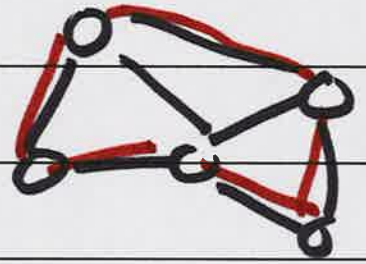
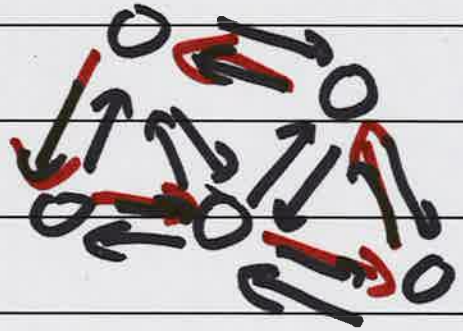
HAM-CYCLE $\leq_p$ DIR-HAM-CYCLE

I_1

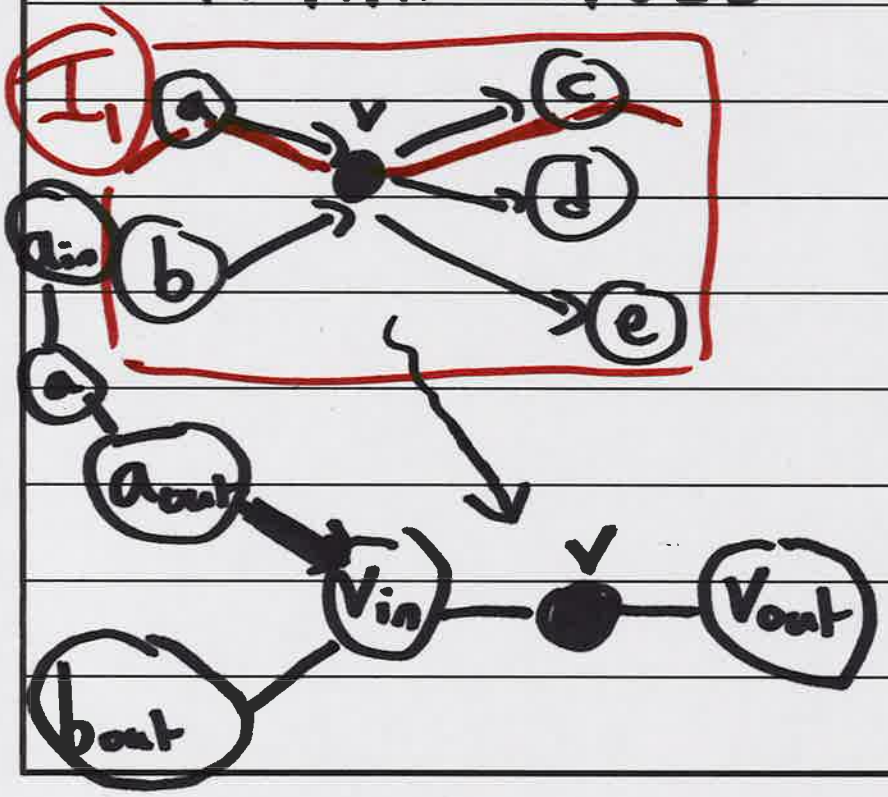


$\Rightarrow$

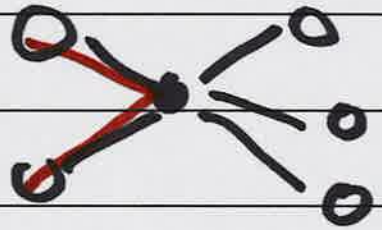
I_2



DIR-HAM-CYCLE $\leq_p$ HAM-CYCLE



$\Rightarrow$

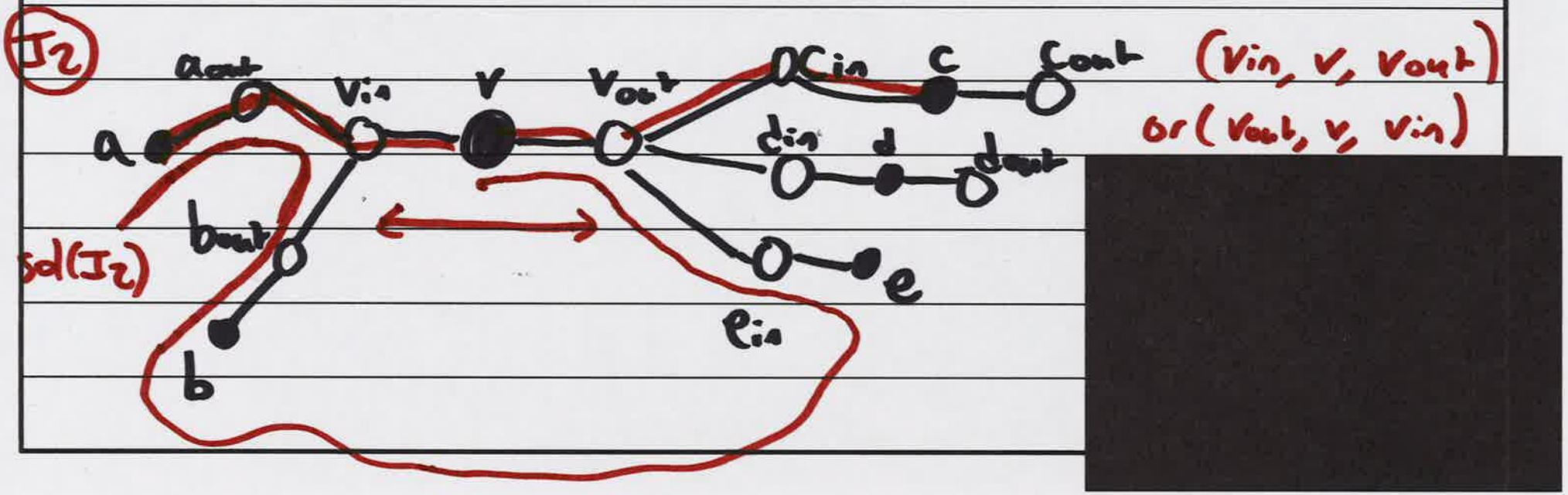


3-SAT $\leq_p$ DIR-HAM-CYCLE

[KT 8.5]

VERTEX-COVER $\leq_p$ HAM-CYCLE

[CLRS 34.5]



2- Partition.

$a_1 \dots a_n$

$$S = \sum_{i=1}^{n} a_i$$

$\exists I \subseteq \{1, \dots, n\}$ s.t.

$$\sum_{i \in I} a_i = \sum_{i \notin I} a_i = \frac{S}{2}$$

[redacted]