

## MATH 347 HW 2

due September 18, at the beginning of class

### HOMEWORK GUIDLINES

Obviously, your solutions need to be complete and correct, but to receive full credit your write-up should also satisfy the following:

- All the important logical steps in the proof should be present and fully explained.
- All assumptions should be clearly identified.
- Your solutions should be clear and concise. If a sentence does not further the reader's understanding of the solution then it has no place in your write up.
- Use full and grammatically correct English sentences. Mathematical symbols should be used as a tool to distill complex mathematical relationships into a readable format.

Moreover, in order to obtain full credit for the homework, you must write down, in the very least, an attempt at a solution for each problem.

### PROBLEMS

Do the following problems from your book: 2.4, 2.5, 2.10, 2.16, 2.17, 2.22, 2.30, 2.32, 2.44. Also answer the following:

- (1) Show that  $(p \vee q) \wedge \neg q$  implies  $p$ .
- (2) Are  $(p \rightarrow (q \rightarrow r))$  and  $(p \wedge q) \rightarrow r$  equivalent statements?