



Assignment 1, Due Mon., 24 Jan.

Construct natural deduction proofs for the following sequents:

1. $\vdash p \rightarrow (q \rightarrow p)$
2. $p \rightarrow (q \vee r) \vdash (p \rightarrow q) \vee (p \rightarrow r)$
3. $(\neg p \wedge \neg q) \vdash \neg(p \vee q)$
4. $\neg(p \vee q) \vdash (\neg p \wedge \neg q)$
5. $\vdash (\neg p \rightarrow p) \rightarrow p$

Solutions in the suggested order: 1,4,5,3,2