Philosophy 142: Conditional Logics Exercises II

November 17, 2008

1. Show that the following fail in C^+, but hold in S:

(a) $\Diamond p \models \neg(p > (q \wedge \neg q))$
(b) $p > q, \neg(p > \neg r) \models (p \wedge r) > q$

2. Show that the following is false in C_2: $(p \vee q) > r \models (p > r) \wedge (q > r)$.

3. Determine whether the following hold in each of C_1 and C_2:

(a) $p > (q \vee r) \models (p > q) \vee (p > r)$
(b) $p > q, \neg q \models \neg q > \neg p$
(c) $\Diamond p, p > q \models \neg(p > \neg q)$