5.2

→ matrix of basis

- $B = P^{-1}AP$; then B is similar to A
- A is diagonizable if it is similar to some diagonal matrix
- Obtain basis, if count is less than 'n', then, not diagonizable.
- $A^k \rightarrow \lambda^k$
- $A^k = PD^kP^{-1}$
- geometric multiplicity = count of basis i.e dimensions
- algebraic " = power on 'λ' term
- geo ≤ algeb
- geo of each eigen = algeb of each eigen, then diagonalizable