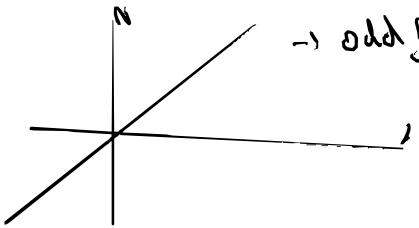
1) $f(t) = \frac{t}{\pi}$ for $t \in]-\pi, \pi[$

$T = 4, L = 2$



→ odd function, $a_n = 0$

$f(t) = \sum_{n=1}^{\infty} b_n \sin(n \cdot t)$, mit $b_n = \frac{1}{\pi} \cdot \int_{-\pi}^{\pi} \frac{t}{\pi} \cdot \sin(n \cdot t) \cdot dt$