

HW 10**Due:** 1 October 2009**Prof. Caldwell****COSC 2300**

Give sequent proofs and then translate those proofs into English for the following sequents. You will want to read the section of the lecture notes attached to this assignment to get the rules and for some example translations.

Remember the rule of thumb, wait to apply the $(\exists R)$ and $(\forall L)$ rules until later in the proof when possible.

1. $\vdash \neg(\forall x.\neg P(x)) \Rightarrow (\exists x.P(x))$

2. $\vdash \neg(\exists x.P(x)) \Rightarrow \forall x.\neg P(x)$