

Modus Ponens	$A, A \rightarrow B$	$B$
And introduction	$A, B$	$A \wedge B$
And Elimination	$A \wedge B$	$A, B$
Double Negation	$\neg \neg A$	$A$
Unit resolution	$A \vee B, \neg B$	$A$
Resolution	$A \vee B, \neg B \vee C$	$A \vee C$

Satisfiability is connected to inference via the following

$\models B \models \alpha$  if and only if  $(\models B \wedge \neg \alpha)$  is unsatisfiable (true in no models)

### Resolution

- CNF: Conjunctive Normal Form  
POS form
- Resolution can be applied only if a sentence is in CNF