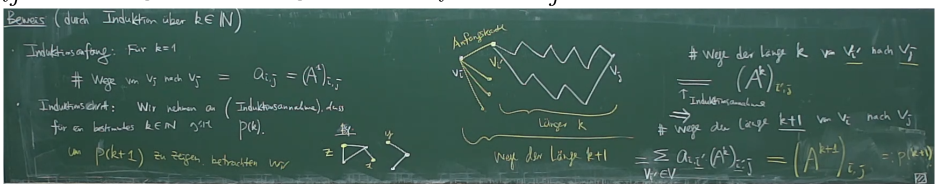
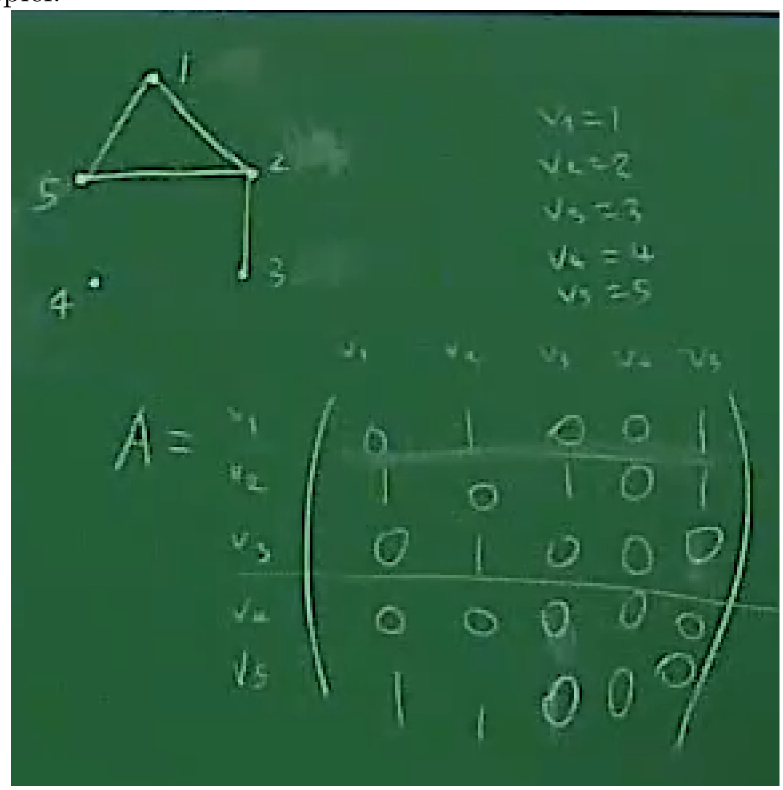
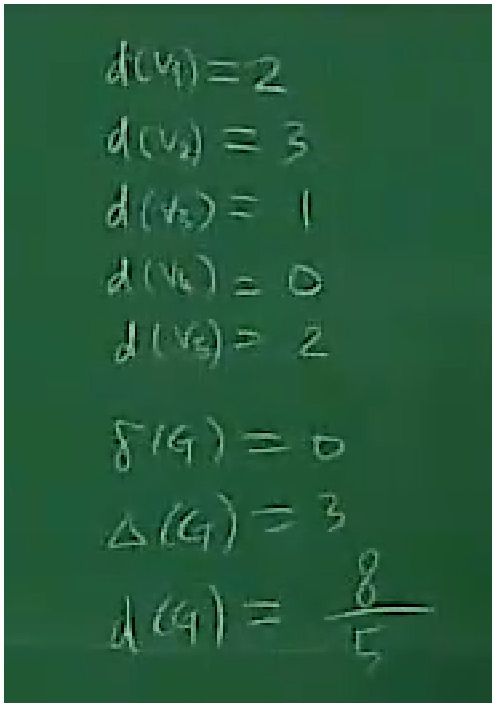
Adjazenzmatrix

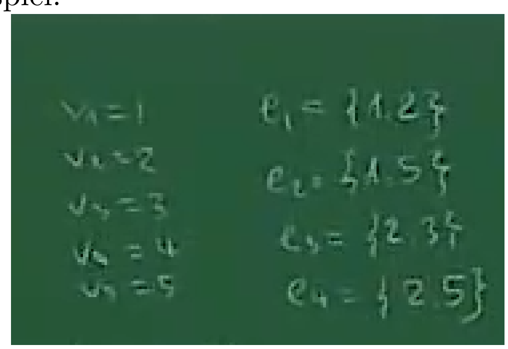
- Adjazenzmatrix ist nxn Matrix mit
  - $a_{ij} = 1$, wenn V_i und V_j benachbart
  - sonst 0
- immer symmetrisch entlang der Diagonale
- $(A^k)_{ij} =$# Wege mit Länge k von v_i nach v_j
  - 

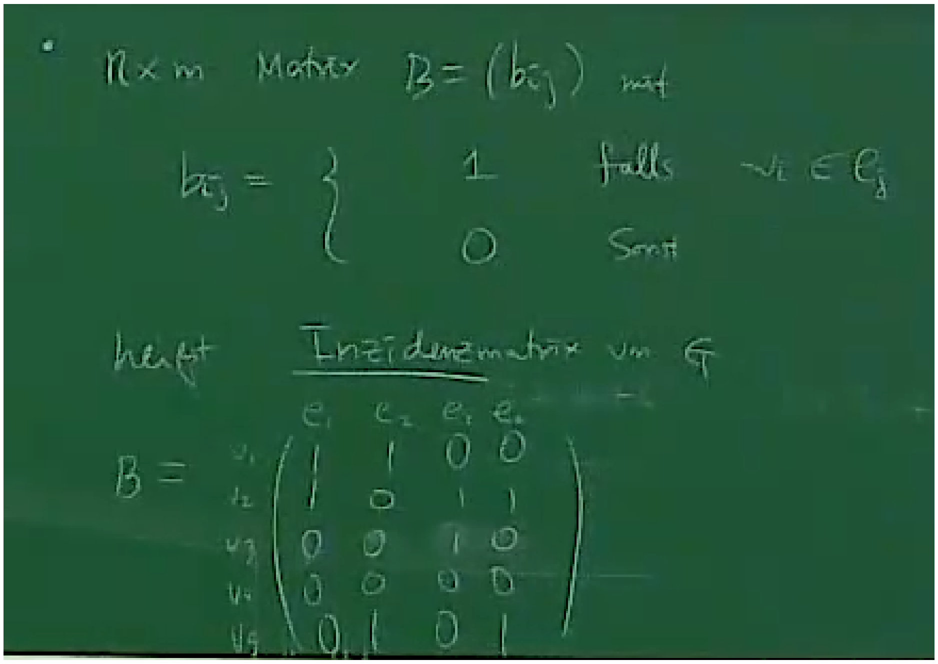
- Beispiel:
  - 

  - Sanity Check - Probe

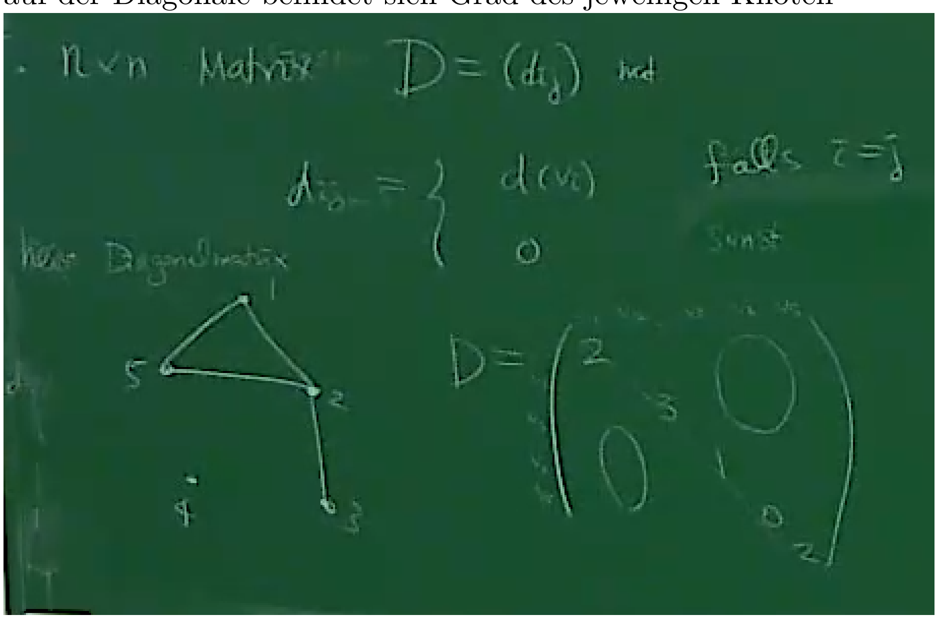
* 

Inzidenzmatrix

- analog zur Adjazenzmatrix
  - 1 wenn inzident
  - sonst 0
- Beispiel:
  - 

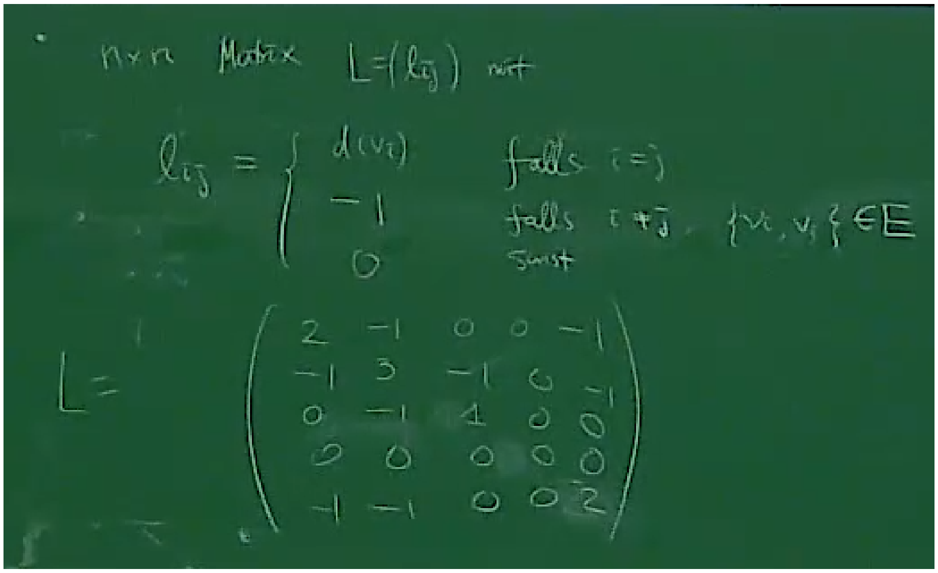
- 

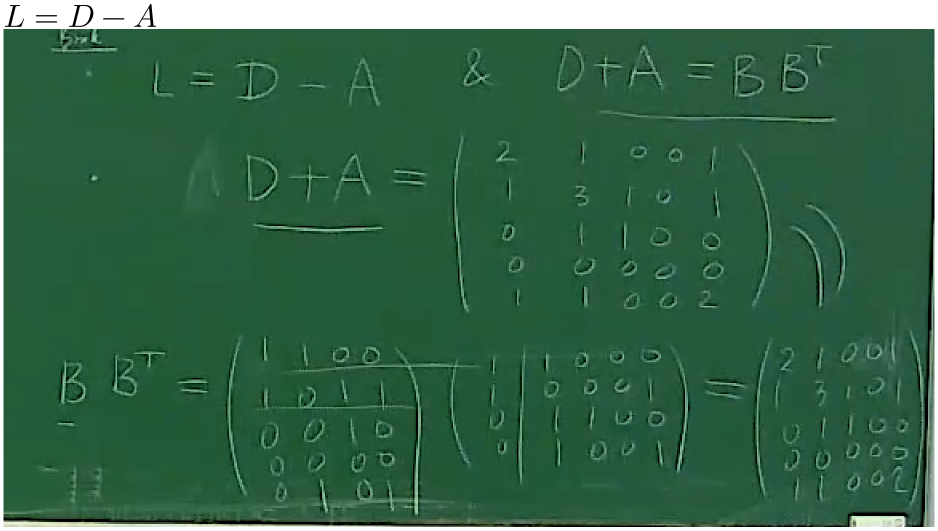
Diagonalmatrix/Gradmatrix

- auf der Diagonale befindet sich Grad des jeweiligen Knoten
- 

Laplace Matrix

- auf der Diagonale befindet sich Grad des jeweiligen Knoten
- ansonsten -1 falls verbunden, sonst 0

- 

- auch über Adjazenz- und Diagonalmatrix bestimmbar
  - $L = D - A$
  - 

[[Graphentheorie]] [[Matrix]]