

Logic pset 6

Resources: HLW [Ch 3](#) and [Lecture 8](#)

Problems: You may use any of the rules of inference, including reductio ad absurdum, to prove the following sequents.

1. $P \rightarrow Q \vdash \neg(P \wedge \neg Q)$
2. $(P \wedge Q) \rightarrow \neg Q \vdash P \rightarrow \neg Q$
3. $P \rightarrow \neg P \vdash \neg P$
4. $\neg(P \rightarrow Q) \vdash P \wedge \neg Q$