Exercise 29 Do the calculation from Example 2.2.2 for the formula $\neg(I \vee \neg B) \vee \neg F$ from Example 2.1.4 and the values $\mathcal{A}(I) = 1$ and $\mathcal{A}(B) = \mathcal{A}(F) = 0$.

Exercise 30 Make the truth table for the formula from Exercise 29.

Exercise 31 Give a model for $\neg(p \wedge q) \vee \neg r$.

Exercise 32 Show the following.

    1. $A \wedge \neg A$ is unsatisfiable.

    2. $A \to \neg A$ is satisfiable.

Exercise 33 Express modus tollens, modus tollendo ponens, and modus ponendo tollens in propositional logic.

Exercise 34 Show, using truth tables, that the modi from Exercise 33 are valid.

Exercise 35 For P the Datalog program from Exercise 9, determine $v(P)$.