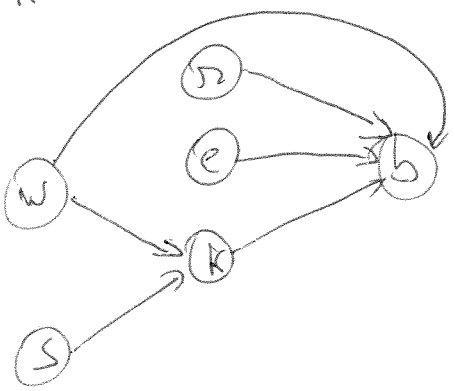
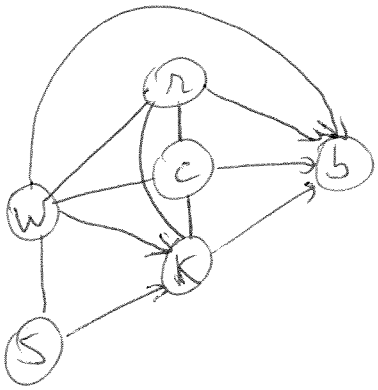
$s \perp\!\!\!\perp b \mid K$

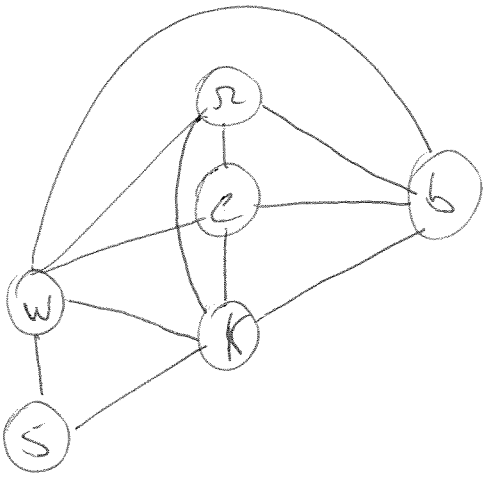
1



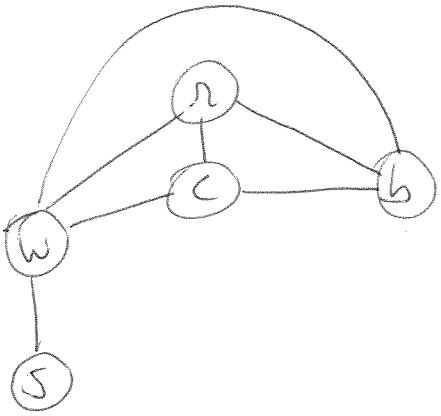
2



3



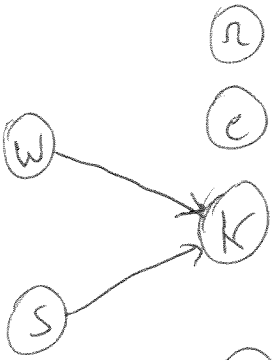
4



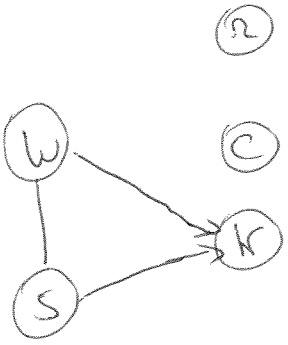
there is a path between s and b, so we cannot prove that $s \perp\!\!\!\perp b \mid K$

$\{a, c\} \perp\!\!\!\perp K$

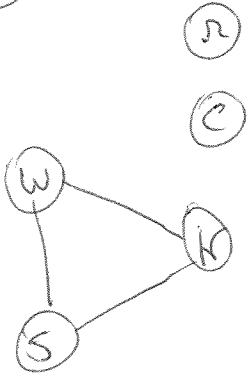
1



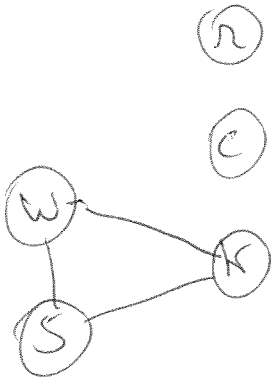
2



3



4



So, it is true that $\{a, c\} \perp\!\!\!\perp K$