Homework 1, MORALLY Due Feb 5, DEAD-CAT DAY 7

1. (10 points) When is the first midterm (give date and time)? When is the second midterm (give date and time)? When is the final (give date and time)? By when do you have to inform Professor Gasarch that you cannot make the timeslot of the first or the second midterm? Of the final?

2. (30 points) Give a Propositional Formula on four variables that has exactly three satisfying assignments. Give the satisfying assignments.

3. (30 points)

   - Do a truth table for $(p \Rightarrow q) \Rightarrow r$.
   - Do a truth table for $p \Rightarrow (q \Rightarrow r)$.
   - Are they equivalent? If NOT then state a row where they differ.

4. (30 points) Show that, for all $n \geq 1$, there exists a formula that is satisfied by exactly n satisfying assignments. Give the satisfying assignments. (This is NOT by induction. Just give the Formula. You may use DOT DOT DOT (that is "...") though it should be clear what you mean.)