## $\mathbf{CS}\ \mathbf{254}\ \mathbf{HW3}$

## Grading

- Due 2014-01-30 @ 2pm. (Right before class).
- Please send all submissions (both LATEXed and handwritten) to cs254-win1314-hw@lists.stanford.edu

## Solving 10 instances of SAT w/ one 2-approximating #SAT Query

Let A be an oracle such that on input  $\phi$ , it outputs a 2-approximation to the number of satisfying assignments of  $\phi$ . Given 10 SAT instances  $\phi_1, ..., \phi_{10}$ , using only one query to A and polynomial time, determine which formulas are satisfiable.