## Math 3000, Homework assignment \#3 (first part)

- Read section 1.2.
- Do Practice 1.1.9 for yourself. (Not to be turned in)
- Turn in all of the following problems, unless otherwise indicated:

Problem 1. Write the negations of the following statements:
(a) $p \wedge(q \vee r)$
(b) $[(\sim p) \Rightarrow q] \wedge \sim q$
(c) $p \Leftrightarrow \sim q$

Problem 2. Do problem 2(e) on p. 9
Problem 3. Do problems 3 and 4 on p.9. (Turn in only problem 4)
Problem 4. For statements (a), (b) and (d) in problem 12 on p.11, do the following:
(i) Express the statement in symbols (as indicated in the problem)
(ii) Negate the statement symbolically
(iii) Write the negation in words

