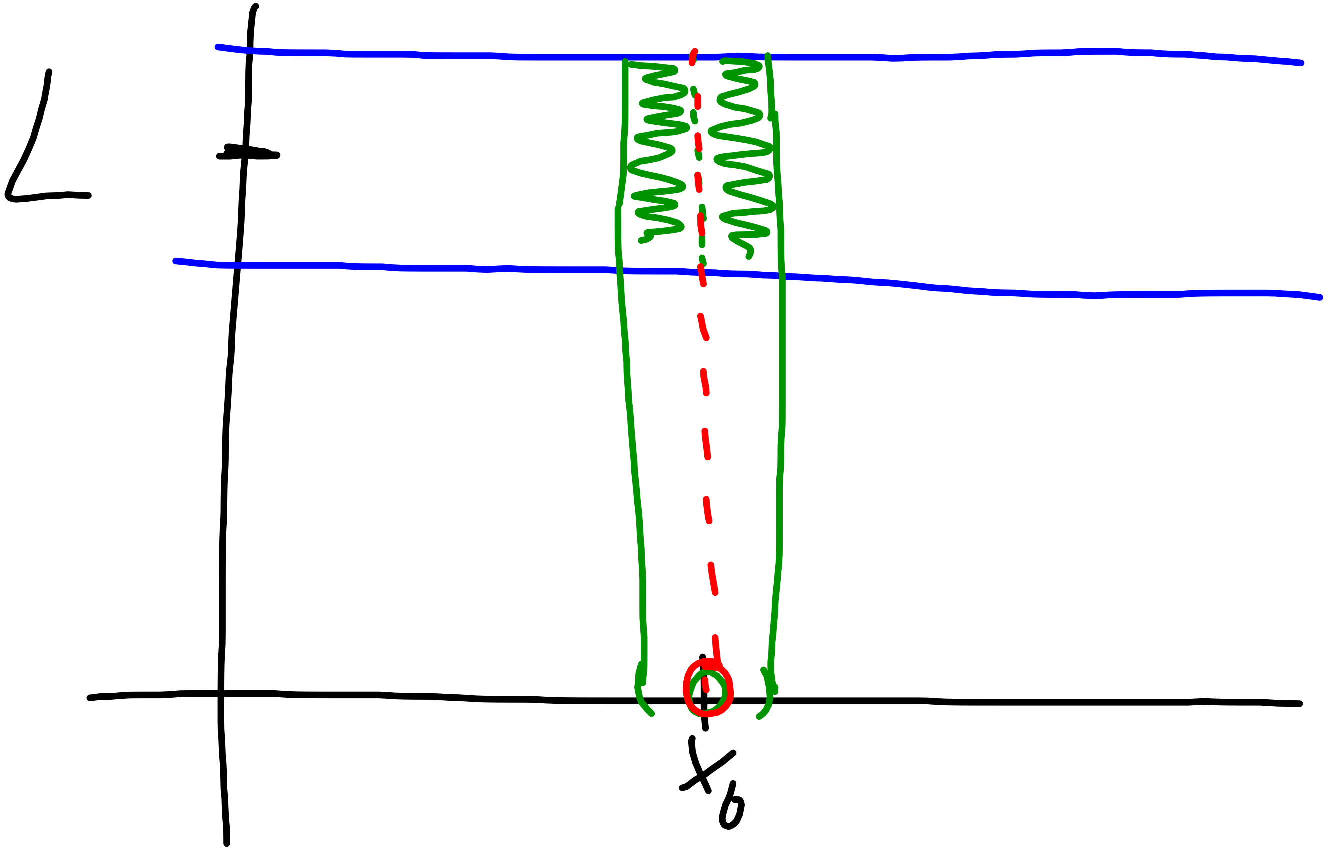
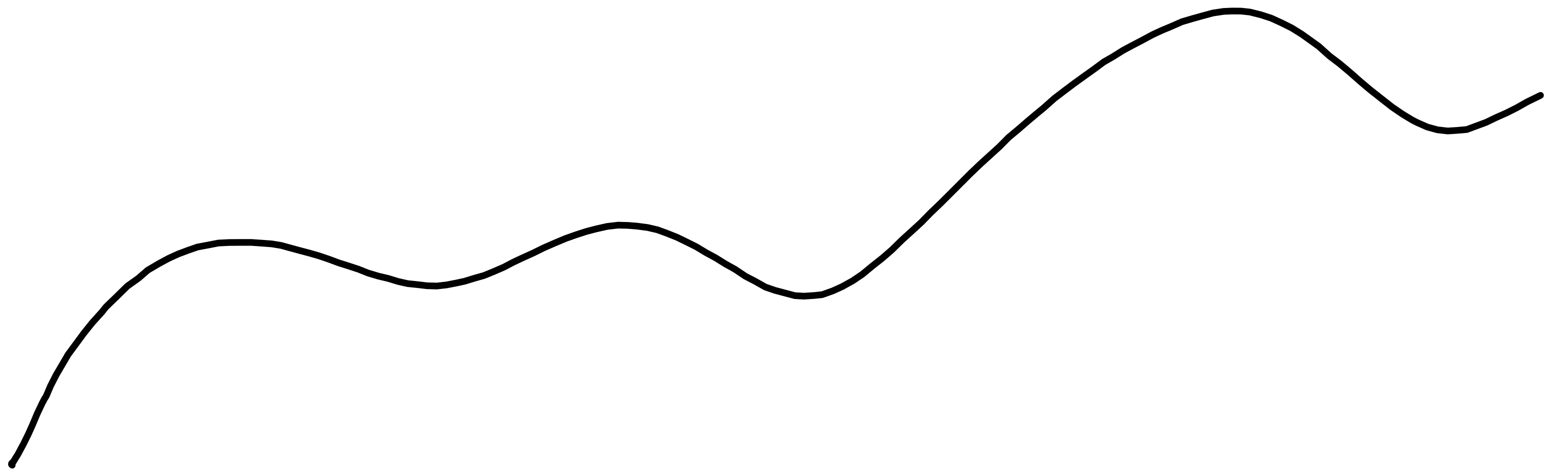
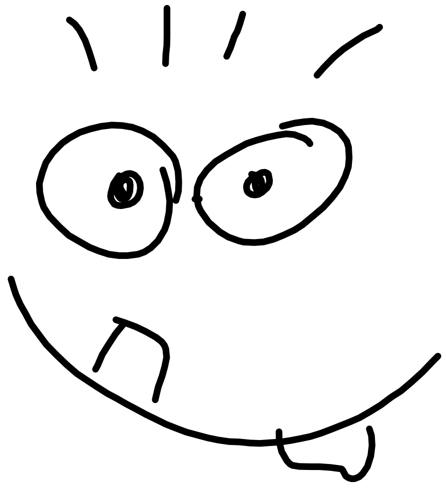
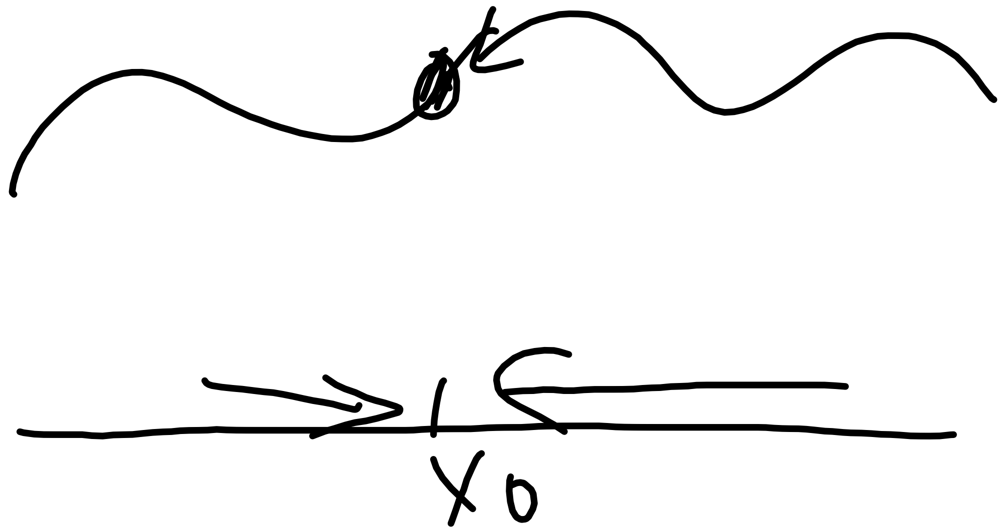
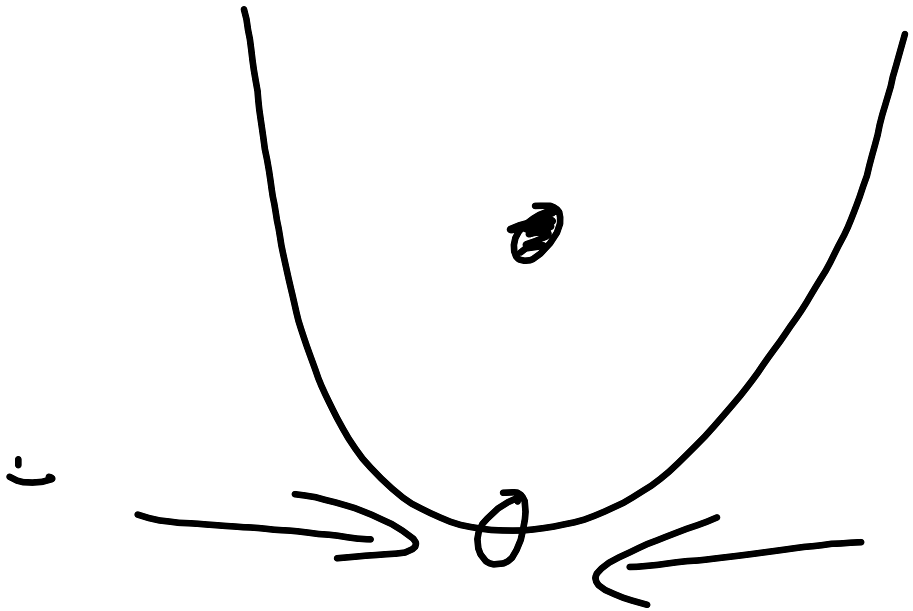

L
x_0

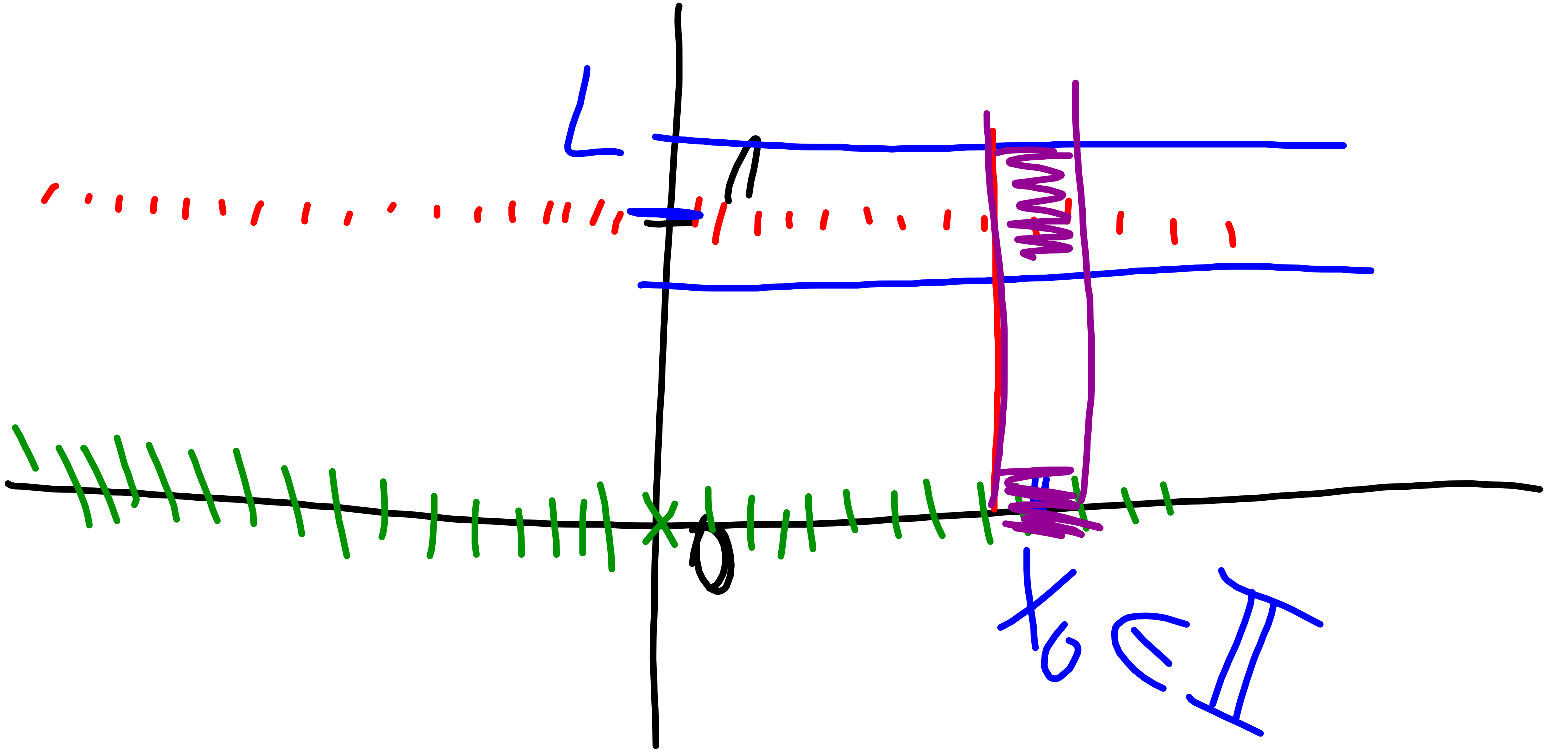


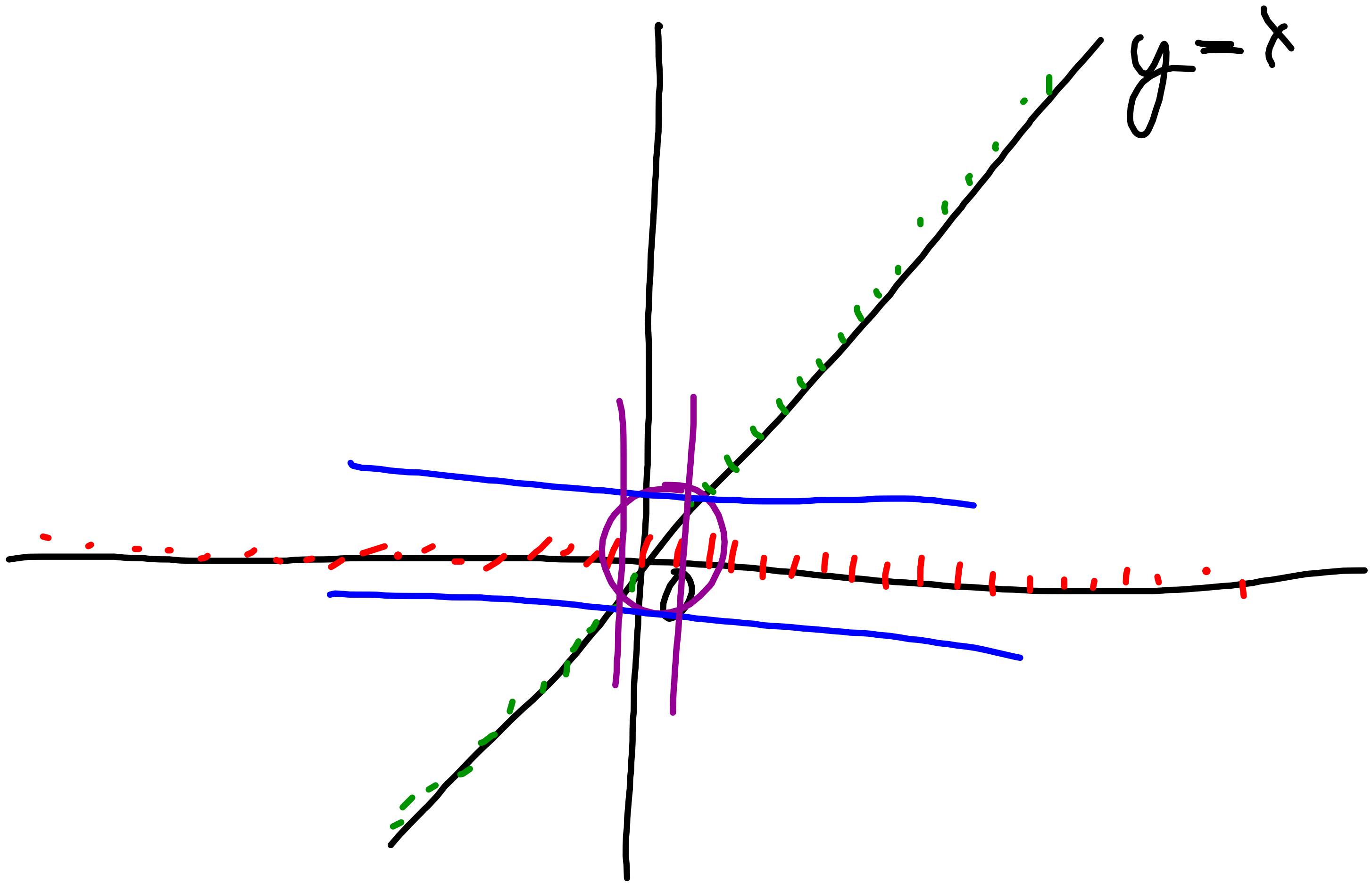




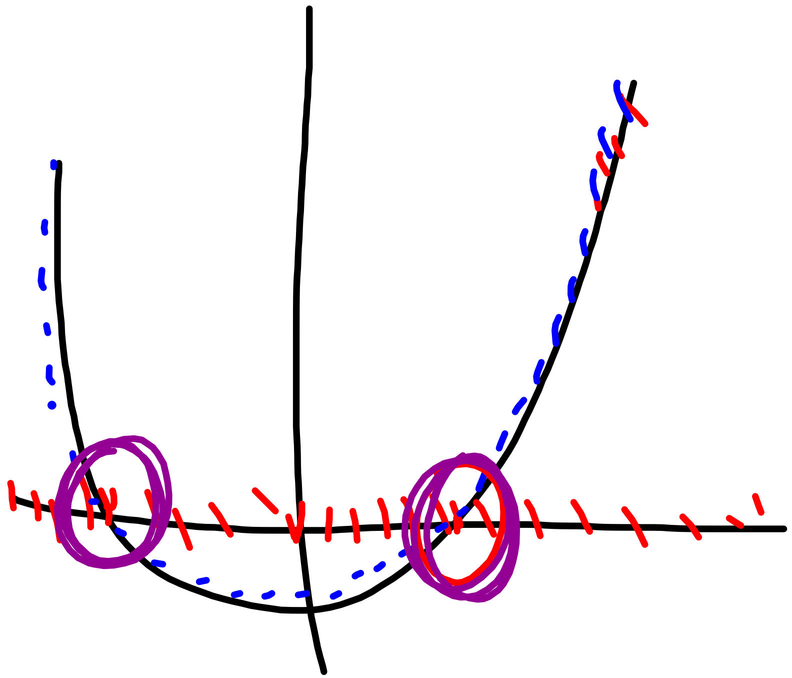
x_0




L
η
0
$x_0 \in I$

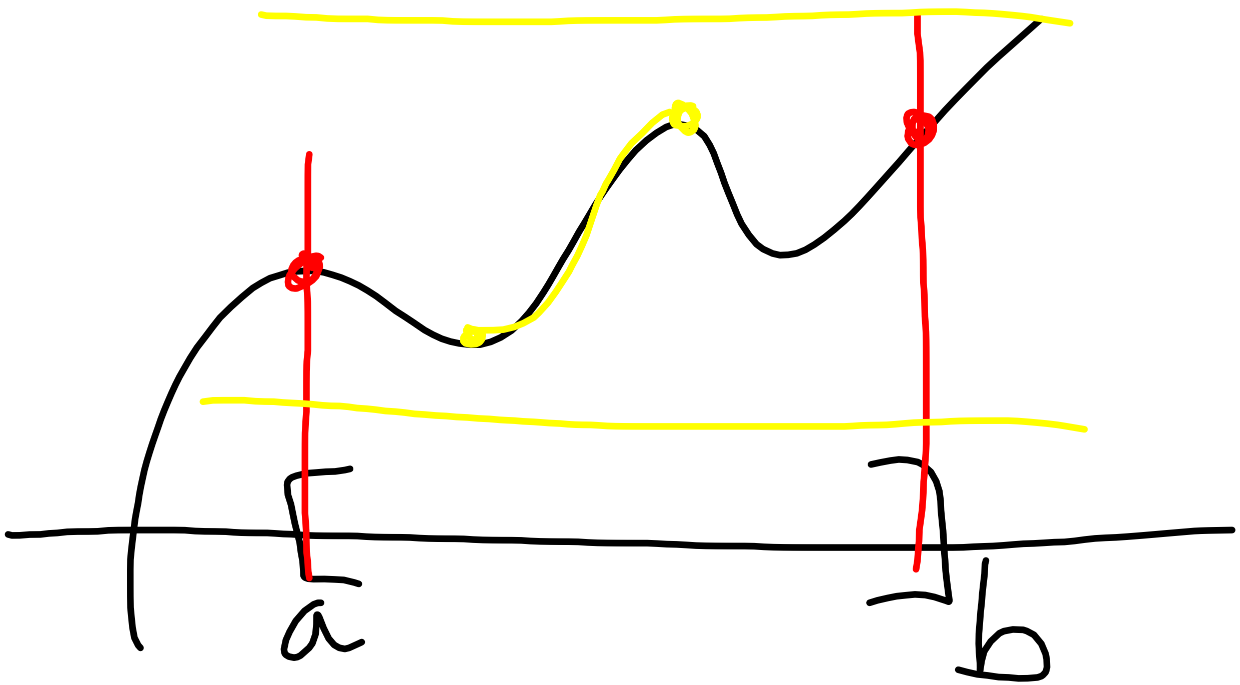

y=x
0

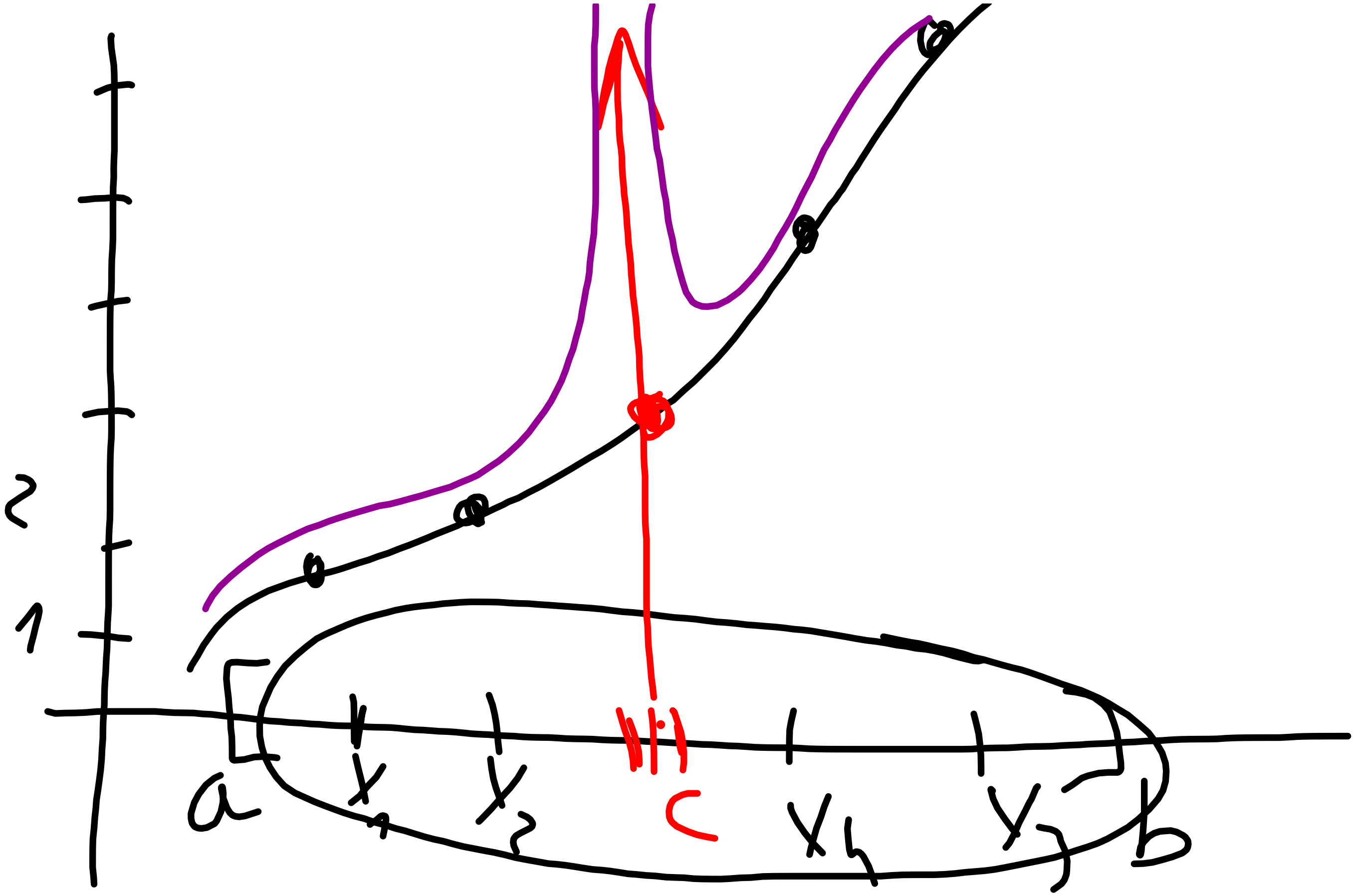
$$\underbrace{(x-1)\cdot(x+1)}_{x^2-1}\cdot \chi(x) = f(x)$$

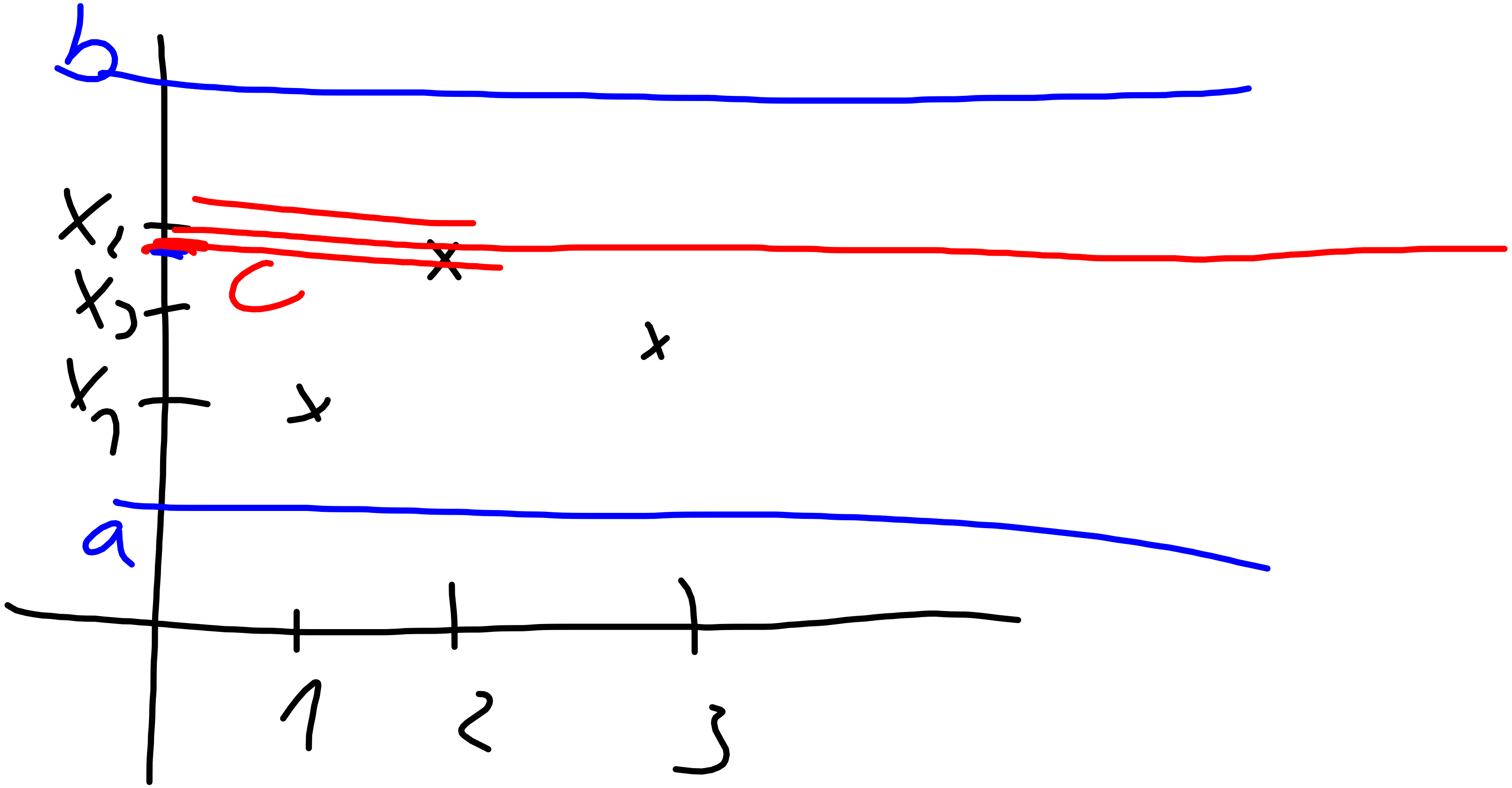


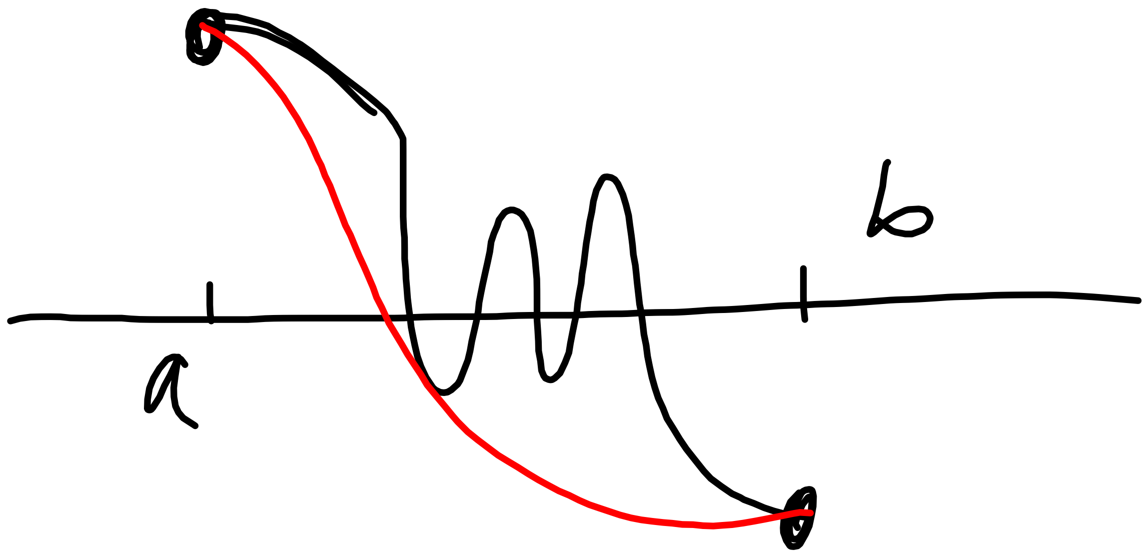
$$\lim \left(5 \cdot f(x)\right) = \lim 5 \cdot \underline{\underline{\lim f}}$$

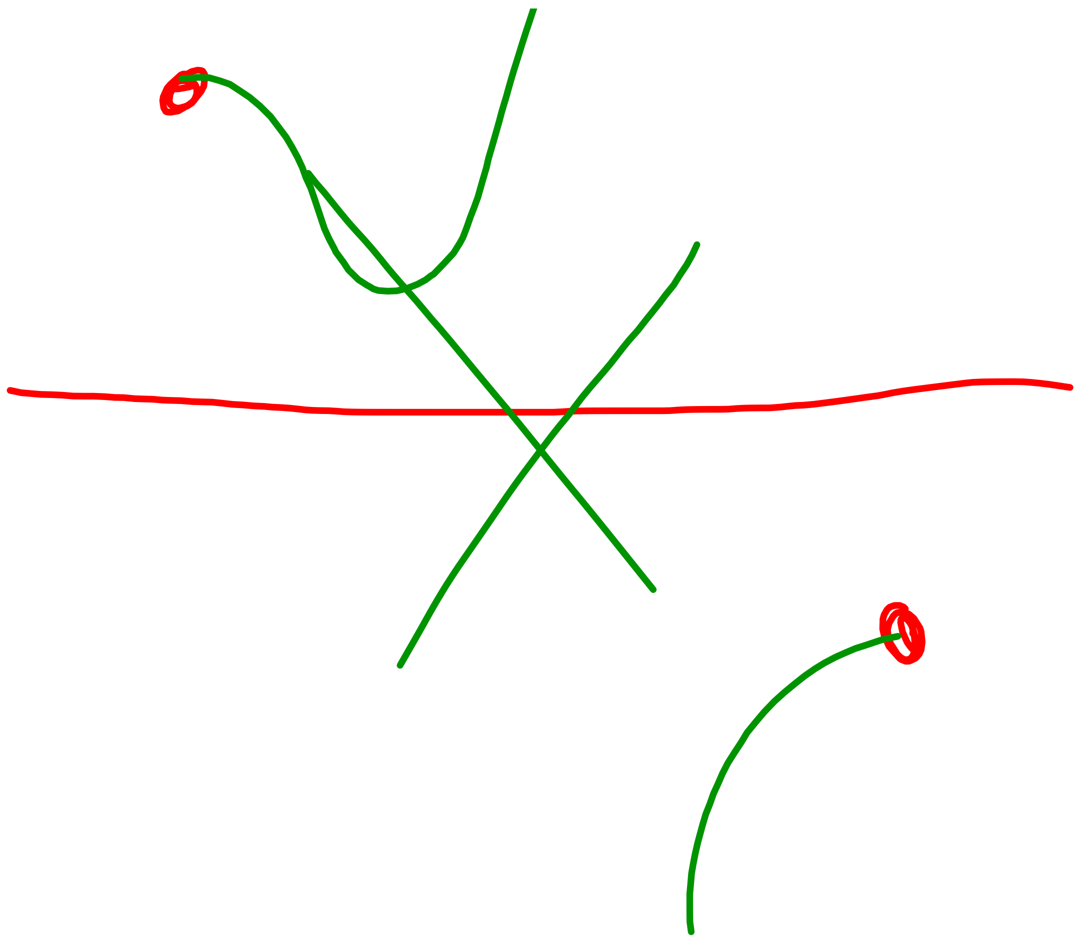
$\to 5$

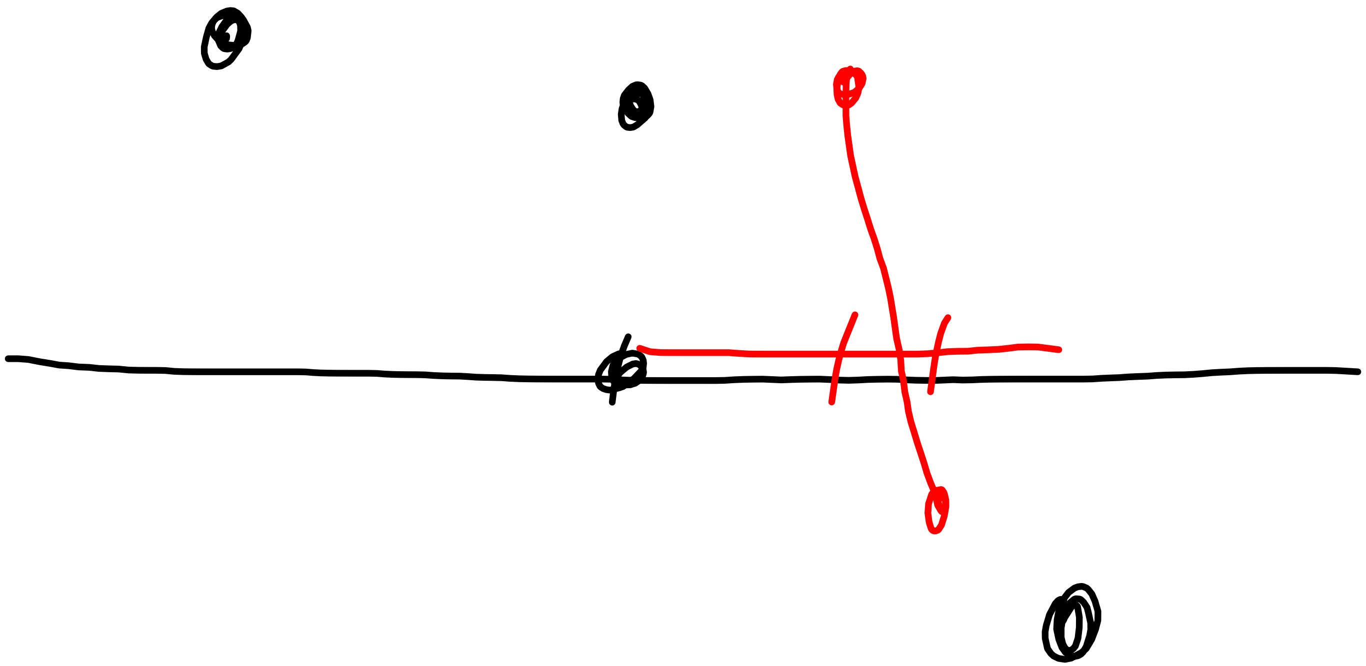

a
b

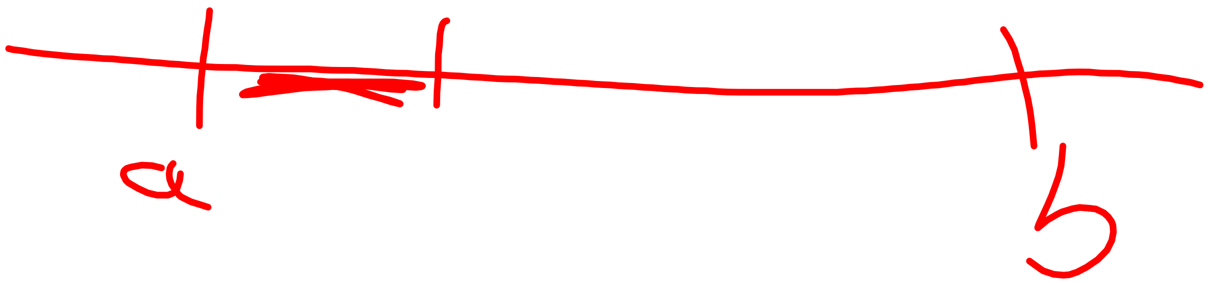

2
1
a
x_1
x_2
c
x_4
x_5
b

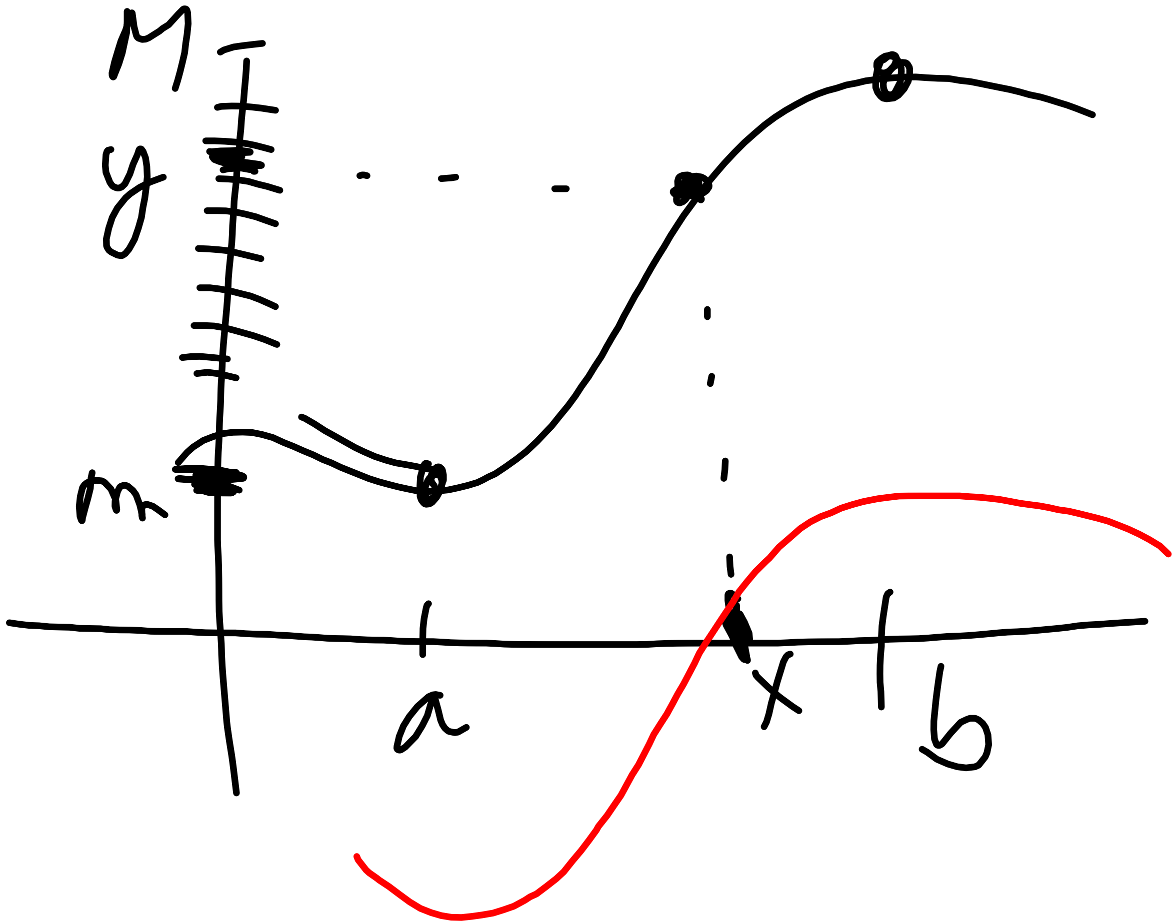

b
a
c
x_1
x_3
x_2
1
2
3

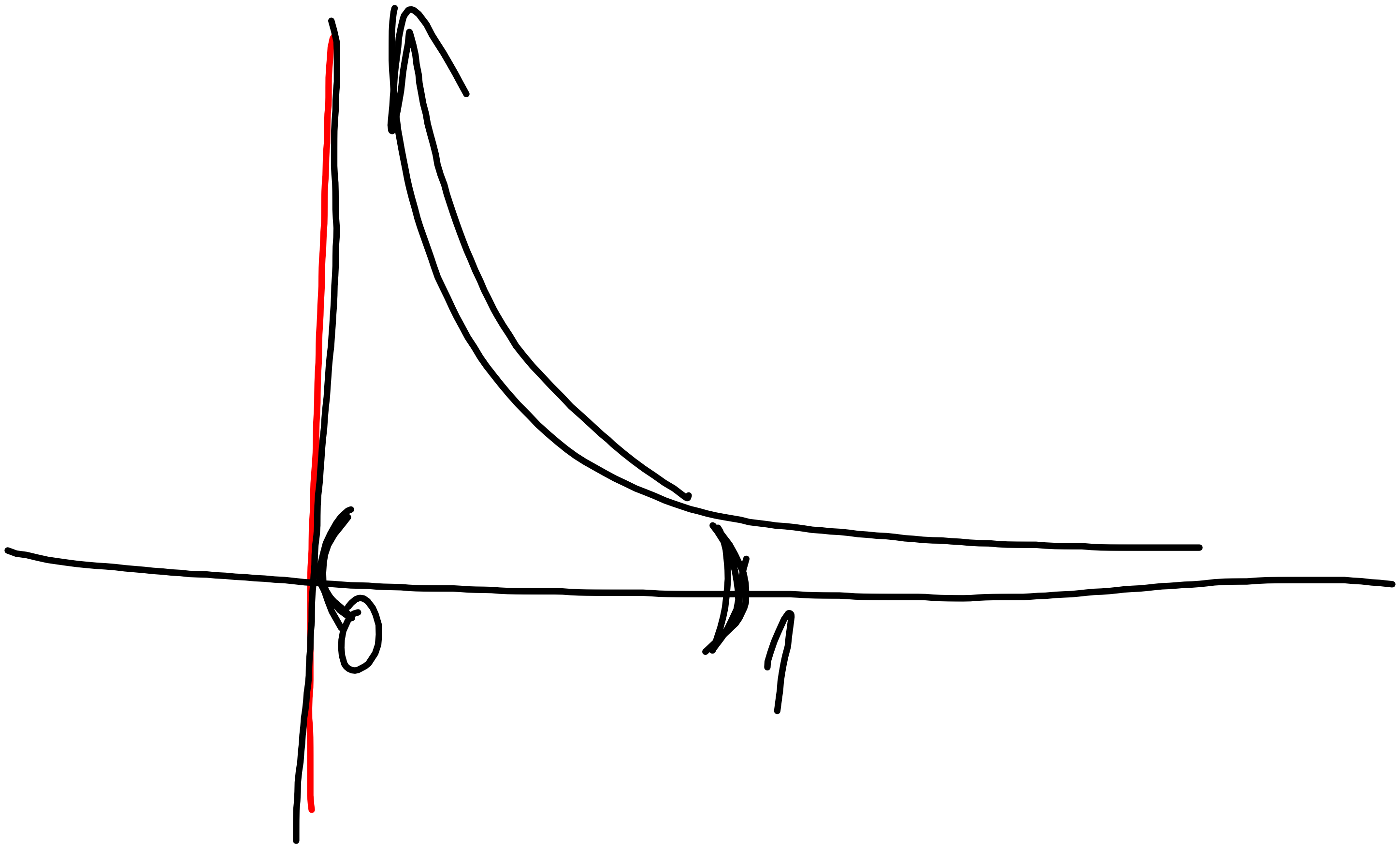

a
b

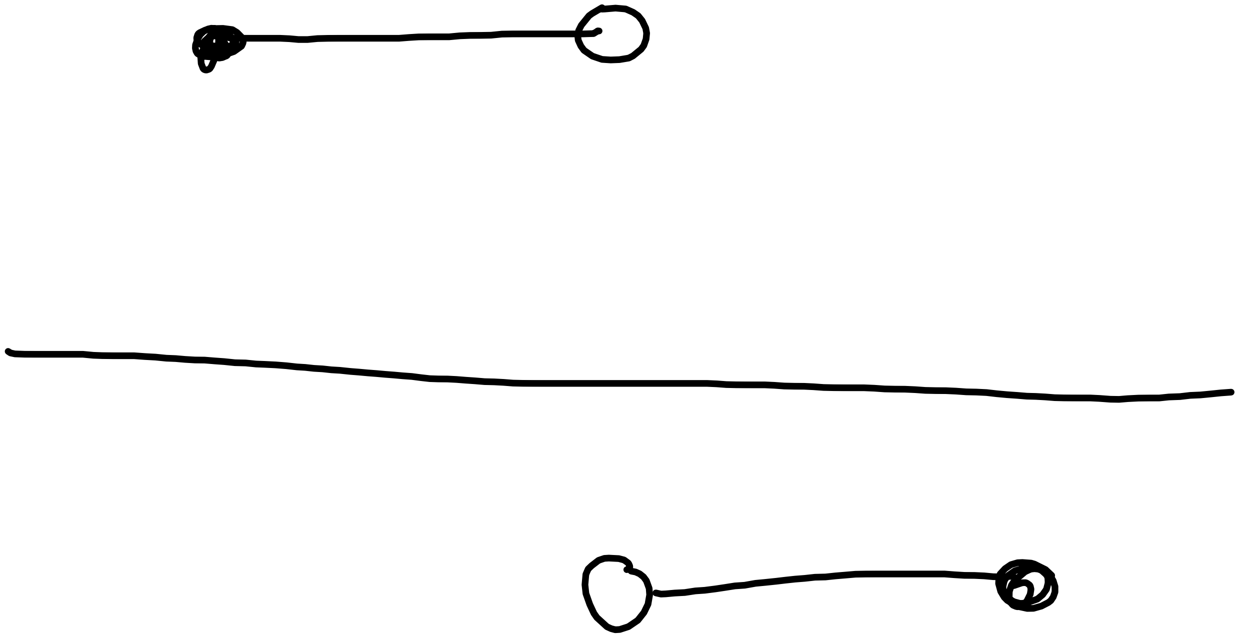


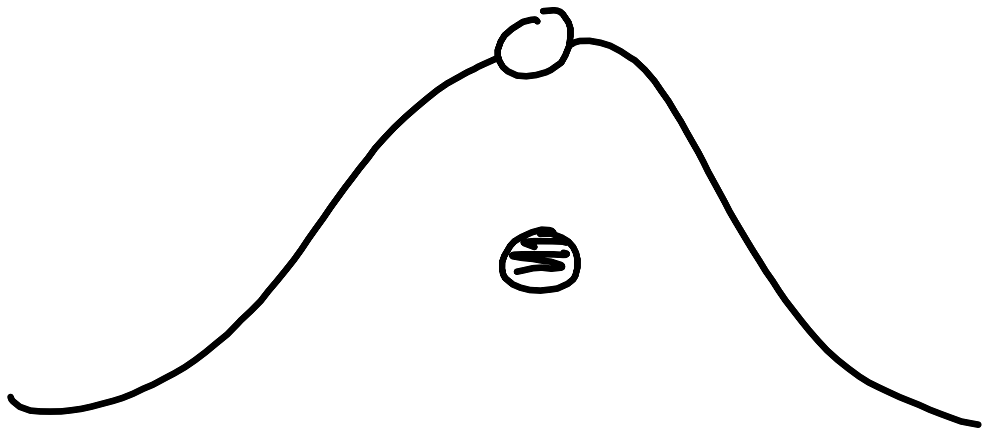



a
b


M
y
m
a
x
b


0
1

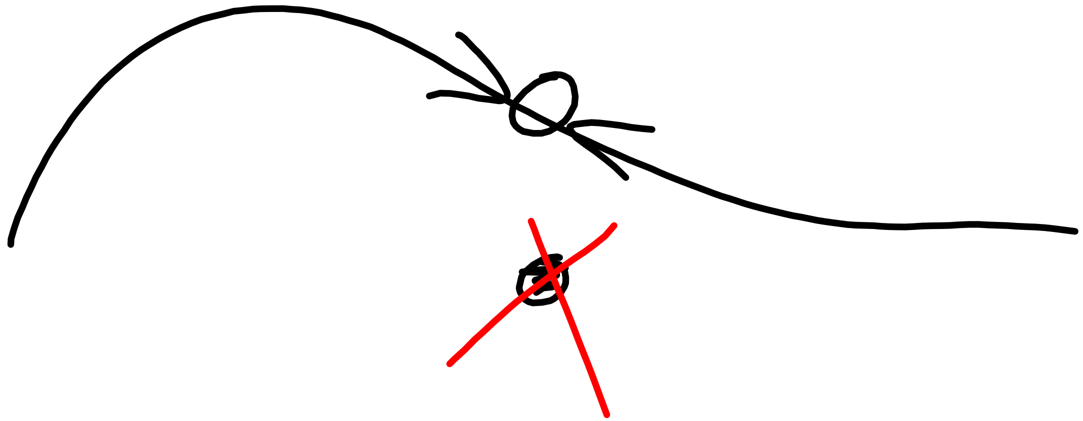


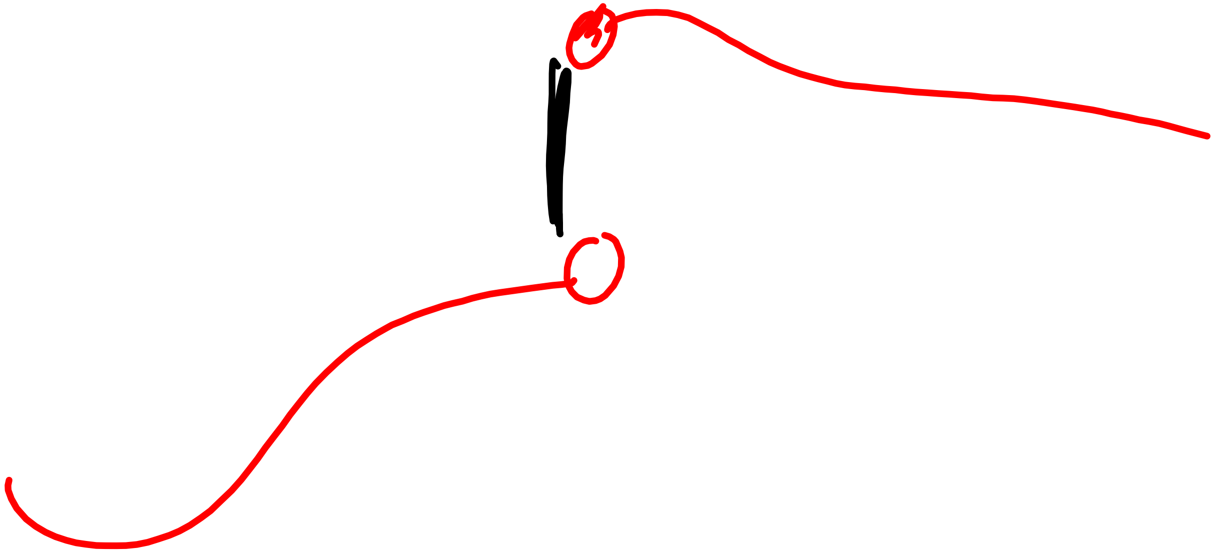


$$\lim_{x \to +\infty} (-5) x^{67} = -\infty$$

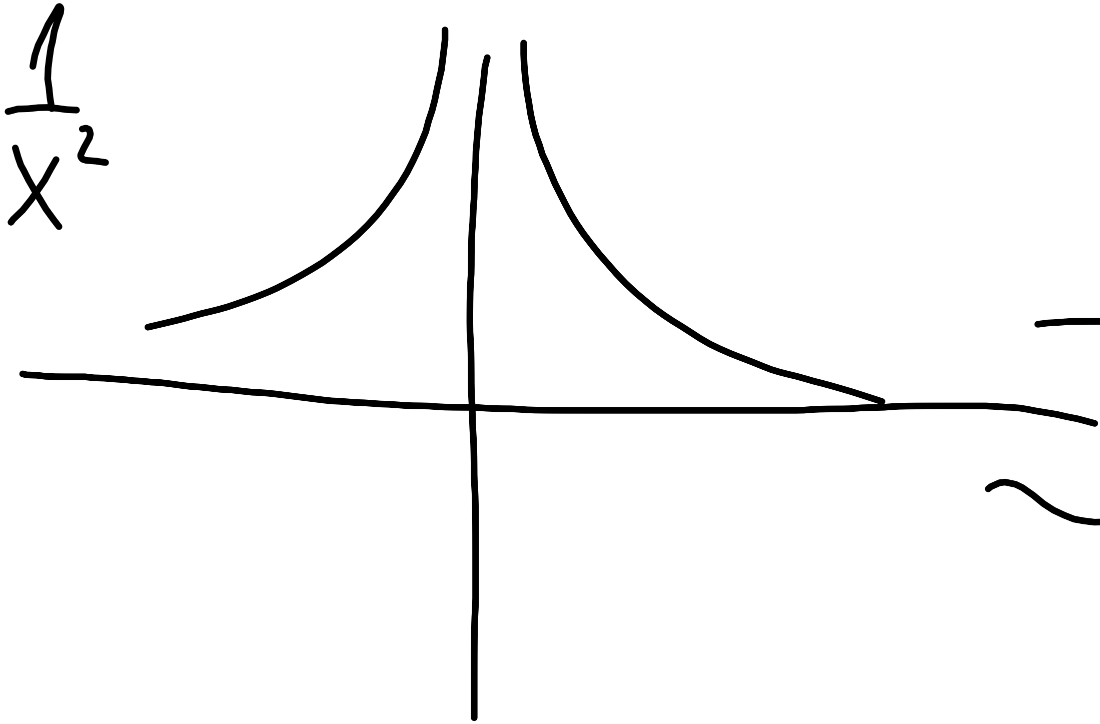
$$x \to -\infty \qquad = +\infty$$

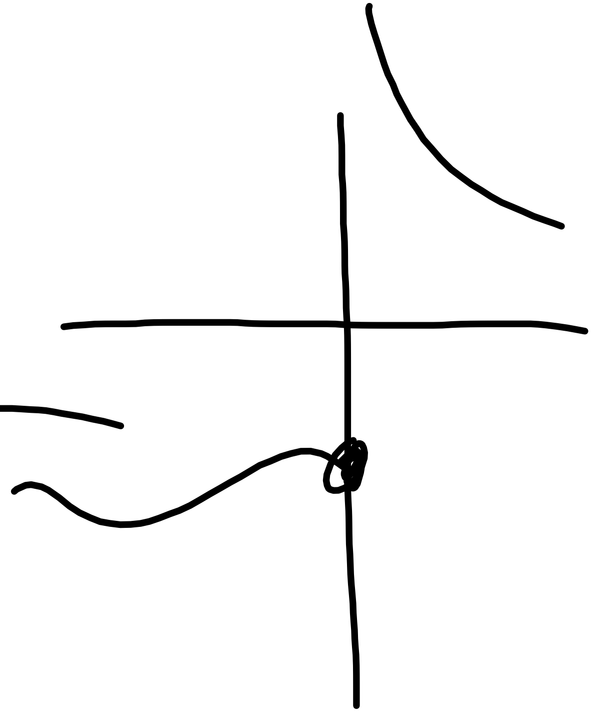
$$[a, b]$$





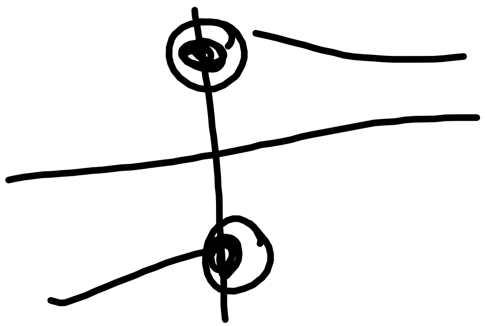
$\frac{1}{x^2}$

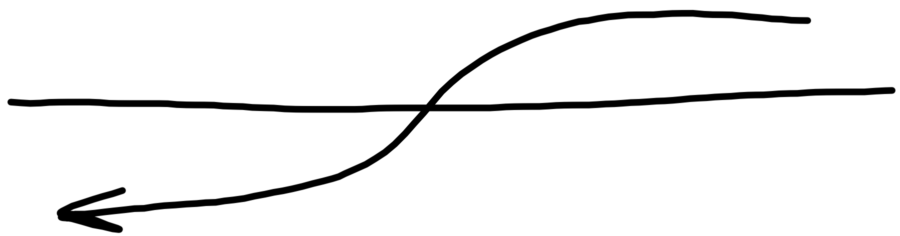


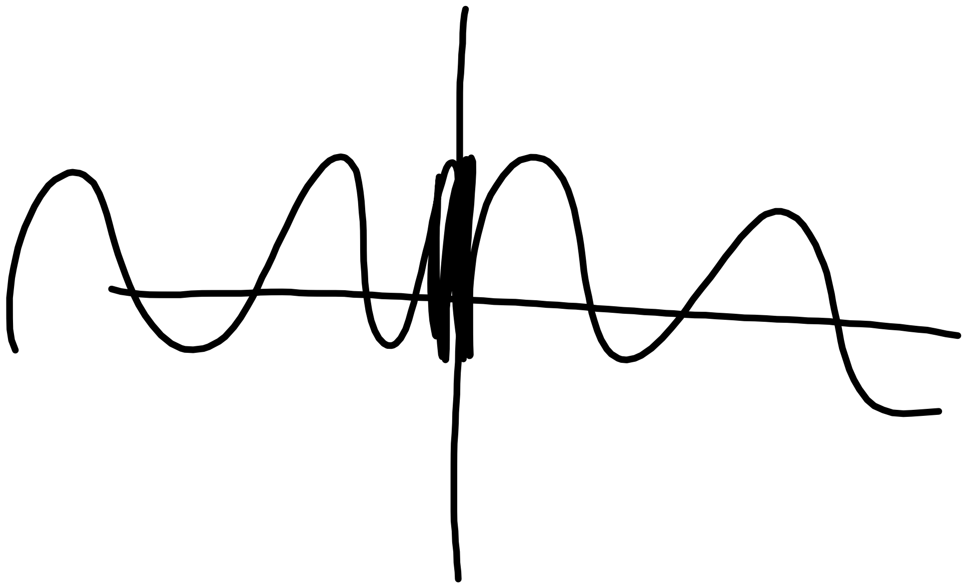


$$\lim_{x\to 0^+} \operatorname{arctg}\frac{1}{x} = \left|\operatorname{arctg}\frac{1}{0^+} = \operatorname{arctg}(+\infty)\right| = \frac{\pi}{2}$$

$$\lim_{x\to 0^-} \operatorname{arctg}\frac{1}{x} = \left|\operatorname{arctg}\frac{1}{0^-} = \operatorname{arctg}(-\infty)\right| = -\frac{\pi}{2}$$

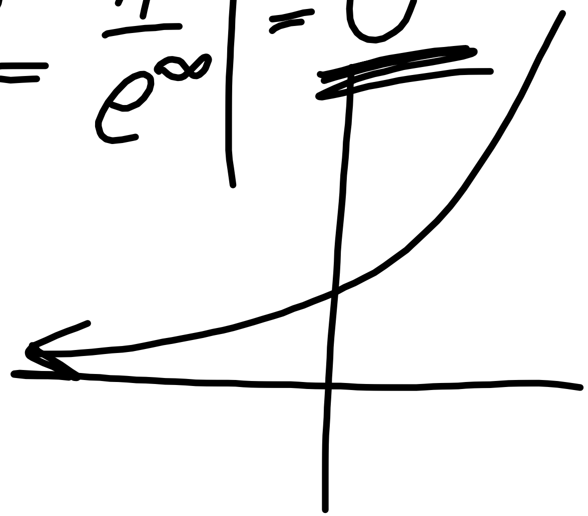




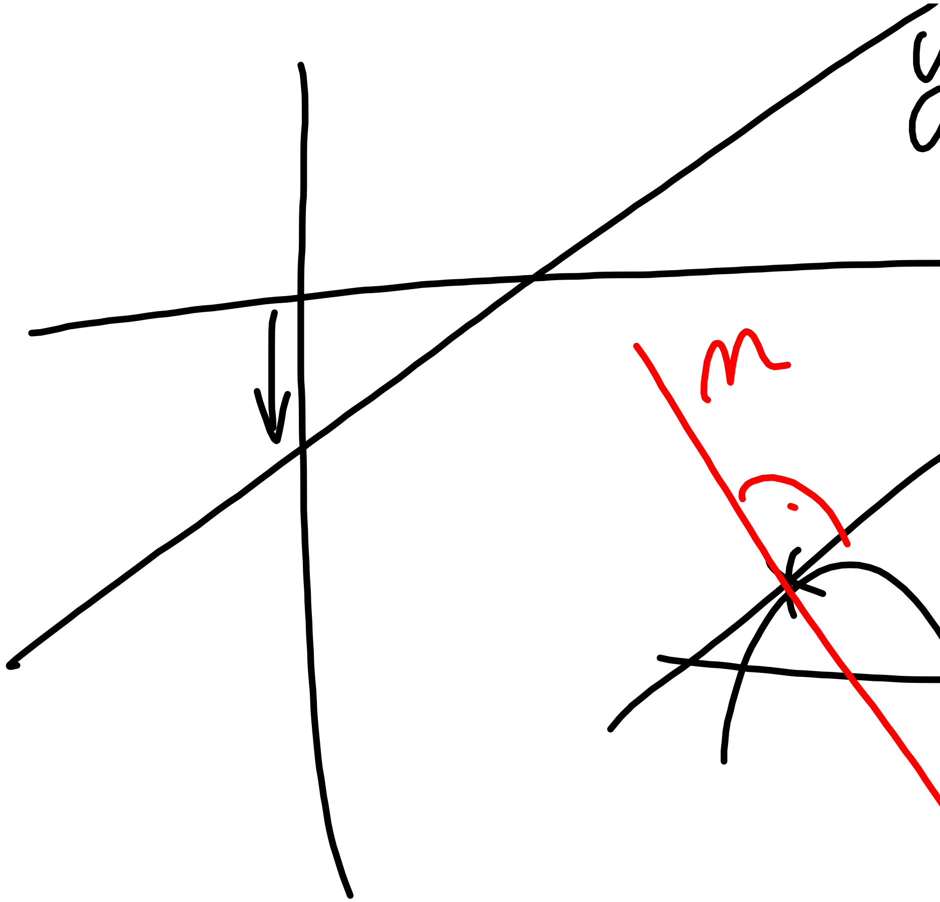


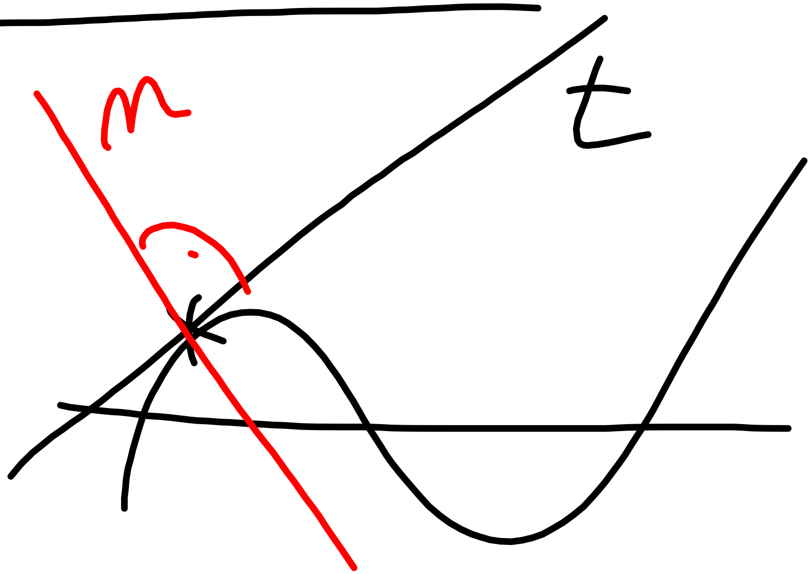
$$\lim_{x\to 0^+} e^{\frac{1}{x}} = \left| e^{\frac{1}{0^+}} = e^{+\infty} \right| = +\infty$$

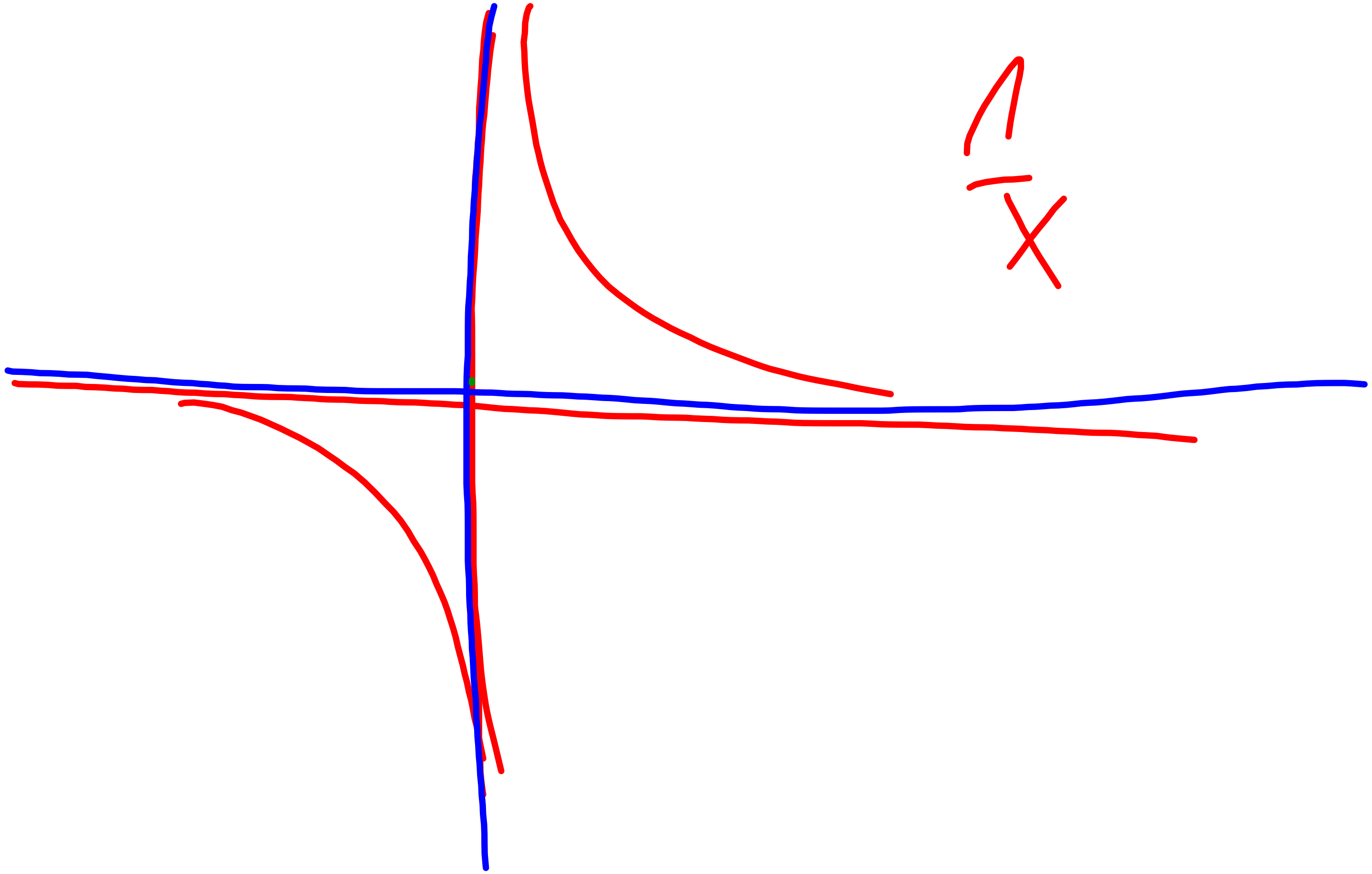
$$\lim_{x\to 0^-} e^{\frac{1}{x}} = \left| e^{\frac{1}{0^-}} = e^{-\infty} = \frac{1}{e^{\infty}} \right| = \underline{\underline{0}}$$

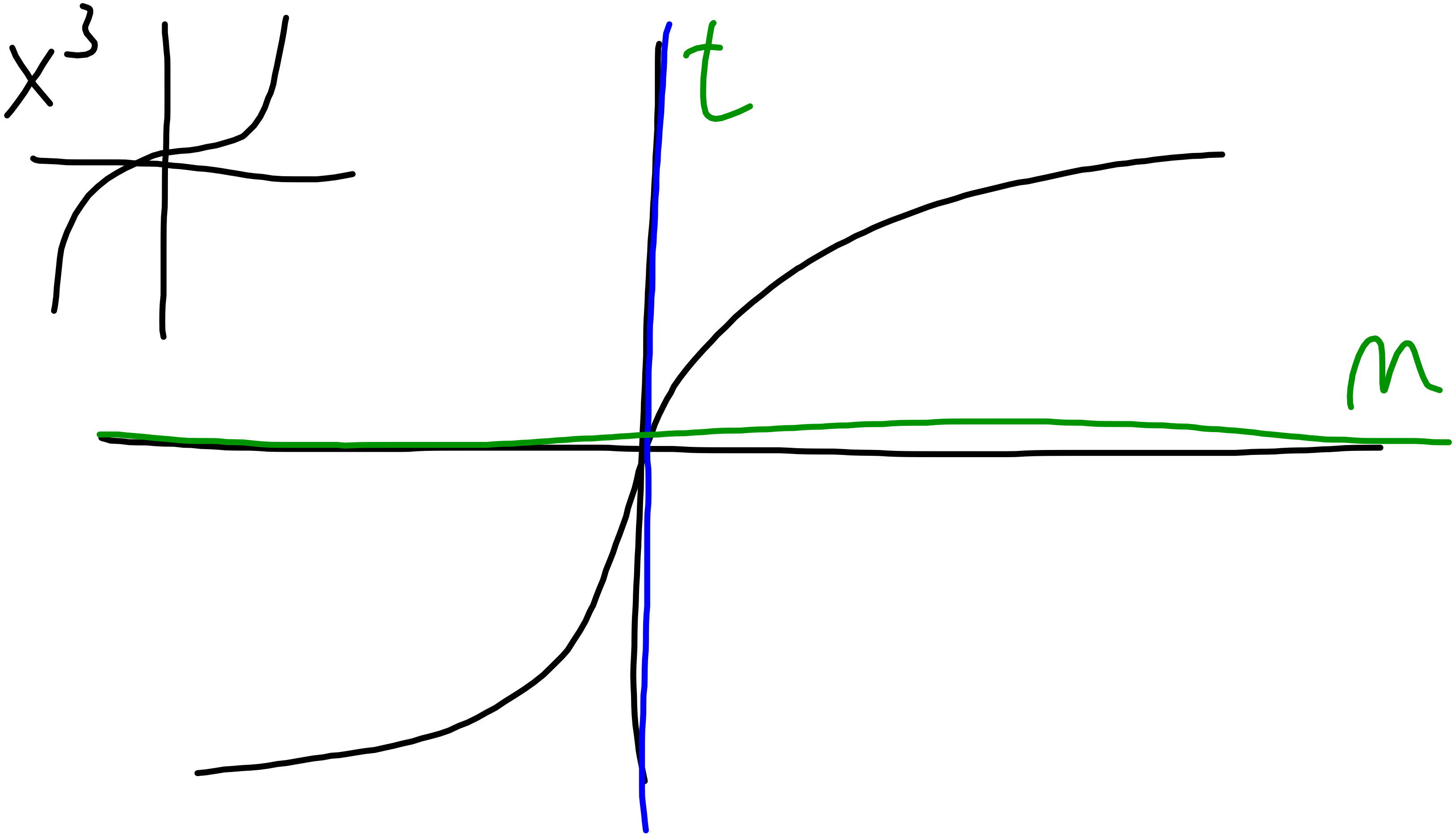


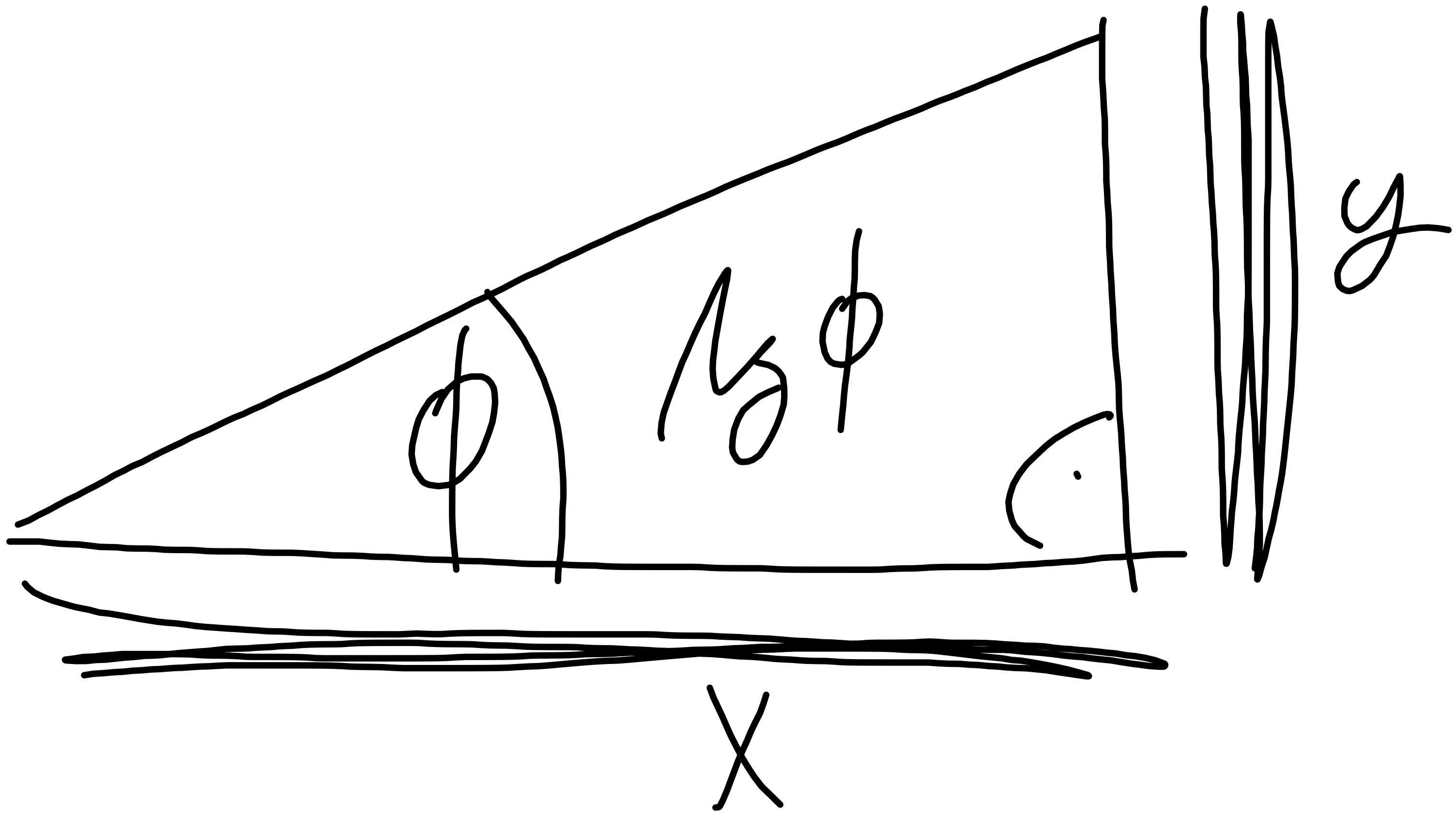
$y = ax + b$






1/x


x^3
t
n


ϕ
$\operatorname{tg} \phi$
y
x