• The final will be 1:00 to 3:00 p.m. on Friday, Dec. 12 in Hasbrouck Addition room 20. Please arrive on time and do not sit right next to anyone else. Please also do me a favor and use the bathroom before the exam starts.

• The final will be closed book, closed notes, no computers including no phones, no calculators, no laptops, no tablets, no wrist computers, etc.

• The final will include a one-page crib sheet which I will finalize and post on next Tuesday morning. This will be similar to the previous test crib sheets. Please send suggestions marked with folder “final” via Piazza before Monday morning for anything additional you would like to see on it. I will try to accommodate all requests that I consider reasonable.

• I’m now going to tell you the exact format of the final. There will be four problems worth 25 points each.

1. Problem 1 will be some questions of the kind that you did in d3 and d10, i.e., given Natural Deduction “proofs”, provide a justification or counterexample for each line besides the assumption lines.

2. Problem 2 will be an inductive proof similar to inductive proofs that you have been shown or asked to do before including in d6, d8, t2, several homeworks, and many lectures.

3. Problem 3 will be similar to Problem 2 on hw7, i.e., for each of the following sets, say whether or not it is regular and prove your answer.

4. Problem 4 will be similar to many problems you’ve had before: for each of the following FO formulas, say what they mean in English and say whether they are FO-VALID, FO-UNSAT, or neither. If neither, then give a world where it is true and one where it is false. Otherwise, justify your answer with a clear reason or informal proof.

Suggestions for preparing for the final: With an idea towards being able to solve the above four kinds of problems, go over the homeworks, discussions, tests and lecture slides which I have posted. Think about sending me suggestions for the crib sheet.

I will post a Sample Final by early Saturday morning. There will be a review session Sunday 4:00 p.m. and I will post solutions to the sample final by then.

I will have my final office hour Monday at the usual time.

As always, relax and get plenty of sleep the night before the final.