

Definition 11.25. [111] Let B_1, B_2 be two normed vector spaces. A function $f : B_1 \rightarrow B_2$ is a **linear isometry** if it is linear and if

$$\|z\|_{B_1} = \|f(z)\|_{B_2} \quad \forall z \in B_1 \quad . \quad (11.26)$$