Notes of "Jordan Normal Form"

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1 Overview

- Root subspace

  - Rmk: The motivation of defining the root subspace
  - Def: The root subspace of an eigenvalue of a linear operator
  - Rmk: The root subspace is an invariant subspace of the linear operator
  - Thm: A direct sum decomposition

- Jordan matrix

- Proof of the existence of Jordan basis

- Proof of the uniqueness of the Jordan normal form of a linear operator

- Find the Jordan normal form of a linear operator and a matrix

- Find the Jordan basis