$$f: [0; l] \to \mathbb{R} \begin{cases} \sin n, \\ \cos n, \end{cases}$$

$$a_0 = a_n = 0$$

$$b_n = \frac{2}{l} \int_0^l f(x) \sin \frac{n\pi x}{l} dx$$

$$f(x) = \begin{cases} -f(x), x \in [-l; 0) \\ f(x), x \in (0; l], T = 2l \end{cases}$$

$$\text{fot. impare} \Rightarrow f(-x) = -f(x)$$

$$cos$$

$$a_0 = \frac{2}{l} \int_0^l f(x) dx$$

$$a_n = \frac{2}{l} \int_0^l f(x) \cos \frac{n\pi x}{l} dx$$

$$f(x) = \begin{cases} f(-x), & x \in [-l; 0) \\ f(-x), & x \in [0; l] \end{cases}$$

$$\text{fot. pare} \Rightarrow f(-x) = f(x)$$