## Deduction

## Syllogism ('modus ponens')

Suppose P and Q are statements, that  $P \implies Q$  is true, and that P is true. Then Q is true.

## Indirect Proof

Suppose that P and Q are statements, that  $P \Longrightarrow Q$  is true, and that Q is false. Then P is false.

## Elimination

Suppose that  $P \lor Q$  is true, and P is false. Then Q is true.