Model Checking	SS 2012	703521
Week 4		March 28, 2012

Homework

1. Show that 2-SAT is **P**
2. Consider the proof that there are no infinite derivations in DPLL.
   - Would the proof work for pure literals? Show a counterexample.
   - Extend the proof to also work for pure literals.
3. Is the complexity of equality logic problems over $\mathbb{R}$ different than that of equality logic over $\mathbb{N}$?
4. Transform the formula below to an equisatisfiable formula using Tseitin's transformation, Plaisted & Greenbaum and Wilson's method:
   - $\neg((a \rightarrow b) \wedge (a \vee (c \vee d)))$
5. Prove that Plaisted & Greenbaum's transformation gives an equisatisfiable CNF for every formula.