

Isabelle/HOL Exercises

Logic and Sets

Elimination of Connectives

In classical propositional logic, the connectives $=$, \vee , \neg can be replaced by \longrightarrow , \wedge , *False*. Define corresponding simplification rules as lemmas and prove their correctness. (You may use automated proof tactics.)

What is the result of your translation for the formula $A \vee (B \wedge C) = A$? (You can use Isabelle's simplifier to compute the result by using the simplifier's *only* option.)