## 1 | Operator, $\mathcal{L}(V)$

def

- ullet A linear map from a vector space V to itself is called an operator.
- The notation  $\mathcal{L}(V)$  means  $\mathcal{L}(V,V)$  which is the set of all operators on V.

## 1.1 | results

## 1.1.1 | Axler3.69 Injectivity is surjectivity in finite dimensions

In a finite dimension operator, invertability, injectivity, and surjectivity are equivalent.

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