

## Assignment #2

### Formal Statement Calculus

Exercises, pg. 36:

For #1, #2, #3, you can use any of the previous Exercises or Propositions to justify steps in proofs.

1. (a), (c)      **Hint:** The proof for #1c is a bit tricky. If you can't see your way through, try using the Deduction Theorem to show that  $\vdash ((p_1 \rightarrow (p_1 \rightarrow p_2)) \rightarrow (p_1 \rightarrow p_2))$ .
2. (a), (c)
3. (a), (c)
- 5.