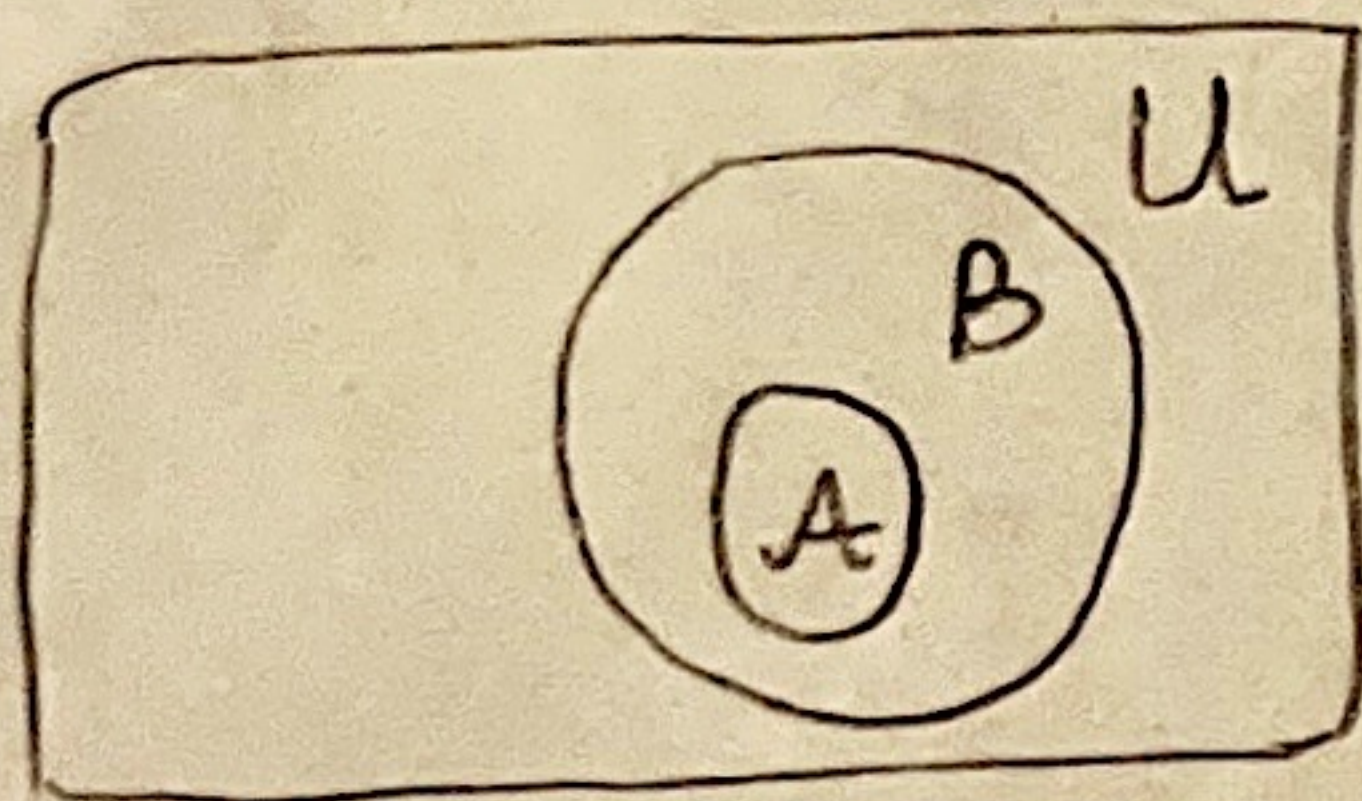


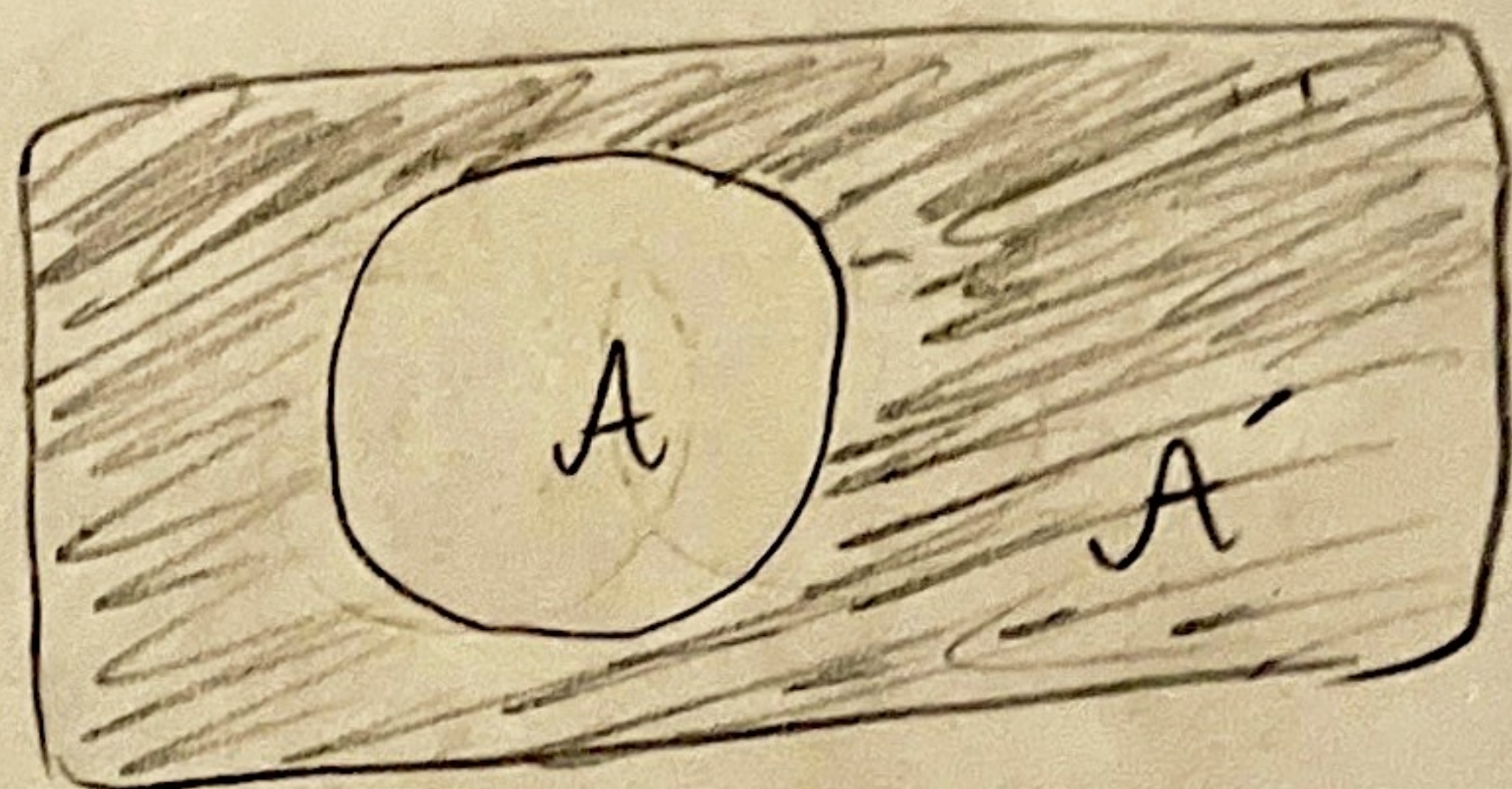
① Logical implication. ($A \Rightarrow B$)
 is equivalent to the following expressions:
 $A\bar{B}$ is false, $\bar{A} + B$ is true, $A = AB$

($A \Rightarrow B$) means if A is true, then B must also be true.

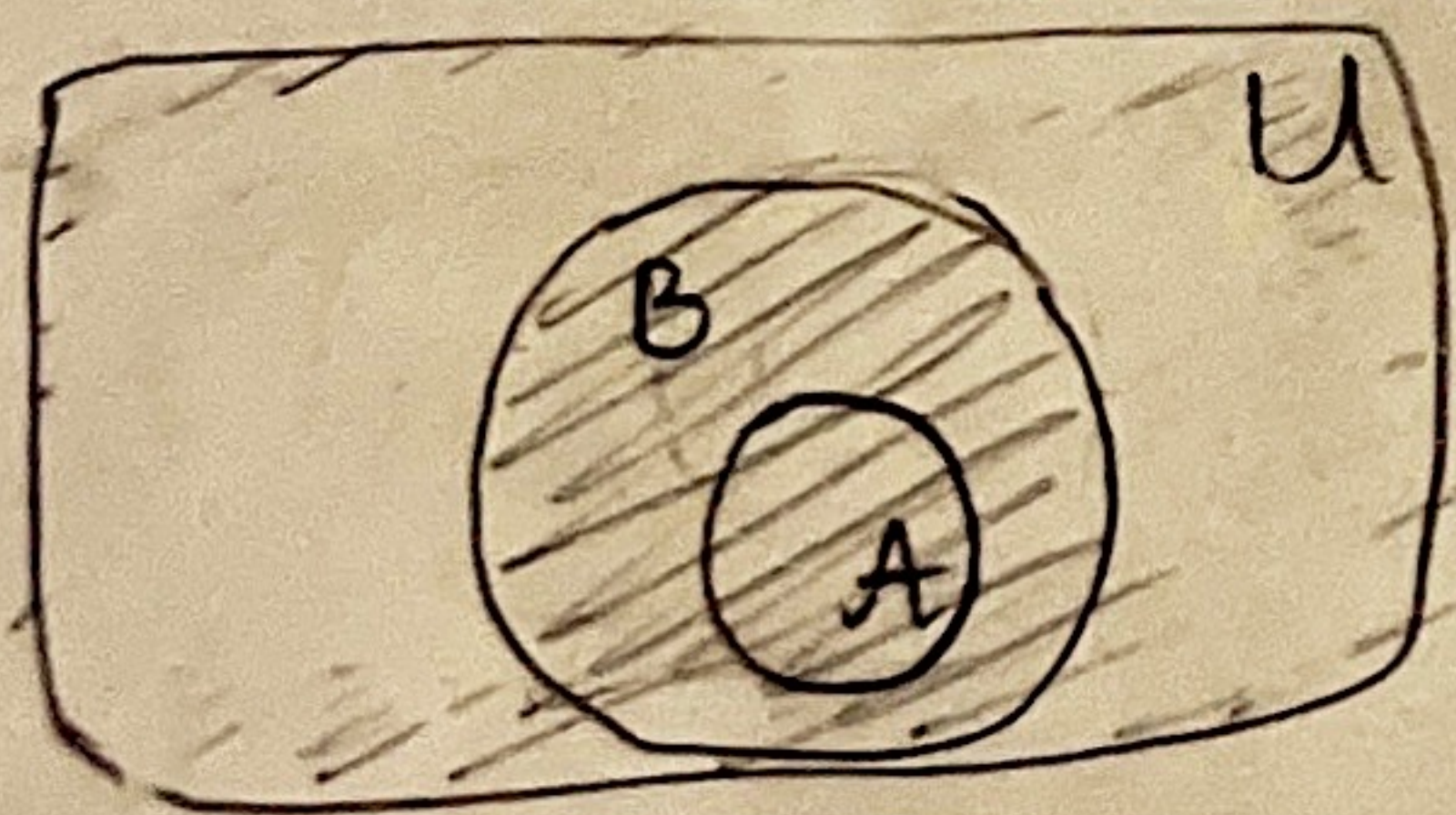
(a) $A \Rightarrow B$



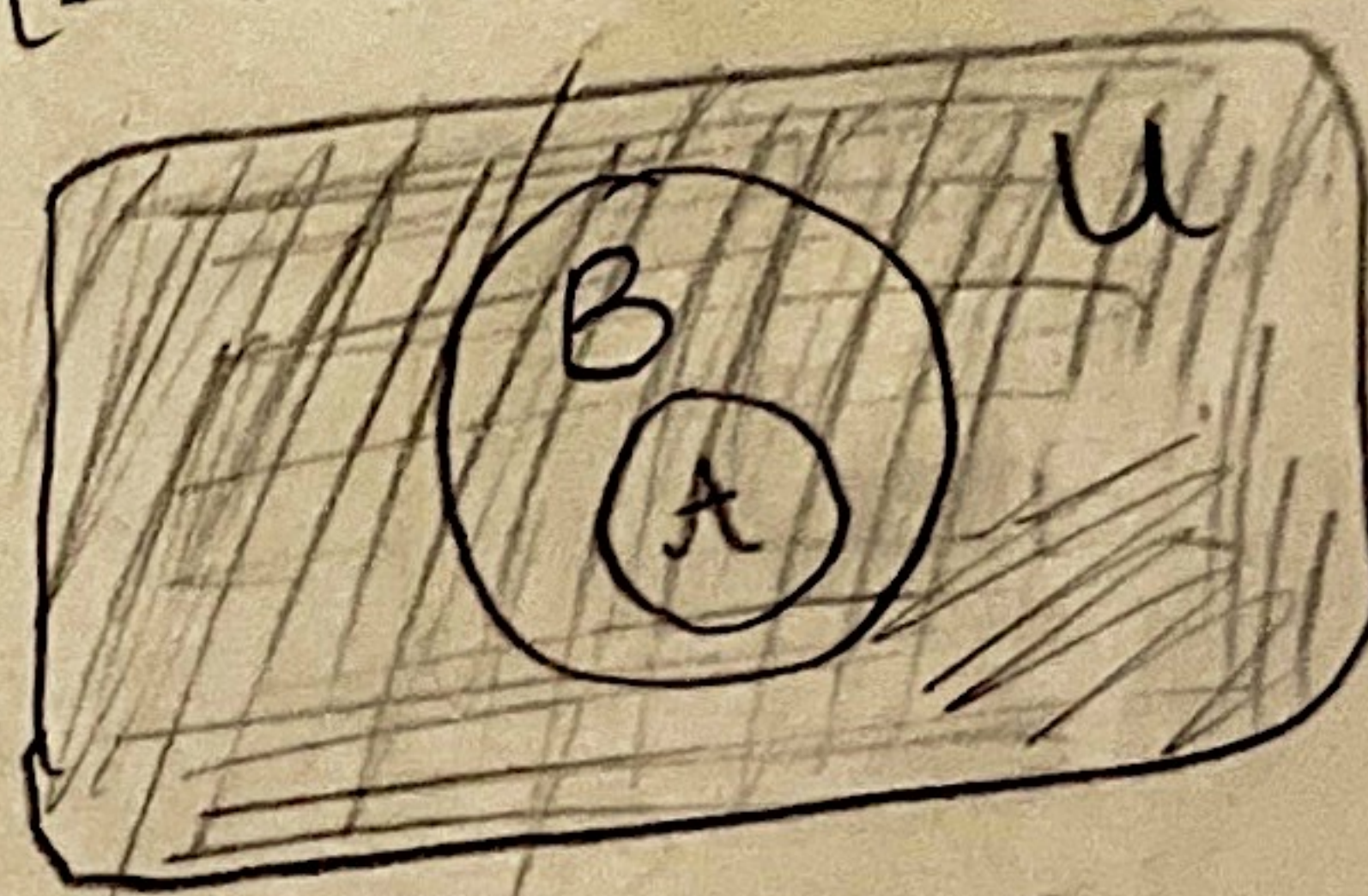
(b) $A\bar{B}$ is false:
 Means it represents part of
 A that is outside of B



(c) $\bar{A} + B$ is true

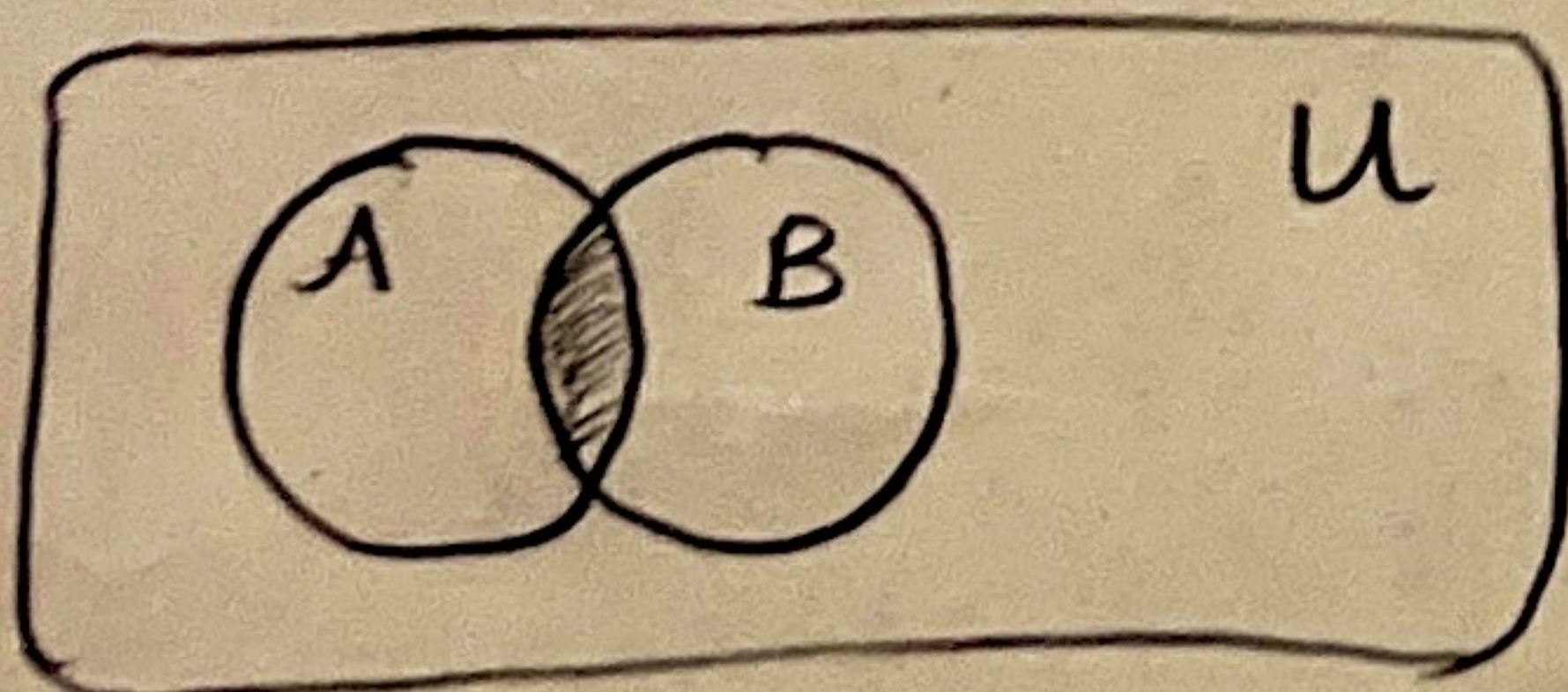


(d) $A = AB$

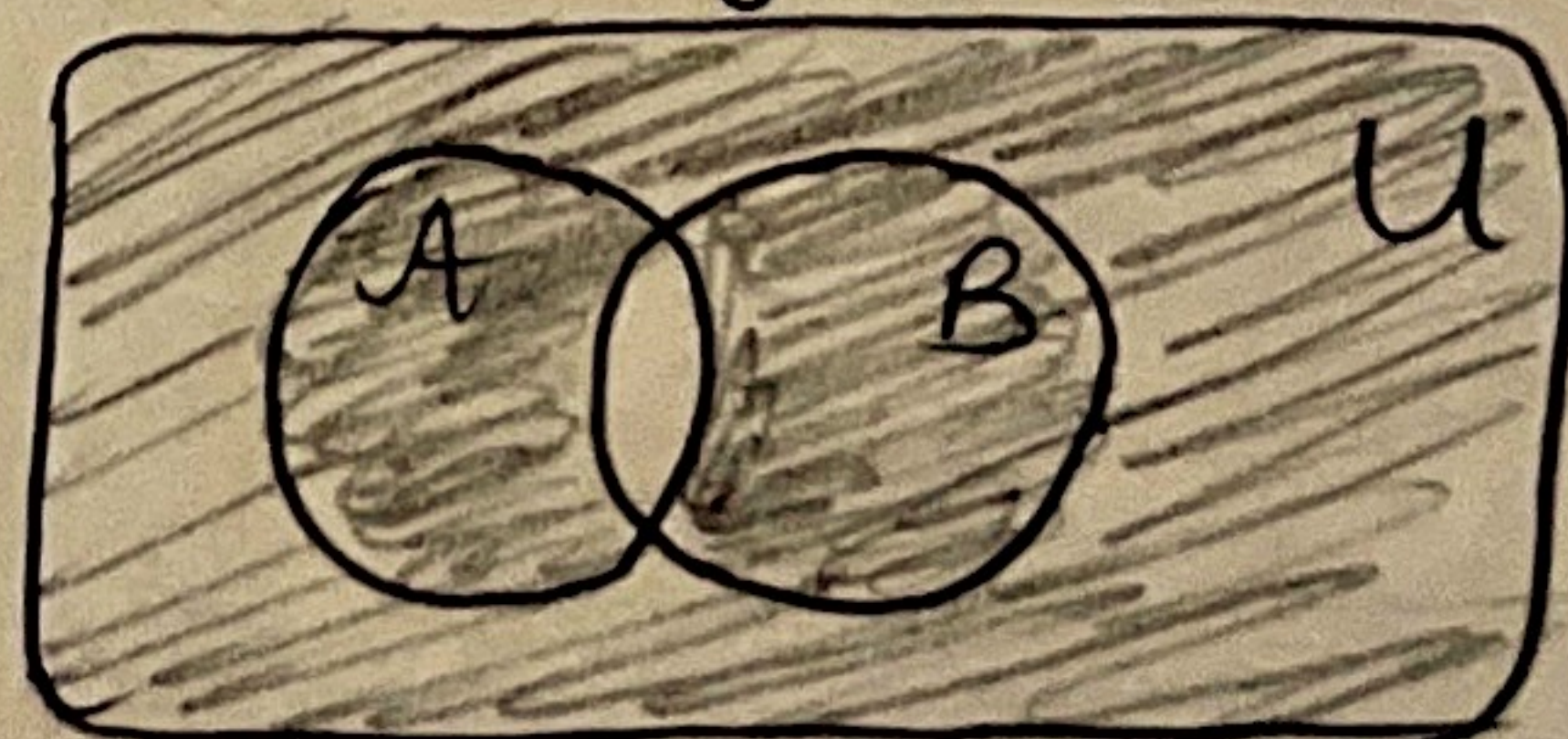


② \overline{AB}

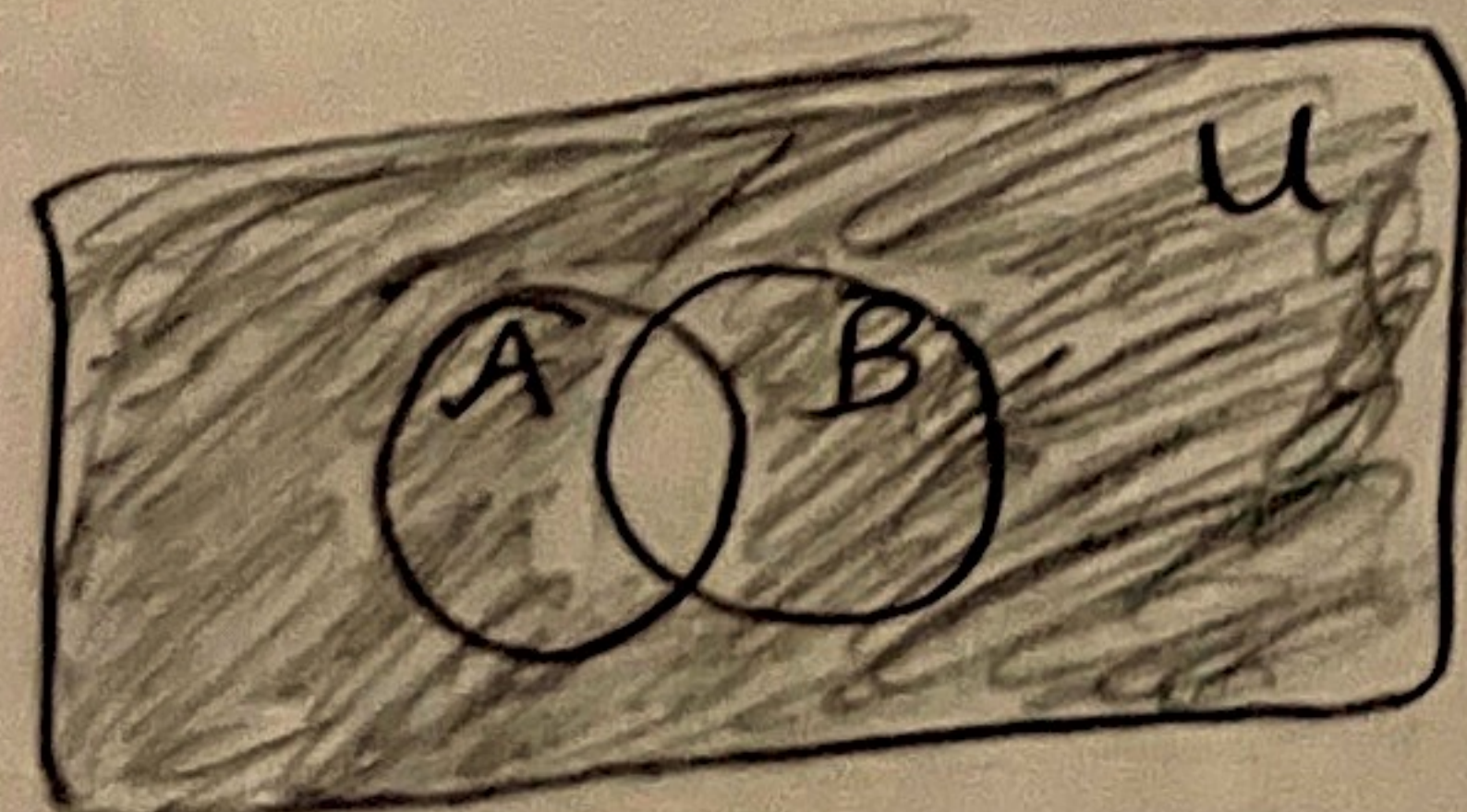
(a) AB



(b) \overline{AB} (Negation of AB)



(c) $A' + B'$



A' represents everything
 out of A and B' represents
 everything outside of B .

\overline{AB} means
 anything outside
 of $A \cup B$

Therefore, $\overline{AB} = A' + B'$