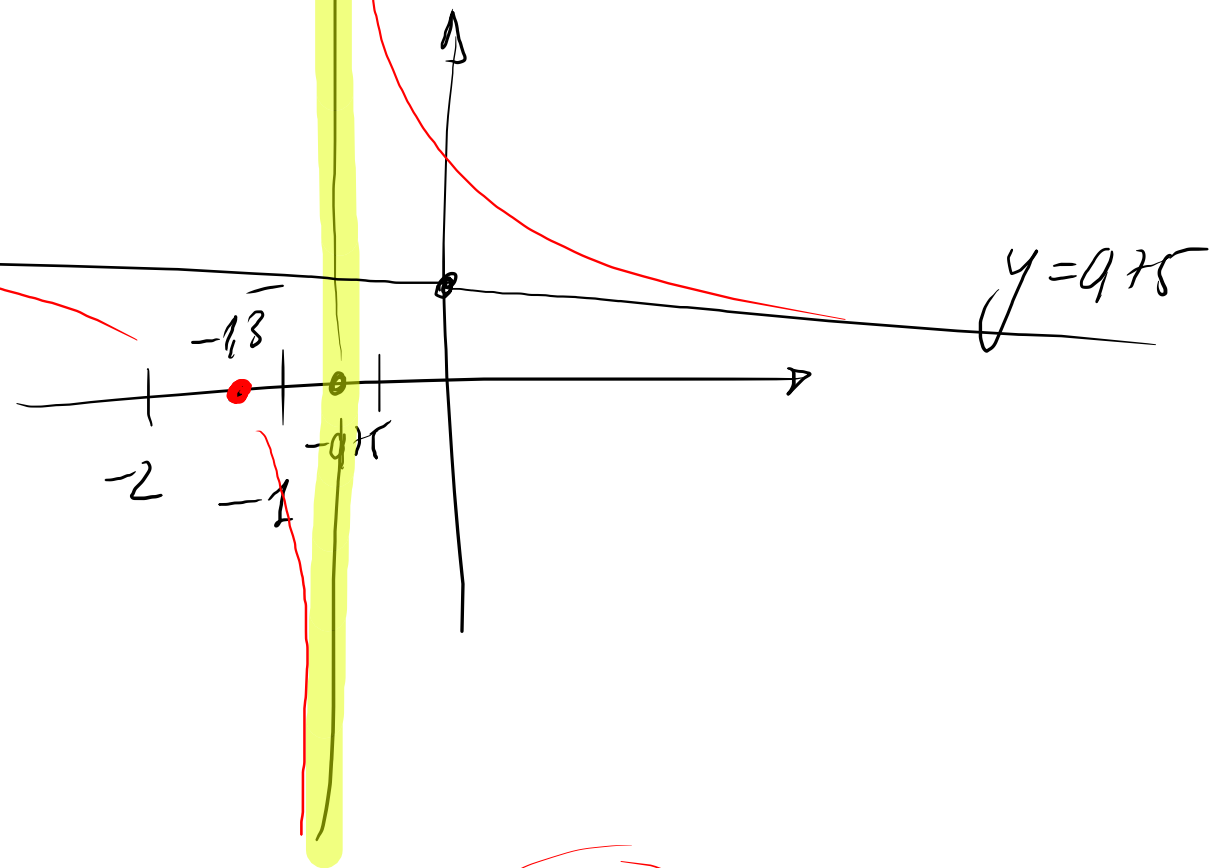
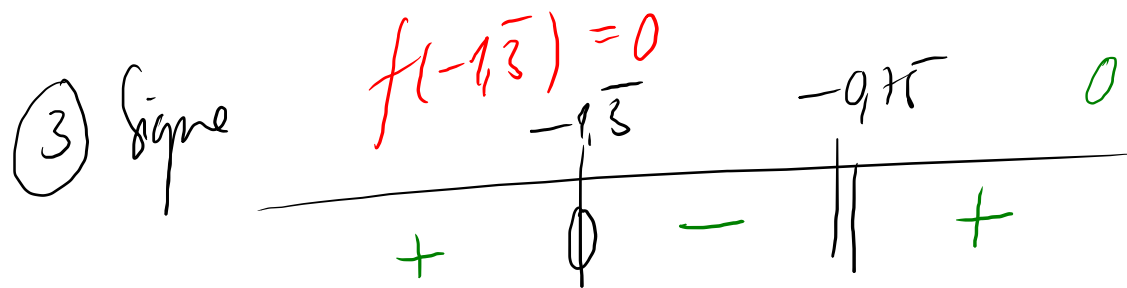
$$f(x) = \frac{3x+4}{4x+3}$$

(1) $D_f = \mathbb{R} - \{-0,75\}$

(2) Zeros

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

$$f(x) = 0 \quad 3x + 4 = 0 \quad / \quad x = -1,3$$



(4) $\left\langle \frac{3 \cdot (-0,75) + 4}{4 \cdot (-0,75) + 3} \right\rangle = \left\langle \frac{-2,25 + 4}{-3 + 3} \right\rangle = \left\langle \frac{1,75}{0} \right\rangle$

A.V. en $x = -0,75$

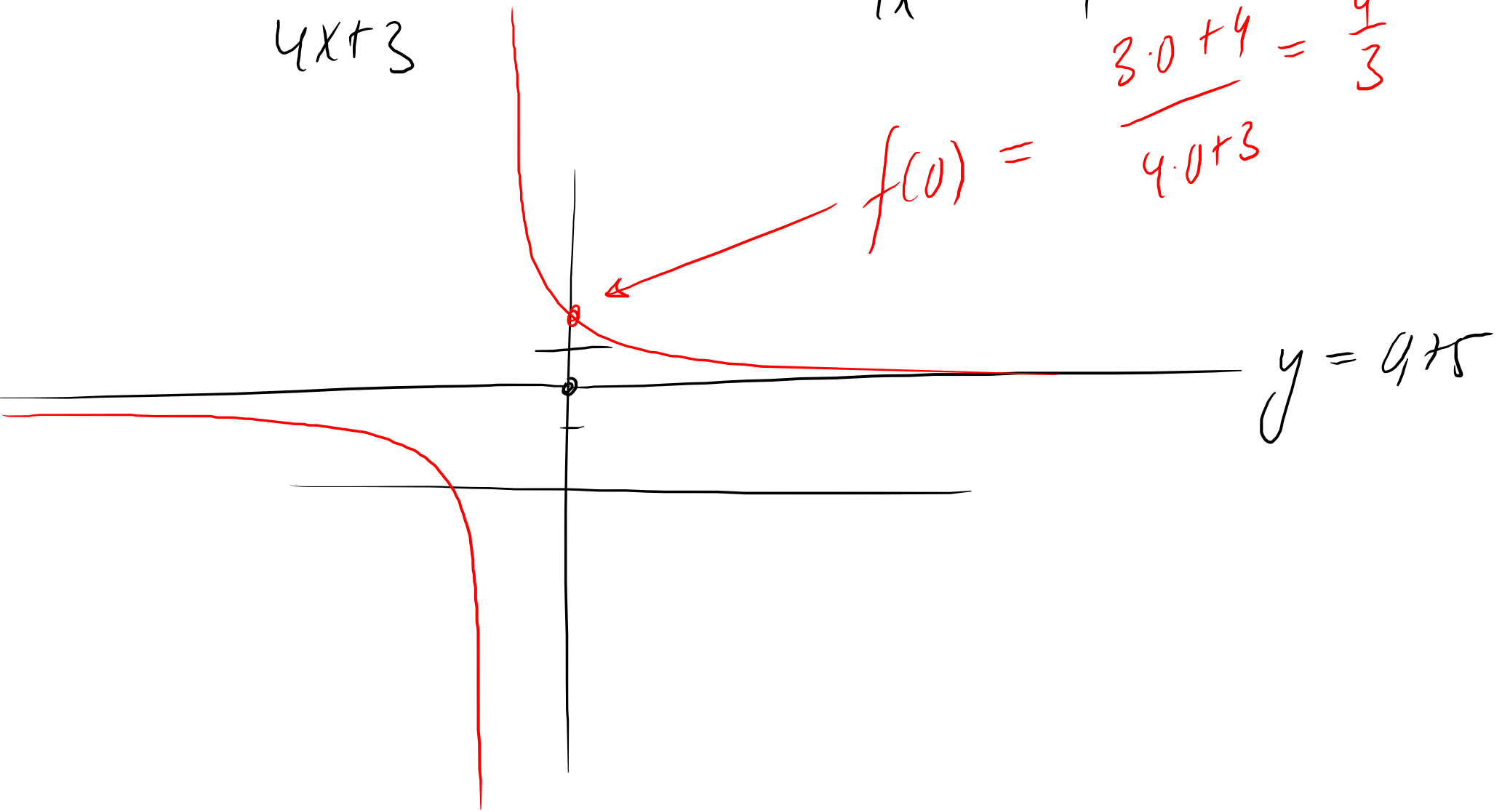
$$y = \frac{3x+4}{4x+3} \xrightarrow{x \rightarrow \infty} \frac{3x}{4x} = \frac{3}{4}$$

$$\frac{3x+4}{4x+3}$$

$x \rightarrow \infty$

$$\frac{3x}{4x} = \frac{3}{4}$$

$$f(0) = \frac{3 \cdot 0 + 4}{4 \cdot 0 + 3} = \frac{4}{3}$$



$$ax^2 + bx + c = 0$$

$$\Delta = b^2 - 4ac$$

$\Delta > 0$ 2 sols

$\Delta = 0$ 1 sol.

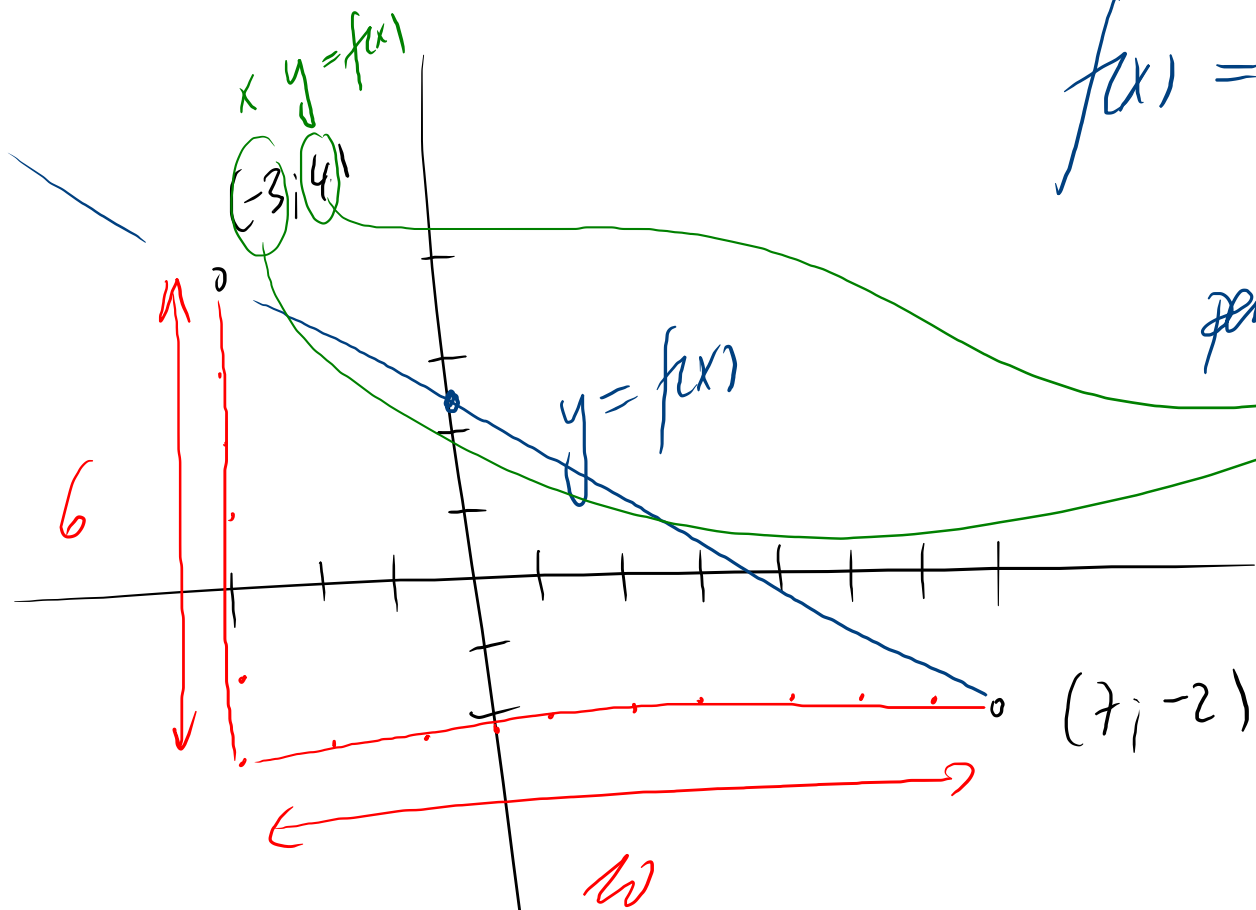
$\Delta < 0$ ~~sol~~

$$x^2 + mx + 3 - x = 0$$

$$x^2 + (m-1)x + 3 = 0$$

$$a=1 \quad b=m-1 \quad c=3$$

$$\Delta_m = (m-1)^2 - 4 \cdot 1 \cdot 3$$



$$f(x) = 2x + b$$

$$f(x) = -0,6x + 2,2$$

↑
pente

$$f(x) = -\frac{3}{5}x + \frac{11}{5}$$

$$f(x) = -\frac{3}{5}x + 6$$

4

-3

$$2 = -\frac{6}{10} = -\frac{3}{5} = -0,6$$

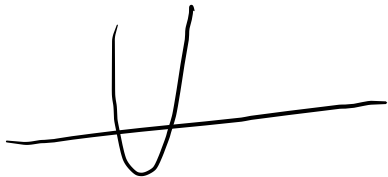
$$4 = \left(-\frac{3}{5}\right) \cdot (-3) + 6$$

$$4 = \frac{9}{5} + 6$$

$$b = 4 - \frac{9}{5} = \frac{11}{5} = 2,2$$

$$f(x) = 1 \cdot x^2 - 4x$$

220



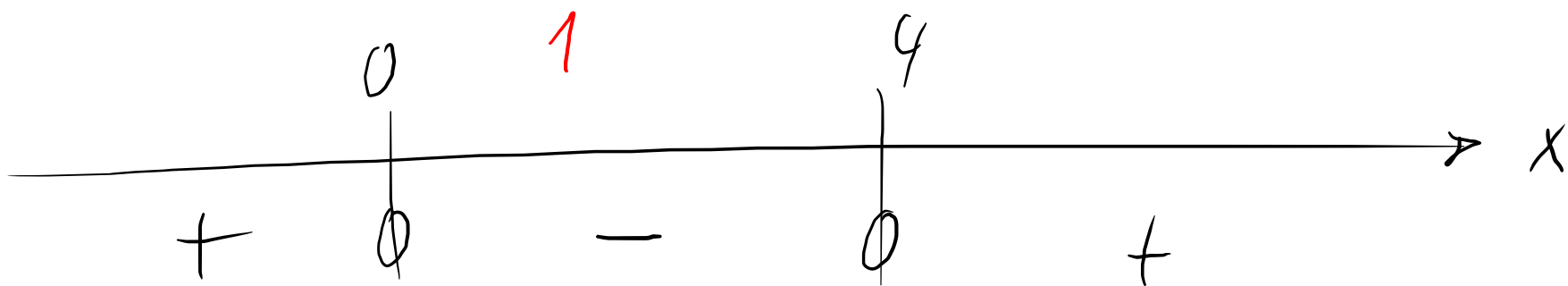
$$f(0) = 0$$

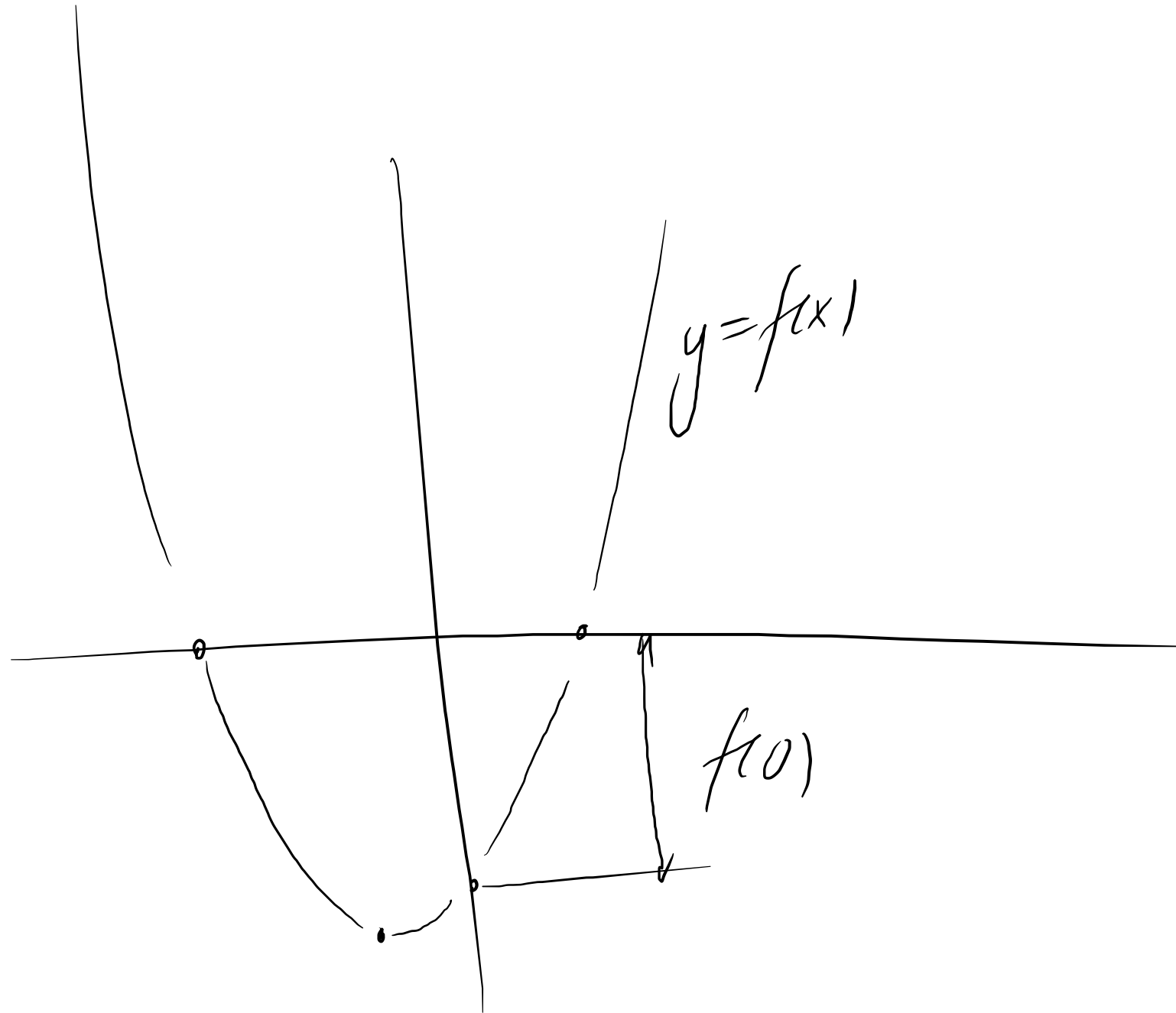
$$f(1) = 1 - 4 = -3$$

Zeros: $\Delta = (-4)^2 - 4 \cdot 1 \cdot 0 = 16$

$$x = \frac{4 \pm \sqrt{16}}{2}$$

4
0





3.3.1 2) a) l)

$$f(x) = \sqrt{x}$$

D_f : Tous les nombres positifs ou nuls.

$$\boxed{x \in \mathbb{R} \quad x \geq 0}$$

$$D_f = \mathbb{R}_+ = [0; +\infty[$$

$$\mathbb{R} =]-\infty; +\infty[$$

$$\sqrt{9} = 3$$

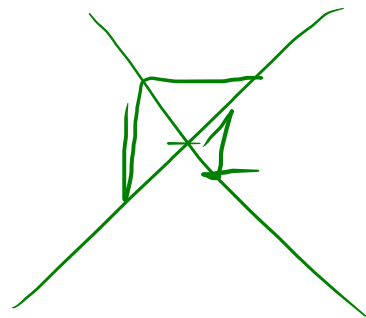
$$\sqrt{4} = 2$$

$$\sqrt{2} \cong 1,4142 \dots$$

$$\sqrt{1} = 1$$

$$\sqrt{0} = 0$$

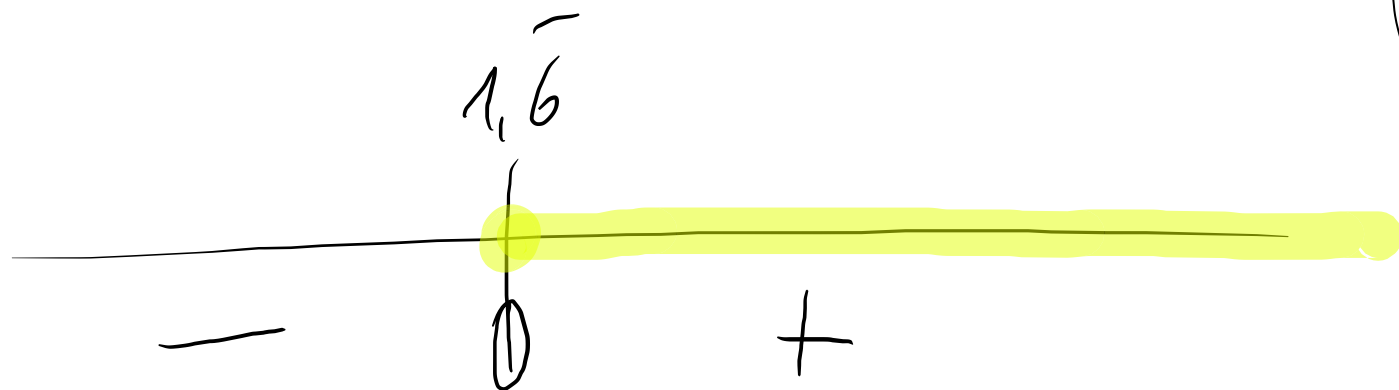
$$0 \cdot 0 = 0$$



$$g(x) = \sqrt{3x-5}$$

$g(x)$ est définie pour $x \geq 1,6\bar{6}$

① Signe de $3x-5$



$$3x-5=0$$
$$3x=5$$
$$x=\frac{5}{3}=1,6\bar{6}$$

$$D_g: x \in \mathbb{R} \text{ tq. } x \geq 1,6\bar{6}$$

$$D_g = [1,6\bar{6}; +\infty[$$

$$f(x) = \frac{2x + b}{cx + d}$$

$$\text{Zero: } x = -\frac{b}{2}$$

$$\text{A.H. } y = \frac{2}{c}$$

$$\text{O.V. } y = \frac{b}{d}$$

$$\text{A.V. } x = -\frac{d}{c}$$