



Why

We want to discuss a function which repeats itself on regular intervals.¹

Definition

A function $f : \mathbf{R} \rightarrow \mathbf{R}$ is *periodic with period* $\alpha \in \mathbf{R}$ if

$$f(x + \alpha) = f(x)$$

for all $x \in \mathbf{R}$. In this case we call f α -*periodic*.

¹Future editions will introduce this after the functions \sin , \cos , etc.

