

$$\cos(x+y) = \frac{|AB|}{1} = |AB|$$

$$\cos x = \frac{|AC|}{|AE|}$$

$$\cos y = \frac{|AE|}{1} = |AE|$$

$$\left. \begin{array}{l} \cos x \cdot \cos y \\ = |AC| \end{array} \right\}$$

$$\sin x = \frac{|DE|}{|EF|}$$

$$\sin y = \frac{|EF|}{1} \Rightarrow \sin x \cdot \sin y = |DE|$$

$$|AB| = |AC| - |BC| = |AC| - |DE|$$

$$f: \mathbb{R} \rightarrow \mathbb{R} \quad f(x)$$

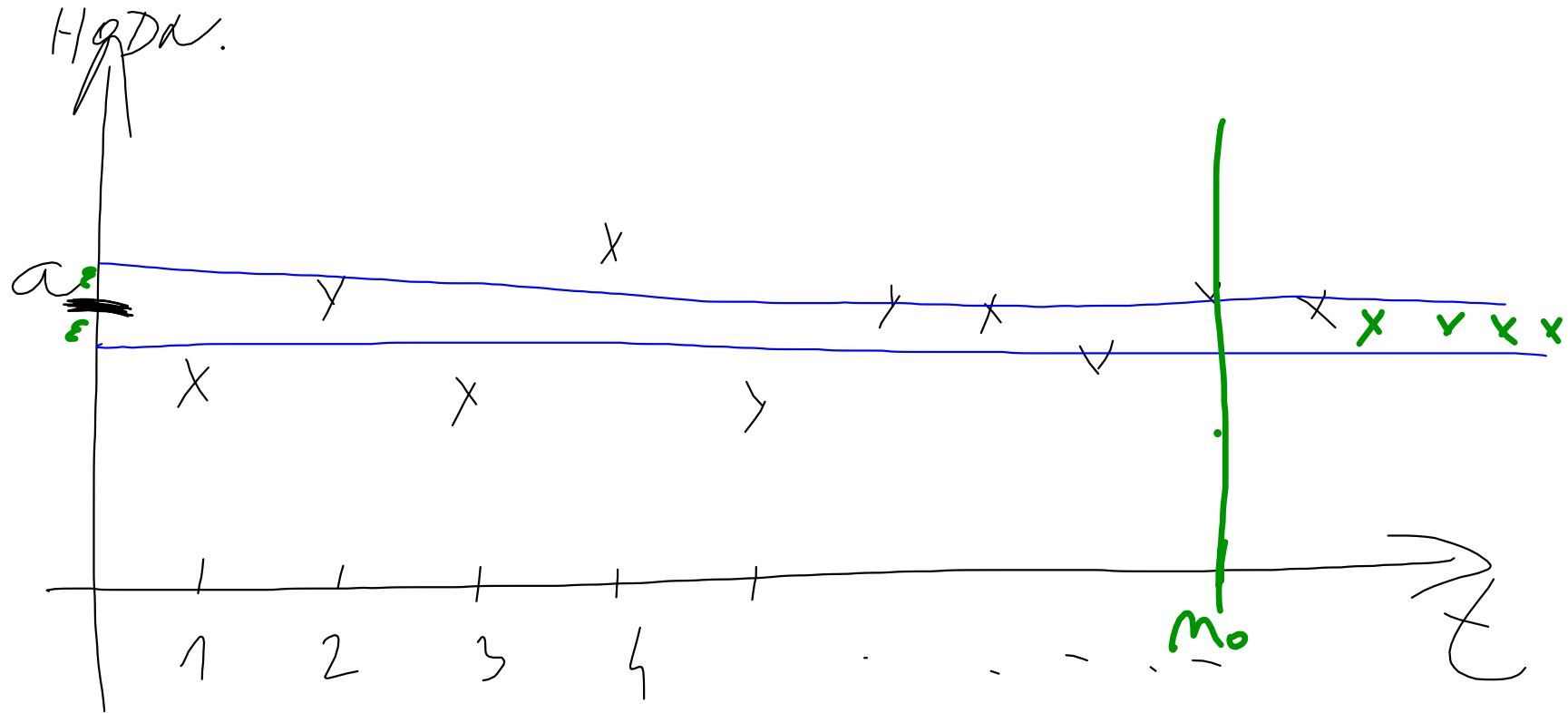
$$\mathbb{N} \rightarrow \mathbb{R}$$

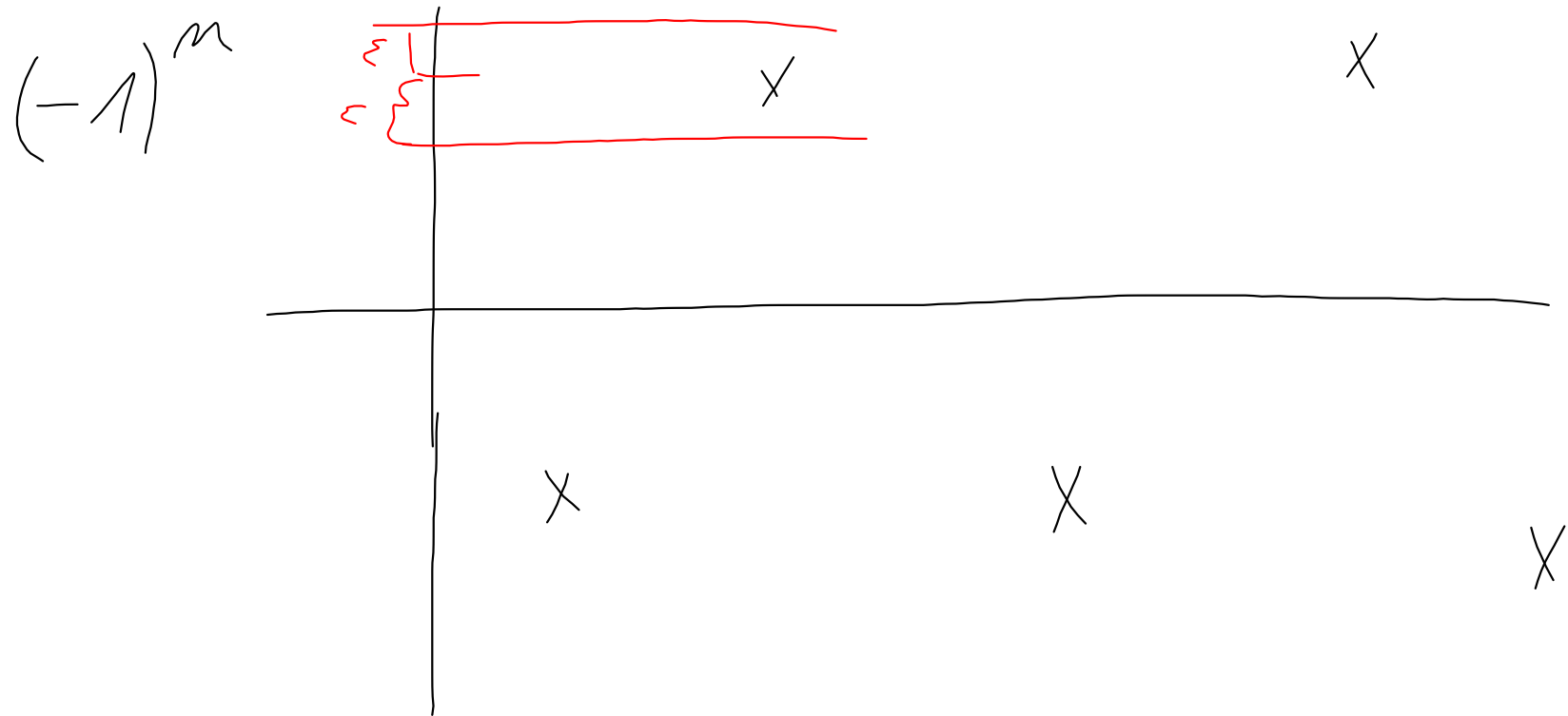
$$f(n), a(n), a_n \dots a_1, a_2, a_3, \dots$$

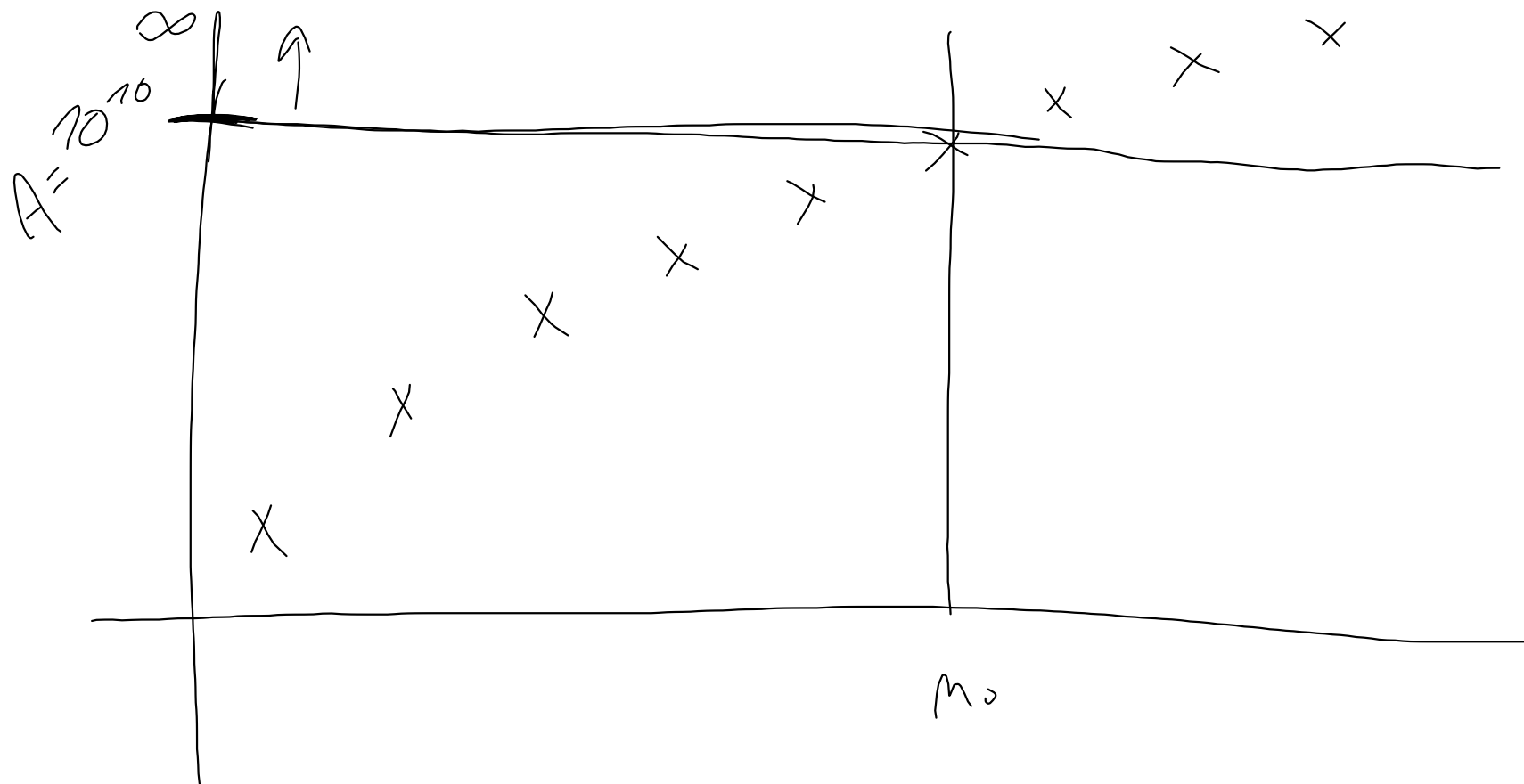
$$a_{-8}, a_{-7}, \dots, a_0, a_1, \dots \rightarrow a_n$$

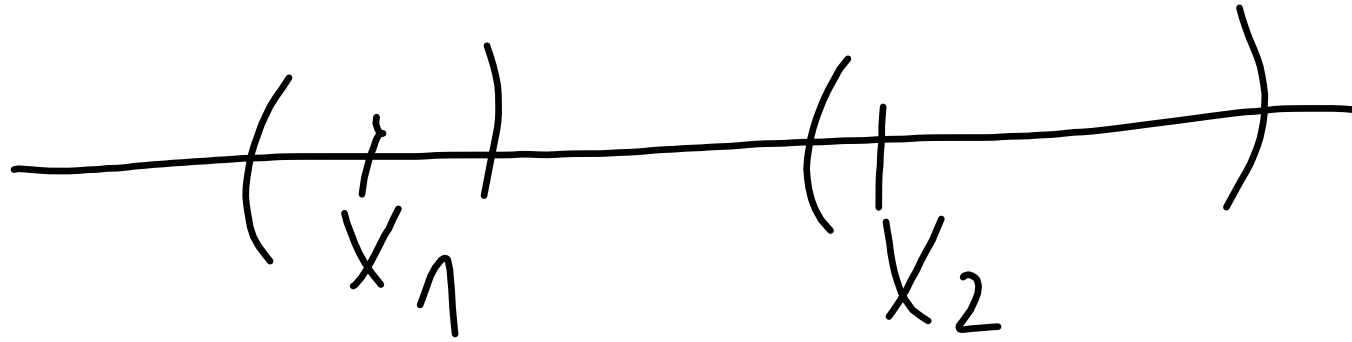
$$m := n + 9$$

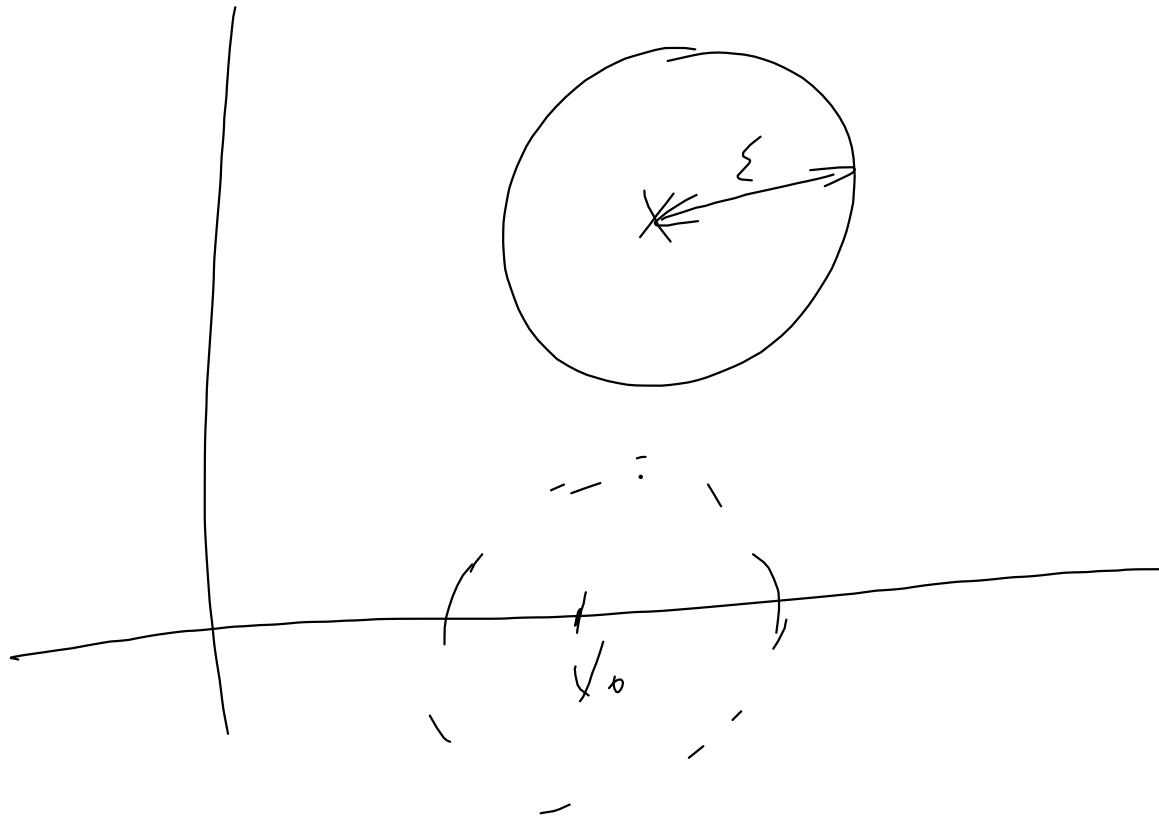
$$a_m \Rightarrow a_1, a_2, a_3, \dots$$













$$[9, 2] = 9 = \lfloor 9, 2 \rfloor$$

$$[0, 8] = 0$$

$$[-5, 4] = -6$$

$$\lceil 9, 2 \rceil = 10$$

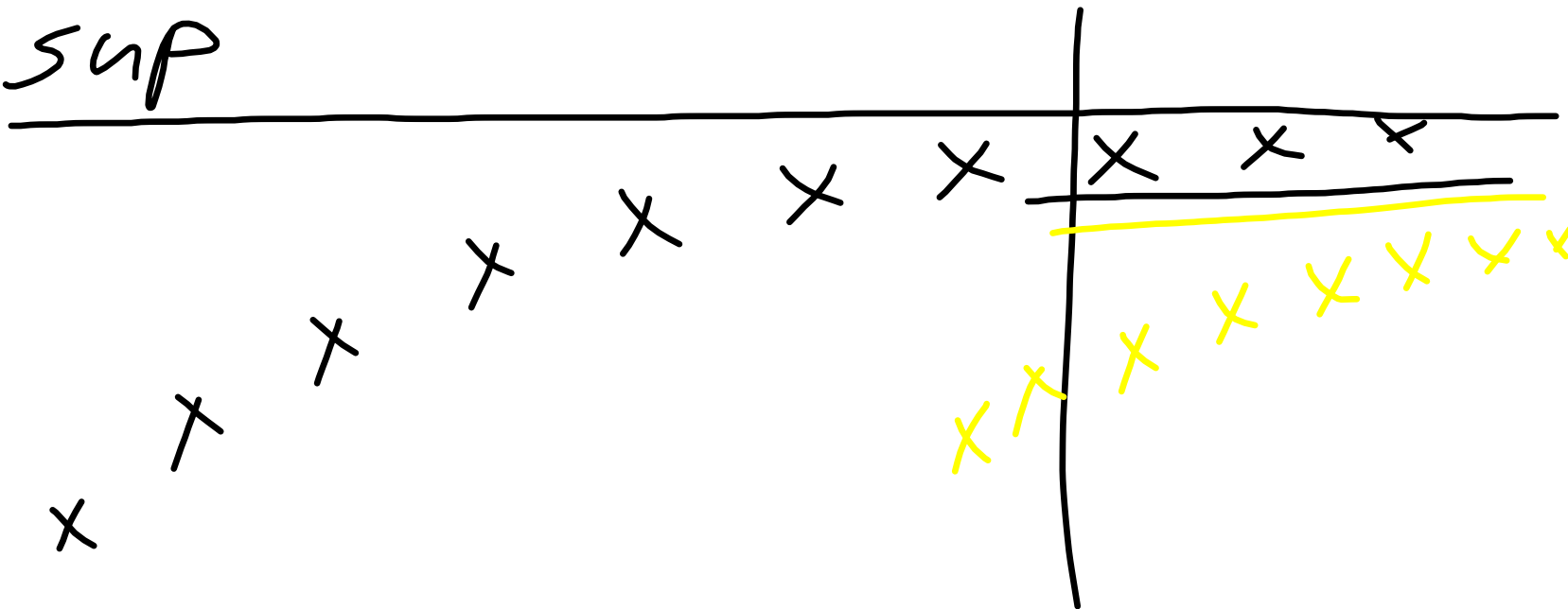
$$\begin{aligned} |5 - 3| &= |5 + (-3)| \leq \\ &\leq |5| + |-3| \end{aligned}$$

$$|b_n - b| < \frac{\epsilon}{2}$$

$$|a_n - a| < \frac{\epsilon}{2}$$

$$|a_n b_n - a b| \leq M \cdot \epsilon + b \cdot \frac{\epsilon}{M}$$

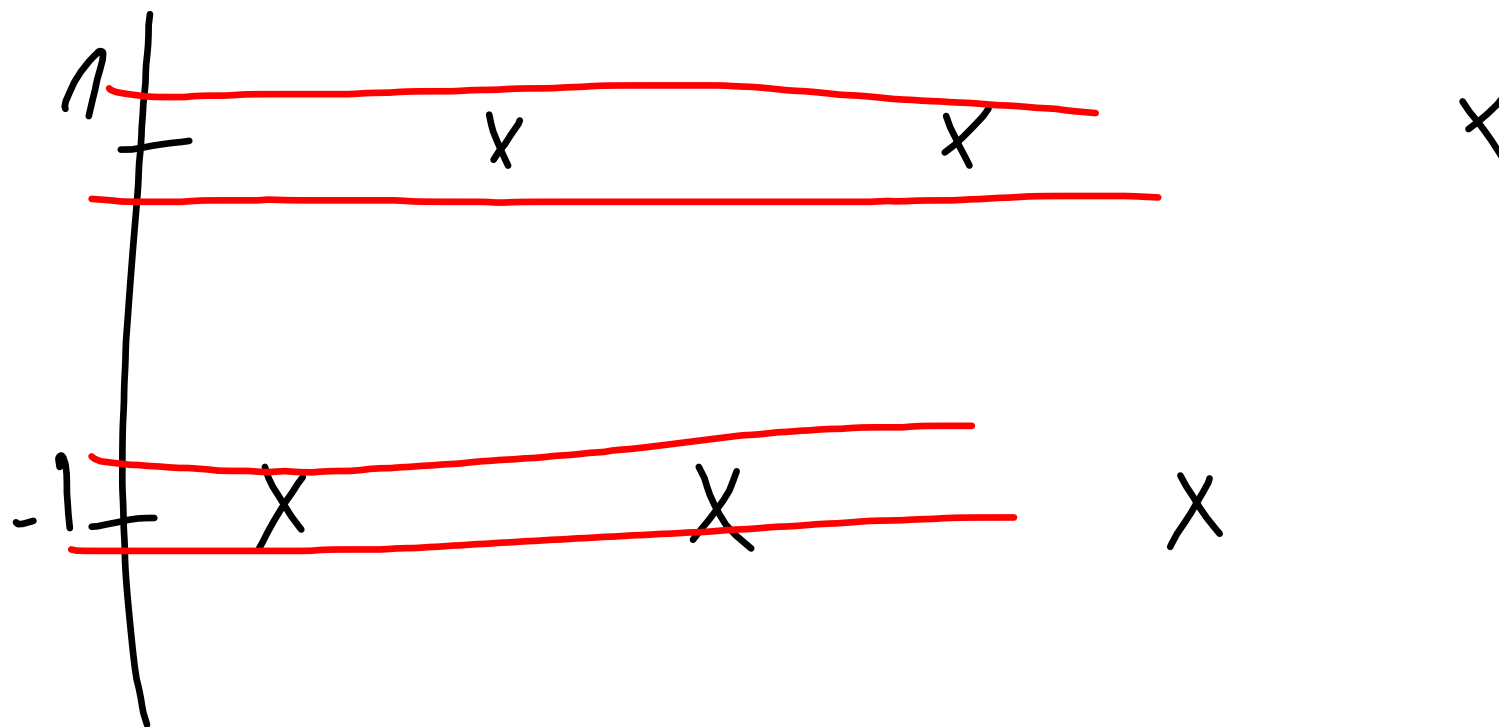
5up



$$\frac{\frac{n}{n-1}}{\frac{n}{n-1}} = 1$$

$$\left(1 - \frac{1}{n^2}\right)^n \approx 1 + n \cdot \left(-\frac{1}{n^2}\right)$$

$$(1 + X)^n, \quad X = -\frac{1}{n^2}$$





$a_n$  $\sin(n), n \in \mathbb{N}$  $\sin 1, \sin 2, \sin 3, \dots$ 