



Homomorphism

1 Why

We name a function which preserves group structure.

2 Definition

A *homomorphism* from group $(A, +)$ to group $(B, \tilde{+})$ is a function $f : A \rightarrow B$ such that $f(e_A) = f(e_B)$ for identities $e_A \in A$ and $e_B \in B$ and $f(a + a') = f(a) \tilde{+} f(a')$ for all $a, a' \in A$.

2.1 Notation

TODO