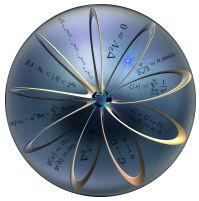

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isometric isomorphism

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Defines	isometrically isomorphic

Let $(X, \| \ \|_X)$ and $(Y, \| \ \|_Y)$ be normed vector spaces. A surjective linear map $T\colon X \to Y$ is called an *isometric isomorphism* between X and Y if

$$\|Tx\|_Y = \|x\|_X \,, \text{ for all } x \in X.$$

In this case, X and Y are said to be isometrically isomorphic.

Two isometrically isomorphic normed vector spaces share the same , so they are usually identified with each other.