

3.3. Negations as premises

3.3.0. Overview

A second group of rules for negation reverses the roles of an affirmative sentence and its negation.

3.3.1. Indirect proof

The basic principles for negation describe its role as a premise only in *reductio* arguments but a *reductio* is always available as an argument of last resort.

3.3.2. Using lemmas to complete *reductios*

The role negative resources play will be to contradict other sentences; since what they contradict must often be introduced as a lemma, a use of lemmas is built into the rule for exploiting negative resources.

3.3.3. More examples

These new rules permit some new approaches to entailments that could be established using the last section's rule; but they also support some further entailments.

3.3.4. Approaching derivations

Derivations are now more varied in form and sometimes more complex than in the last chapter; but each rule can be applied independently of the others, so the variation and complexity are the result of a series of choices, each of which reflects a simple description of the circumstances.