CSCI 1900 – Tarnoff
June 7, 2005 Homework

In-class exercise (not to be turned in):

Show that the following conditional statements are tautologies:

- $\sim(p \Rightarrow q) \Rightarrow p$
- $(p \Leftrightarrow q) \equiv ((q \Rightarrow p) \wedge (p \Rightarrow q))$

Homework (to be turned in Wednesday, June 8):

Show that the following conditional statement is a tautology:

$\sim(p \Leftrightarrow q) \equiv ((p \wedge \sim q) \vee (q \wedge \sim p))$