

**Introduction To Algorithms
CS430**

**Spring 2014
HomeWork 10**

Sample Problem—No need to turn in

1. Problems 34.1-1, 34.1-3, 34.1-6.
2. Show that \leq_P relation is a transitive relation on problems. That is, show if $P_1 \leq_P P_2$ and $P_2 \leq_P P_3$, then $P_1 \leq_P P_3$.
3. Estimate the input size for knapsack and TSP problems. Are the solutions of knapsack and Traveling salesperson problems polynomial in their input length?