

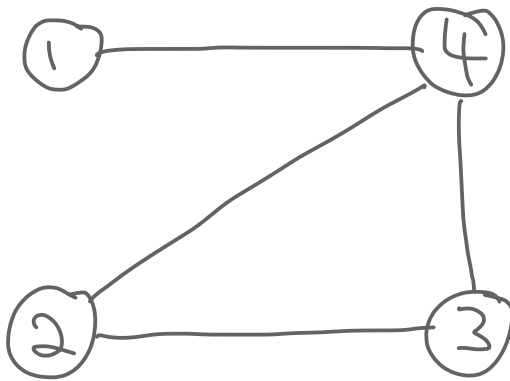
MOD 3.5.19

[10]

$$G = (V, E)$$

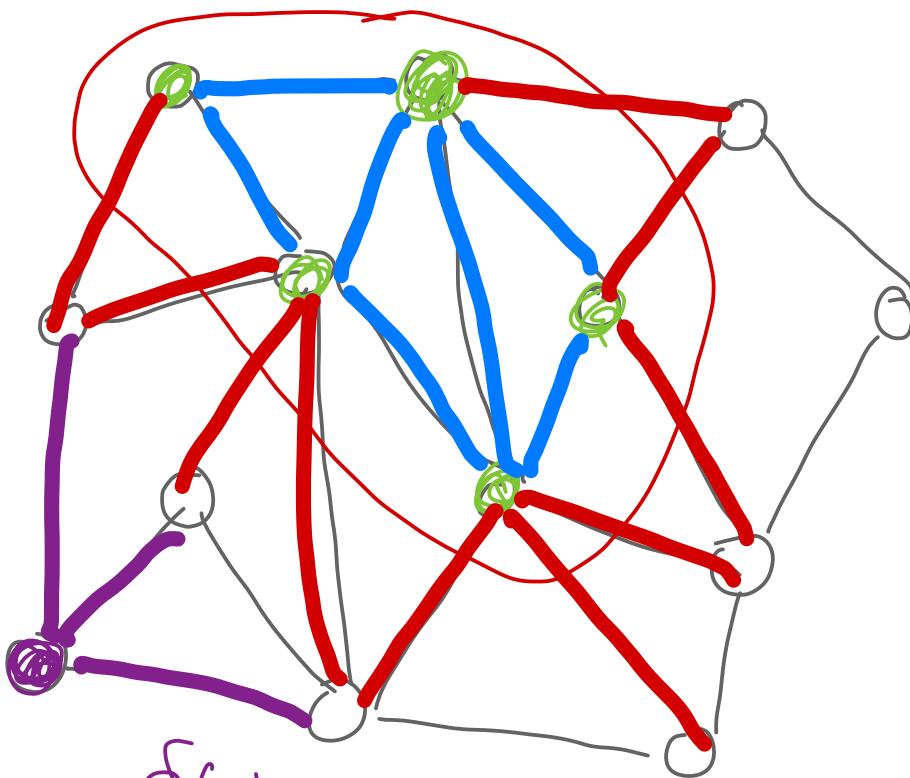
$$V = \{1, 2, 3, 4\}$$

$$E = \{\{1, 4\}, \{2, 3\}, \{2, 4\}, \{3, 4\}\}$$



[11]

S



$\delta(S)$

$E(S)$

v

$\delta(v)$

$\deg(v) = 3$

[12]

$$\left| \{ (v, e) : v \in V, e \in E, v \in e \} \right|$$

||

$$\sum_{e \in E} \underbrace{\left| \{ v \in V : v \in e \} \right|}_2$$

||

$$2|E|$$

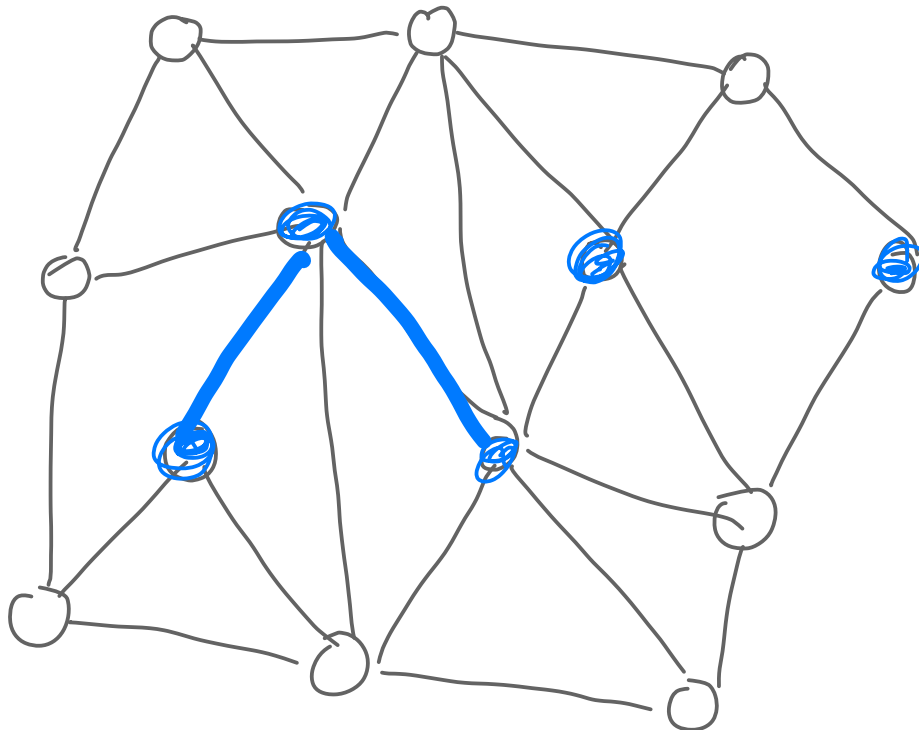
||

$$\sum_{v \in V} \underbrace{\left| \{ e \in E : v \in e \} \right|}_{\deg(v)}$$

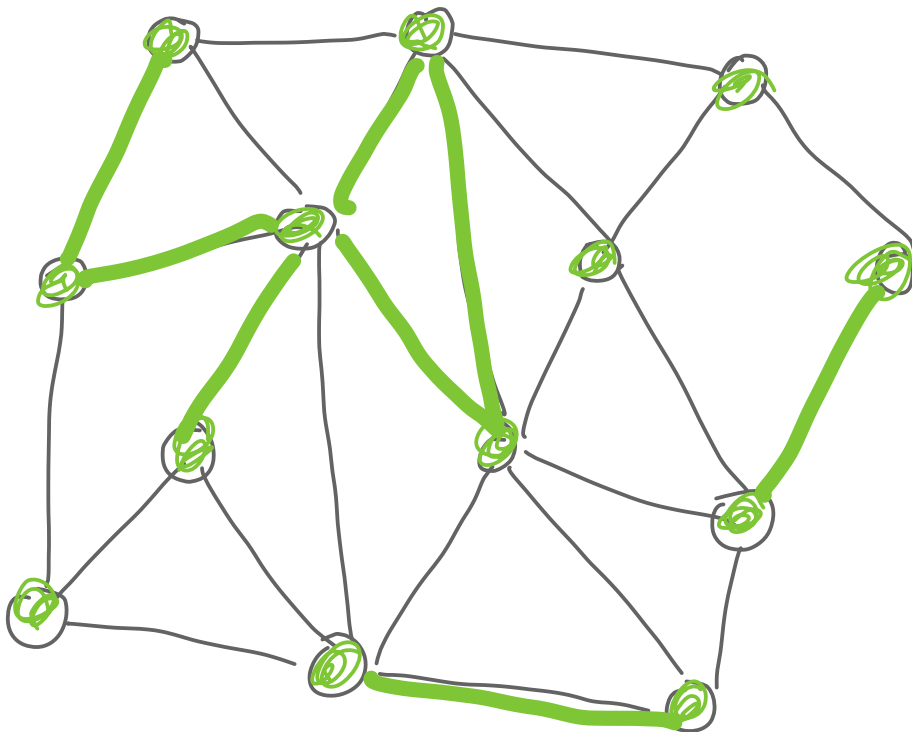
$$\Rightarrow 2|E| = \sum_{v \in V} \deg(v)$$

\Rightarrow # der ungeraden Summanden ist grade.

[13]

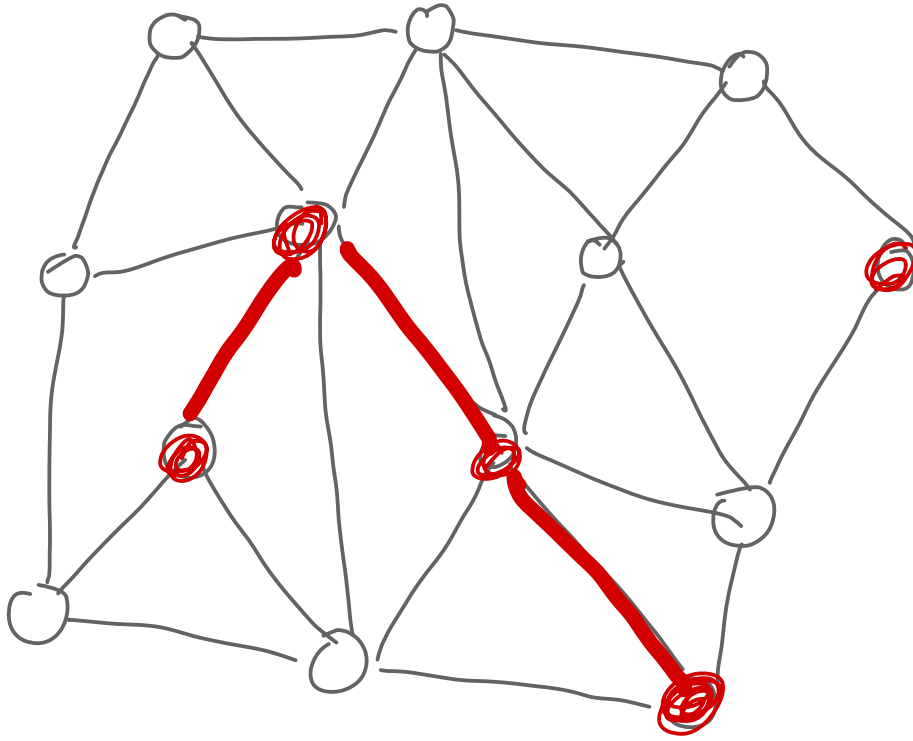


Untersgraph



Spannender Untersgraph

[4]



induzierter Untgraph