

## 0.1 Resolution rule

### 0.1.1 Proof by resolution

If we have a string of or statements,  $A \vee B \vee C$ , and another which contains the complement of one element  $X \vee \neg B \vee Y$ , we can infer:

$$A \vee C \vee X \vee Y$$

If the second statement has only one formula, then we have:

$A \vee B \vee C$  and  $\neg B$  implying  $A \vee C$