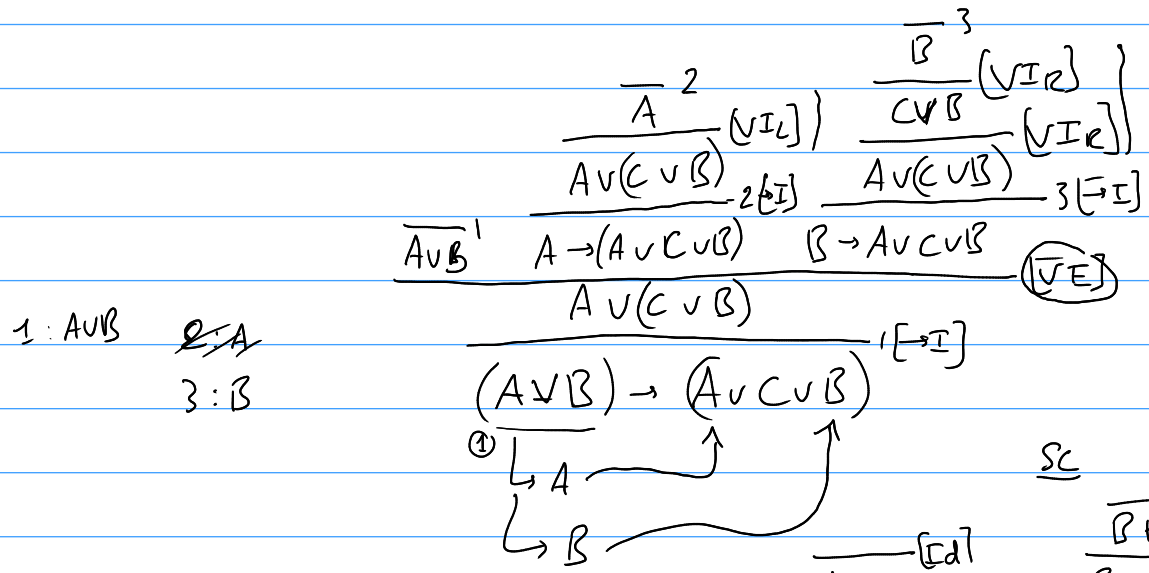
Predicate Logic - proofs & semantics

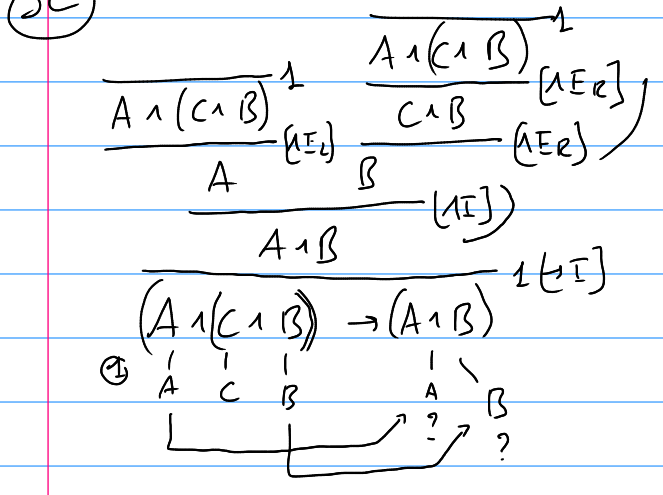
- $(A \vee B) \to (A \vee (C \vee B))$ ND

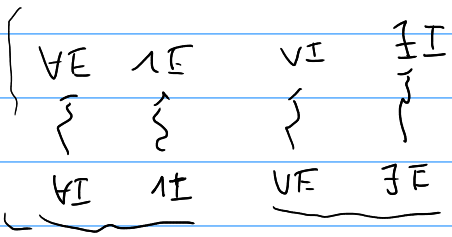


- $(A \wedge C \wedge B) \to (A \wedge B)$

$A_1, \dots, A_n$
$\Gamma \vdash A$

SC



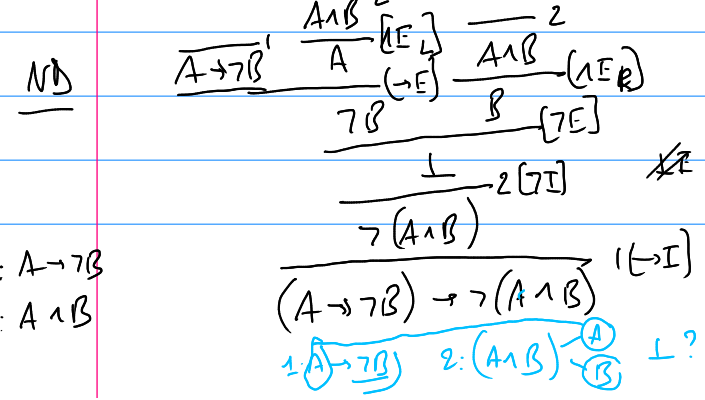


1 : A∧(C∧B)

F

- $(A \to \neg B) \to \neg(A \wedge B)$

ND



valid? soundness
sat.? ✓ soundness

SC

A	B	¬B	A→¬B	A∧B	¬(A∧B)	F
T	T	F	F	T	F	T
T	F	T	T	F	T	T
F	T	F	T	F	T	T
F	F	T	T	F	T	T