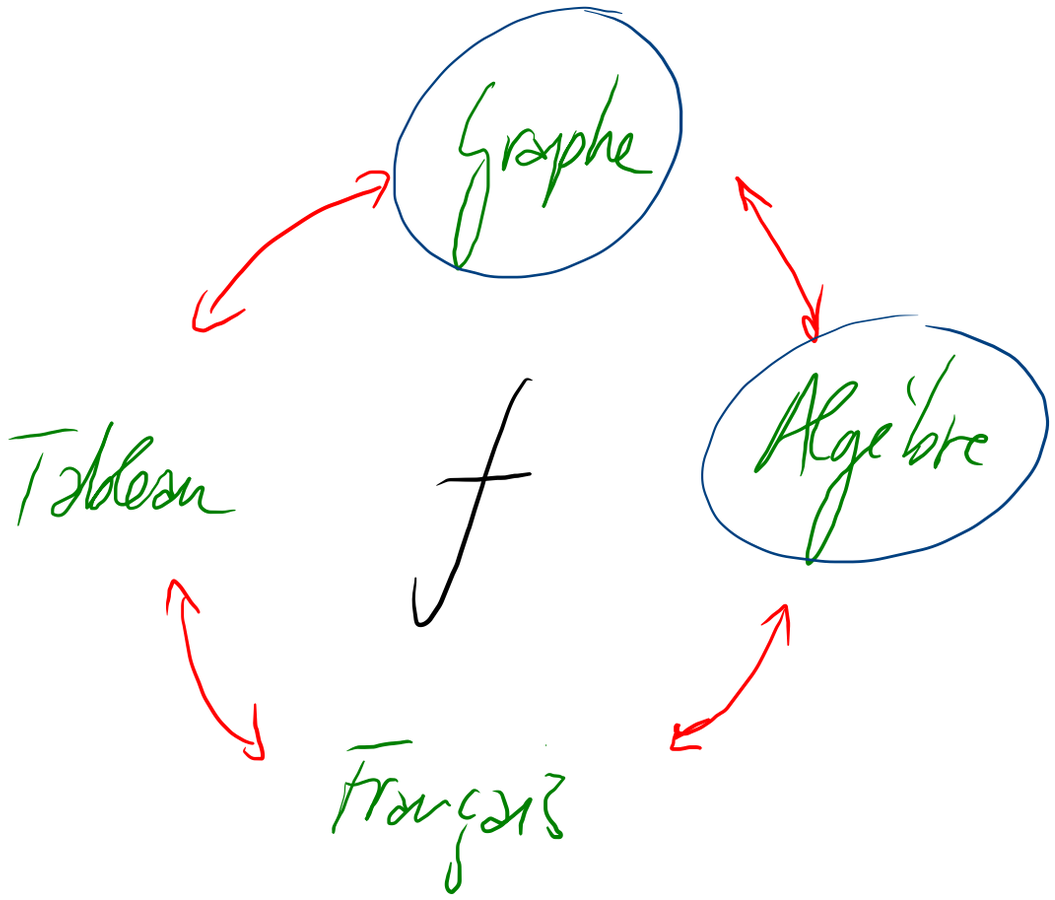
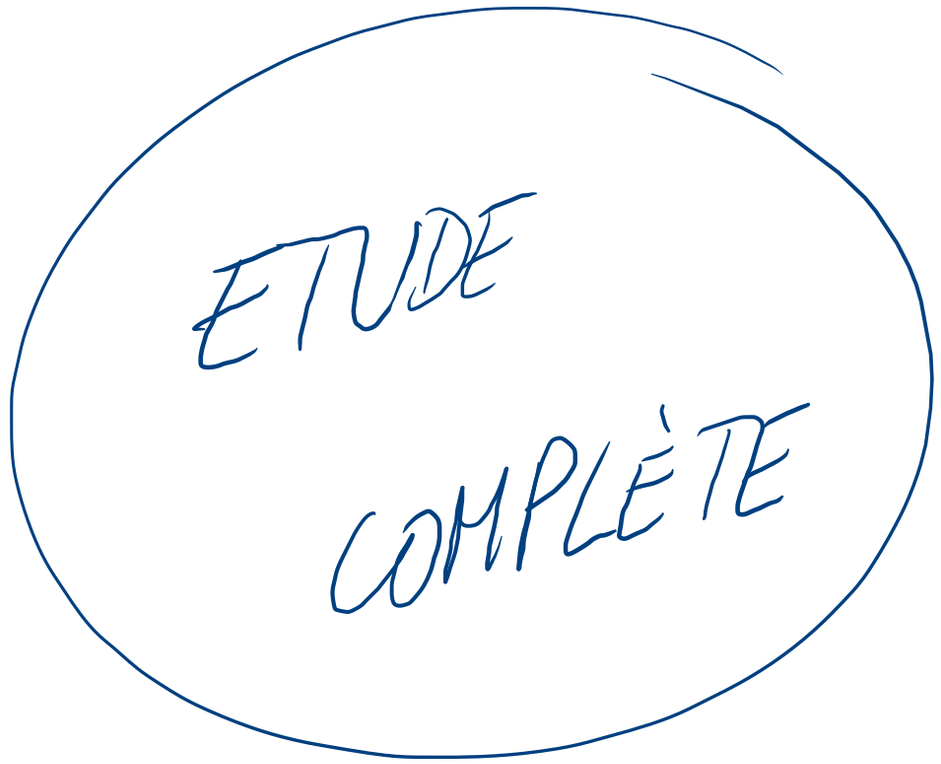

Graphe
Algèbre
Tableau
f
Français


ETUDE
COMPLÈTE

Etude complète de

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

$ax+b=0$

$ax = -b$

$x = \frac{-b}{a}$

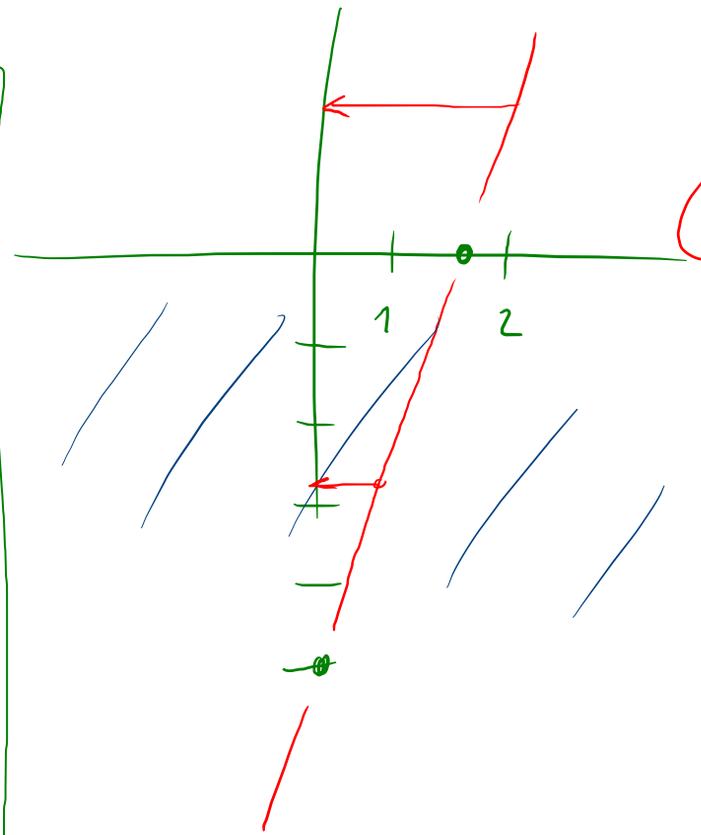
Exemples :

$f(x) = 3x - 5$

$g(x) = \frac{1}{2}x + 4$

$h(x) = 2x - 3$

$i(x) = \frac{4}{5}x + 4$

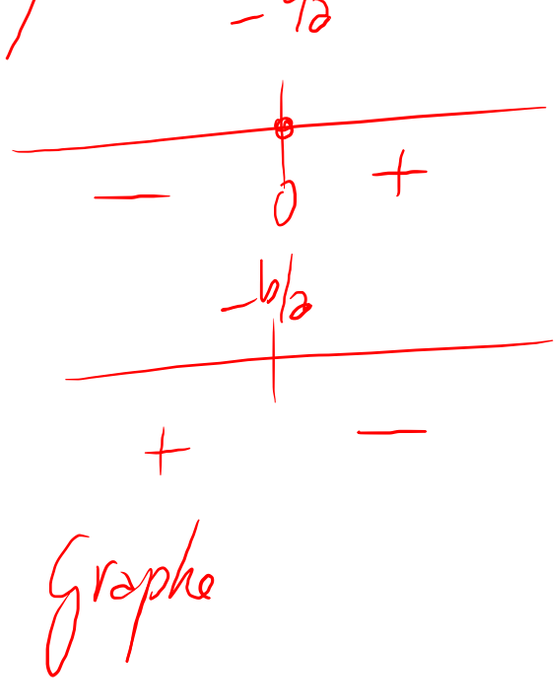


① Ensemble de définition

② Zéros

$ax+b=0 \Leftrightarrow \boxed{x = -\frac{b}{a}}$

③ Signe



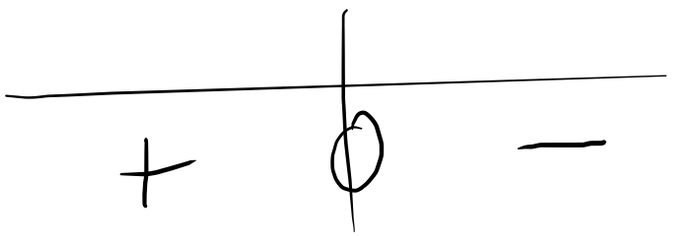
④ Graphe

$$f(x) = \frac{-5}{1}x + 3 = -\frac{20}{4}x + 3 \qquad \frac{-5}{1}$$

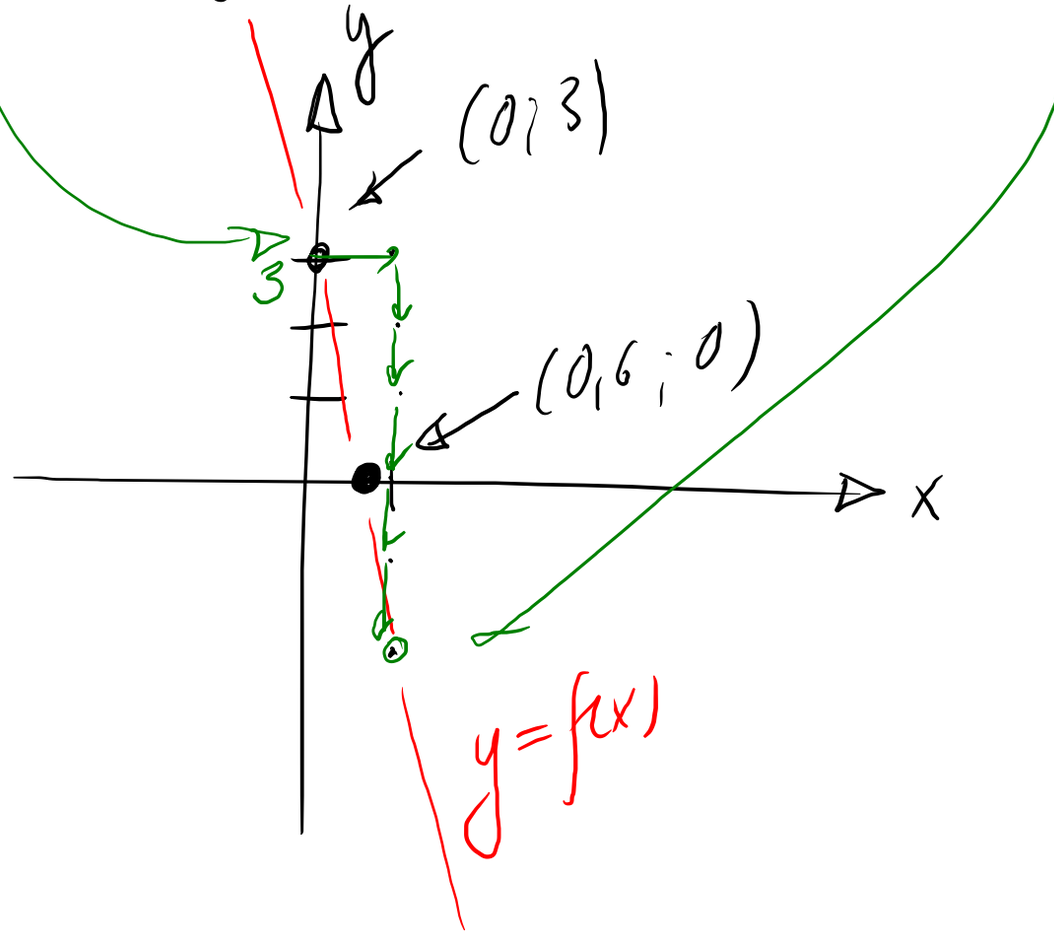
(1) $E_f = \mathbb{R}$ ← Pas de nombres à exclure

(2) $f(x) = 0 \Leftrightarrow -5x + 3 = 0 \Leftrightarrow x = \frac{-3}{-5} = 0{,}6$

(4)



(5)



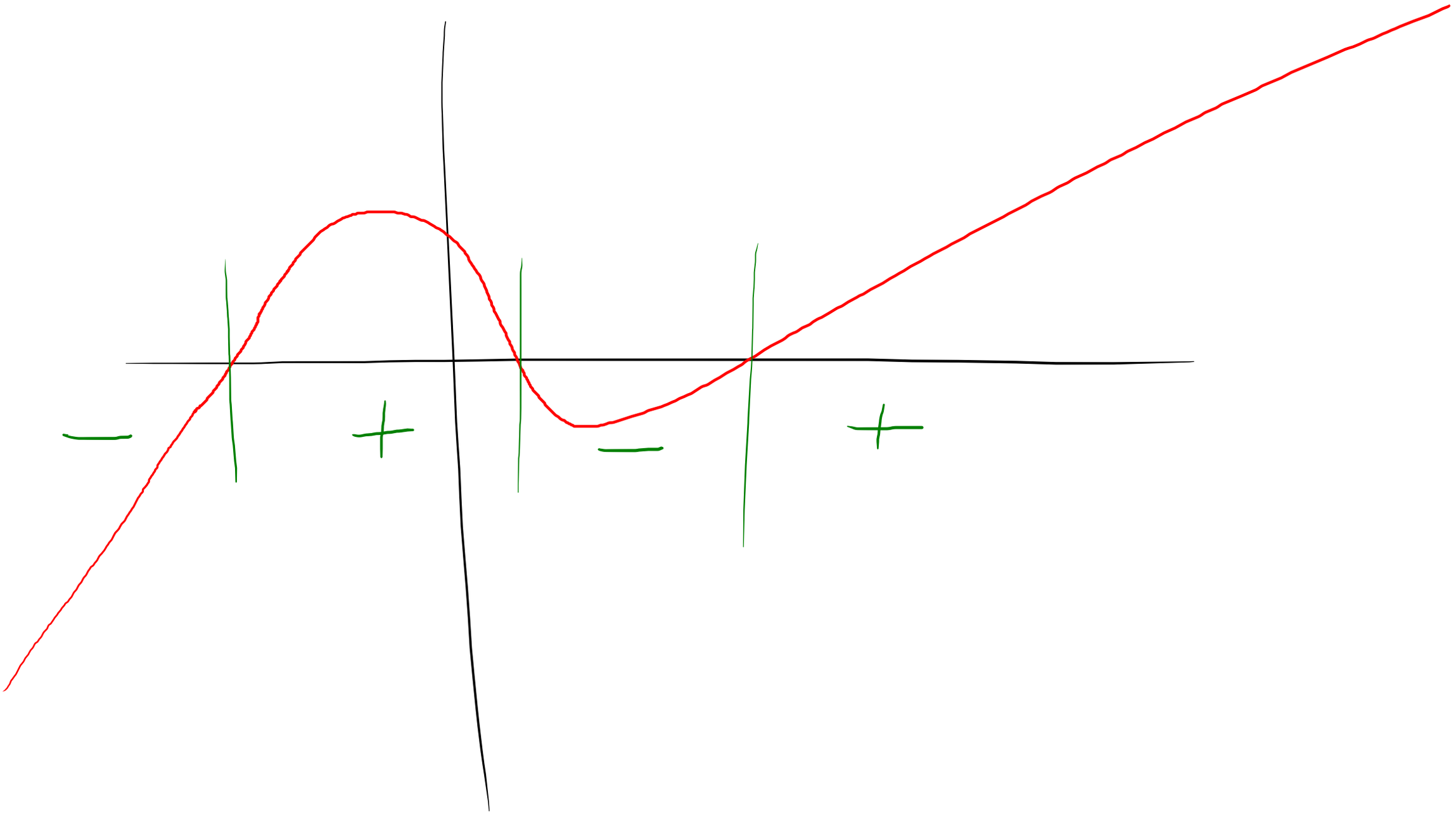
$$h(x) = \frac{1}{x}$$

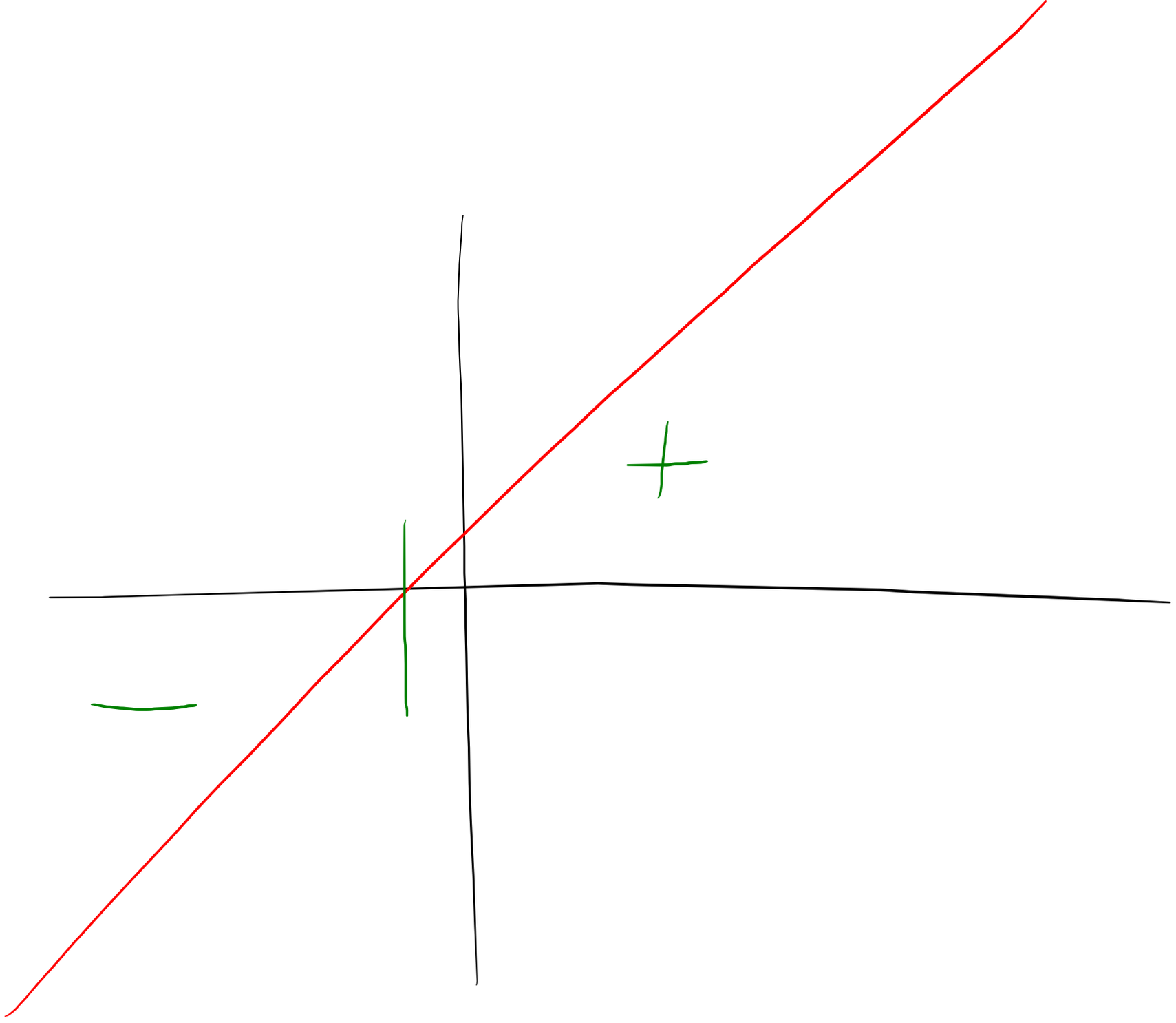
$\triangle$ $x \neq 0$

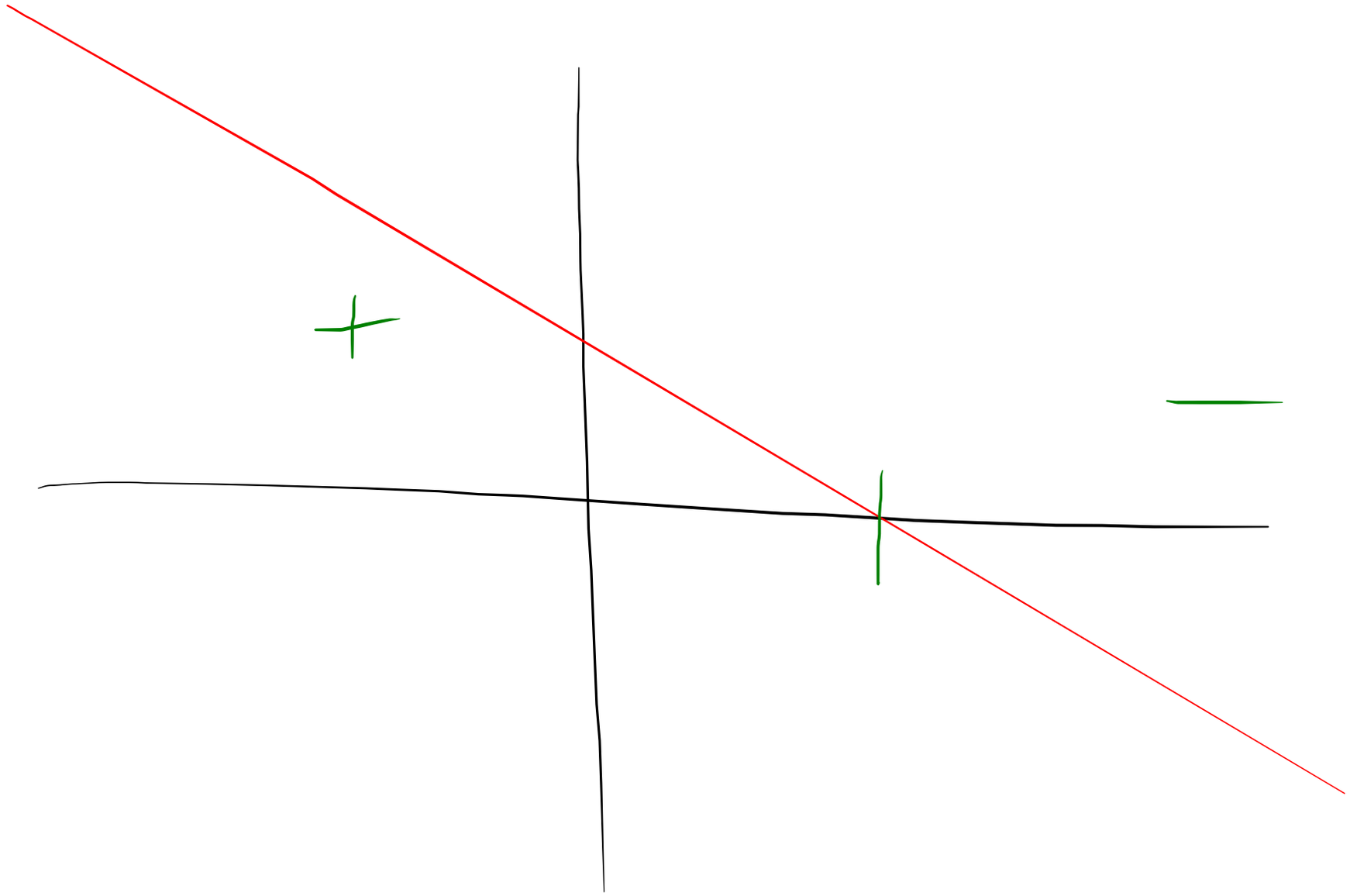
Ensemble de définition :

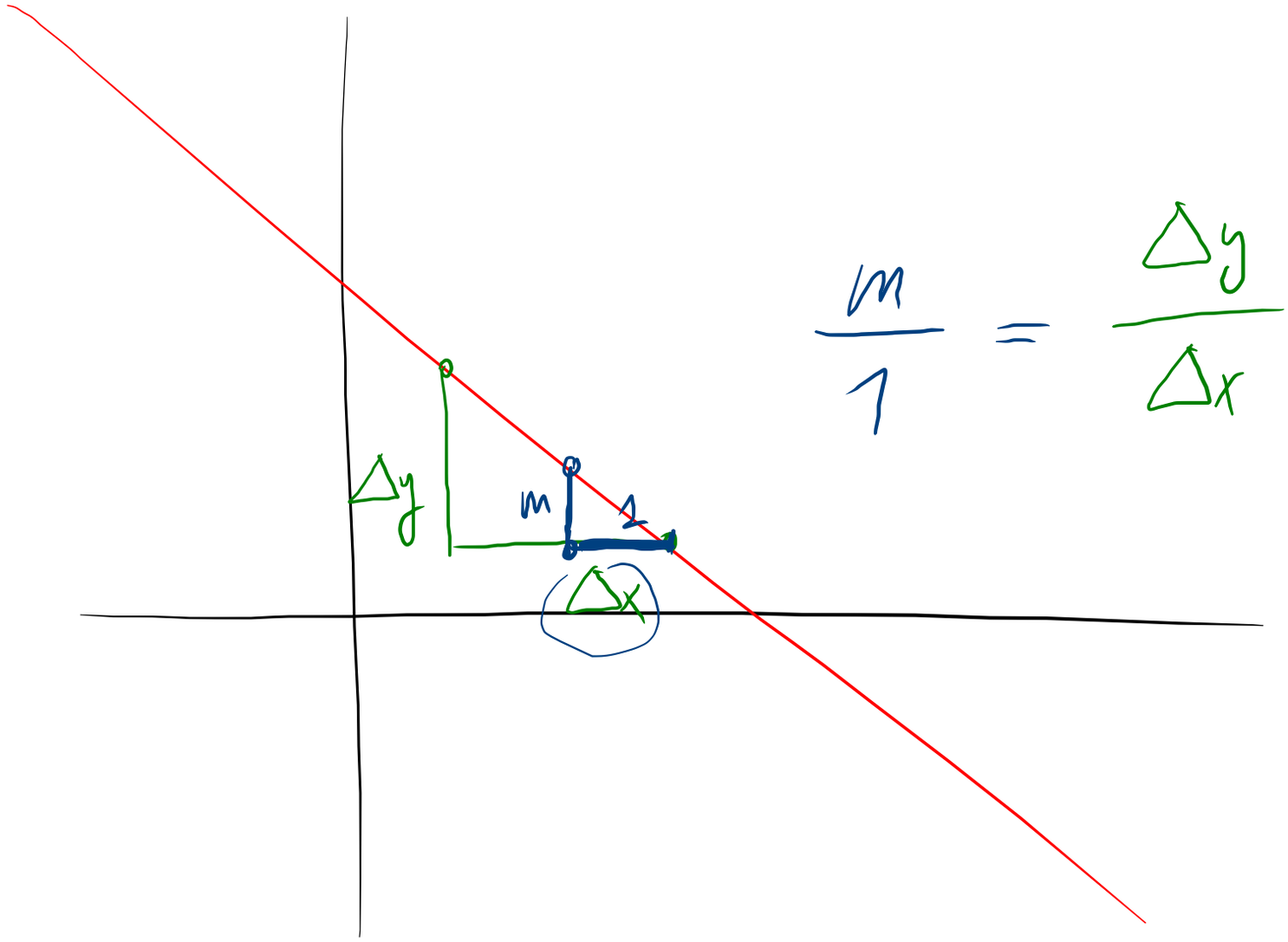
Tous les nbres SAUF 0

$\mathbb{R} - \{0\} = \mathbb{R}^*$





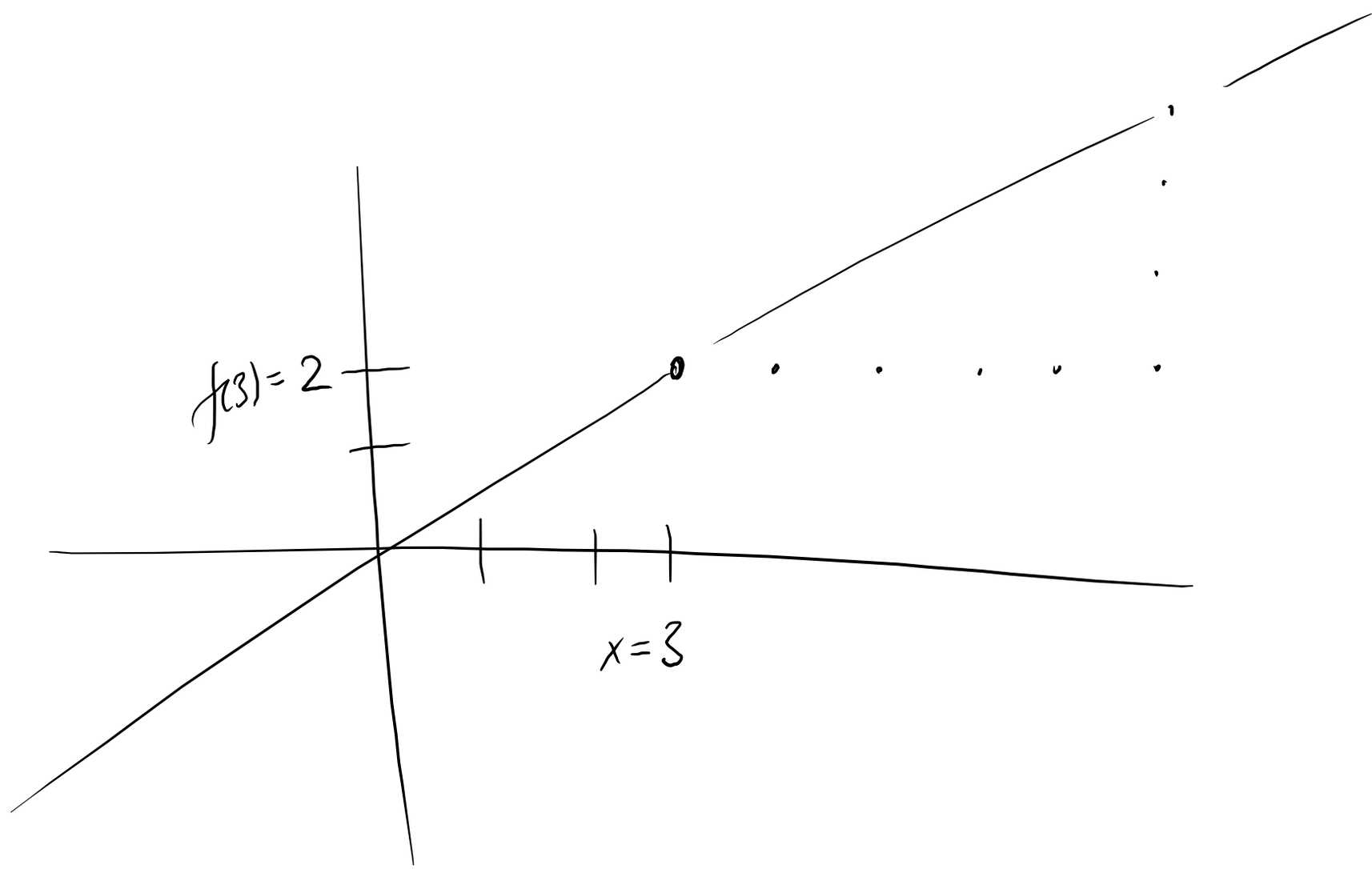




$$\frac{m}{1} = \frac{\Delta y}{\Delta x} = \text{pente}$$

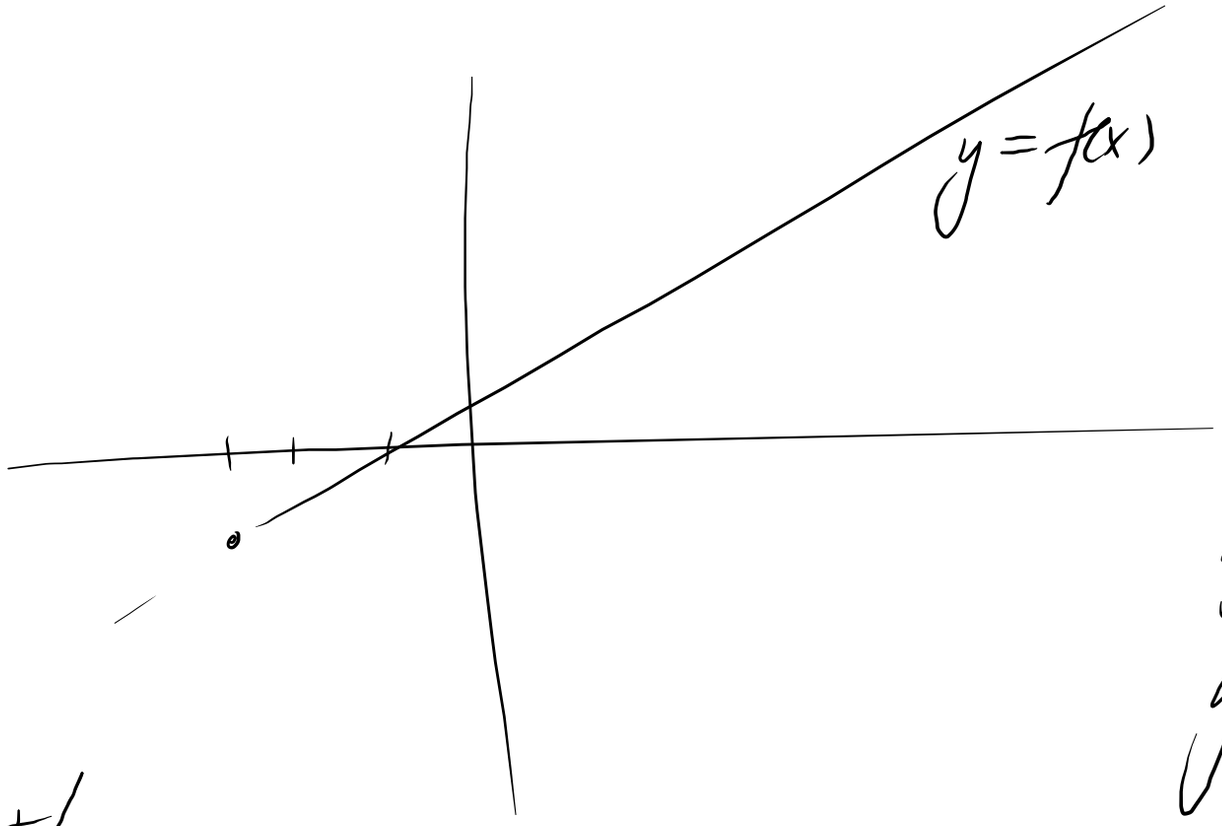
$f(3) = 2$

pente : $\frac{3}{5}$



$f(x) = 0{,}5x + h$

per $(-3; -1)$



$g(x) = -0{,}6x + 2{,}2$

$g(x) = -0{,}6x + h$

$-1 = 0{,}5 \cdot (-3) + h$

$4 = -0{,}6 \cdot (-3) + h$

$-1 = -1{,}5 + h$

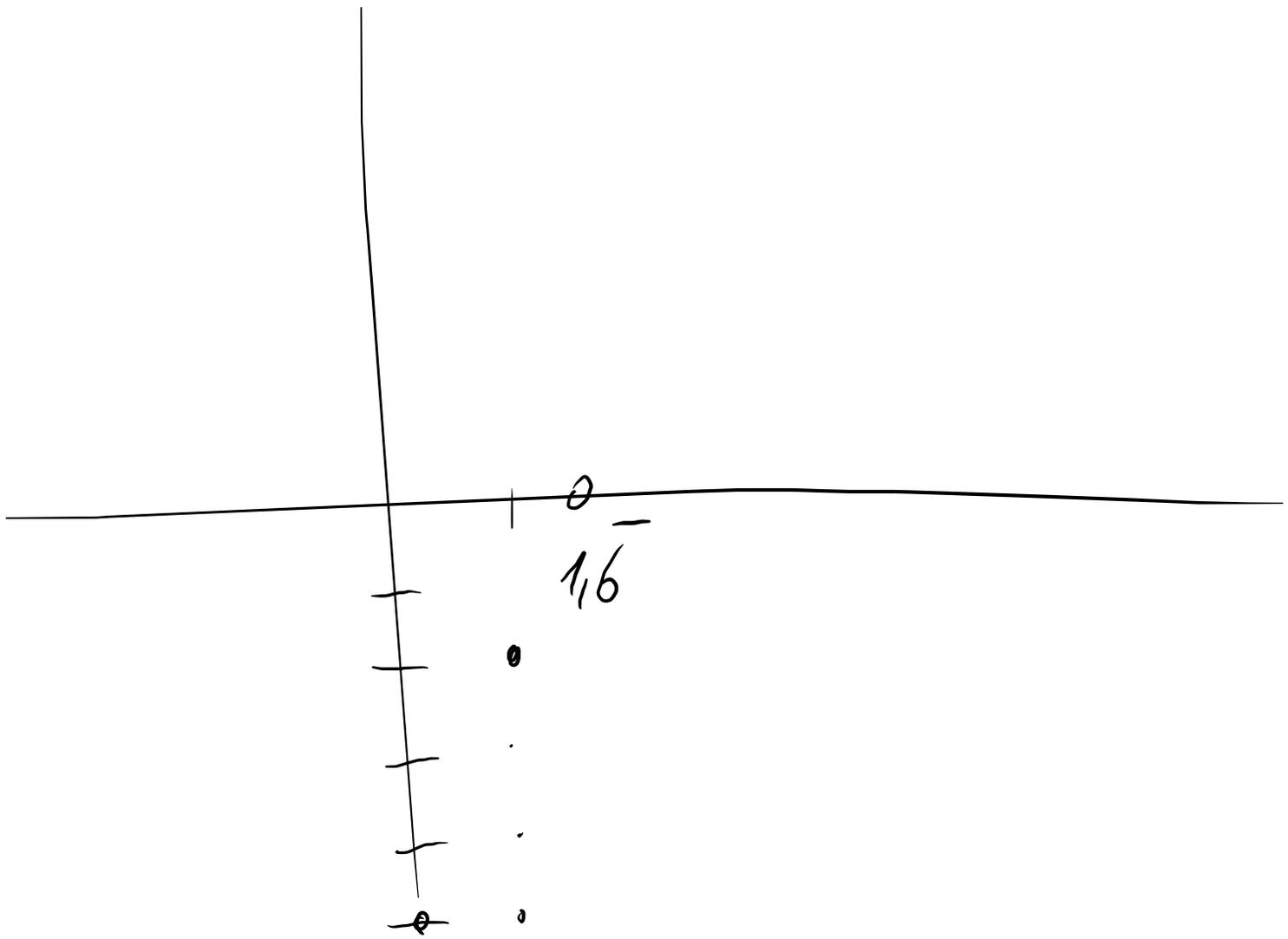
$\Rightarrow \boxed{f(x) = 0{,}5x + 0{,}5}$

$4 - 1{,}8 = h$

$-1 + 1{,}5 = h$

$\boxed{2{,}2 = h}$

$0{,}5 = h$


0
1,6

$x < 2$

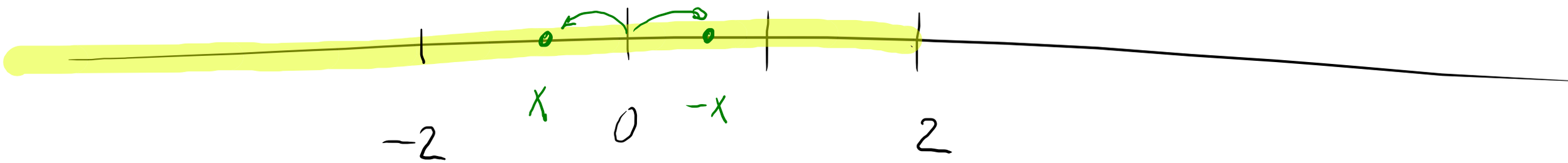
$\cdot(-1)$

$-2 < -x$ ✓

$-x > -2$

$a < b$

$b > a$

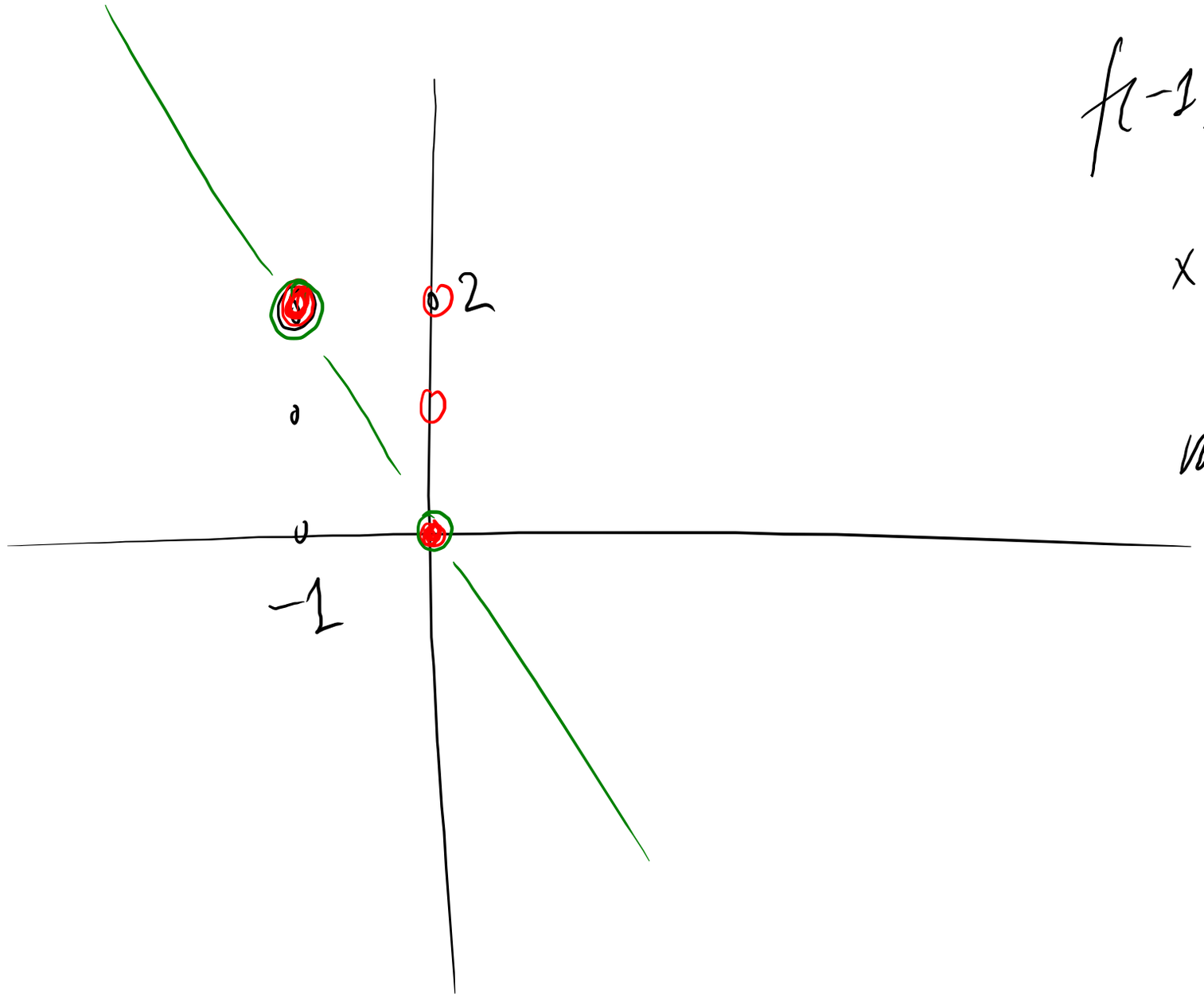


$$-2x+6<0$$

$$-2x \leq -6$$

$$2x \geq 6$$

$$x \geq 3$$



$$f(-1) = 2 = y$$

$$x = 1 \Rightarrow y = 2$$

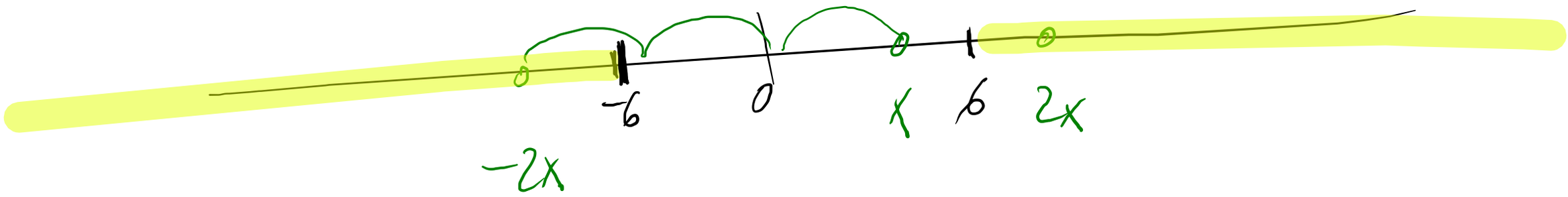
$$m = -2 = -\frac{2}{1} = \frac{-2}{1}$$

$$-2x+6<0$$

$$-2x<-6$$

$$2x>6$$

$$x>3$$



$f(x) = 0,5x + h$

f passe par $(-1;0)$

x	$f(x)$

$2x - 3$