Pop Quiz
Philosphy 3

1 Indirect Truth Tables

Determine whether the following arguments are valid or invalid by using the Indirect Truth Table Method.

1. $p \rightarrow q$
   $p \vee q$
   $\neg q$
   $\therefore \neg(p \rightarrow q)$

2. $p \rightarrow q$
   $q \rightarrow r$
   $\neg r$
   $\therefore \neg p$

2 Rules of Inference

Write arguments in English using the following rules of inference:

3. Modus Ponens

4. Disjunctive Syllogism

5. Modus Tollens

3 Equivalence

Write down two propositions in our formal language that are logically equivalent.