We call a meromorphic function $f : \mathbb{C} \to \mathbb{C}$ doubly periodic if there exist two non-zero complex numbers ω_1 and ω_2, such that ω_1 and ω_2 are linearly independent over $\mathbb{R}$ and $f(z + \omega_1) = f(z)$ and $f(z + \omega_2) = f(z)$ for all z in $\mathbb{C}$.

Extra Problem 1. Show the only entire doubly periodic function are the constant functions.