

CS 461, HW6

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Due: December 7th, 2003

Note: each of these problems (except the extra credit) can be done in half a page.

1. Exercise 25.2-1
2. Exercise 25.2-6
3. Exercise 34.5-1 (hint: to show the problem is NP-Hard, reduce from the problem Clique discussed in lecture)
4. The problem **IndependentSet** asks: “Does there exist a set of k vertices in a graph G with no edges between them?”. Show that this problem is NP-Complete. (hint: to show the problem is NP-Hard, again reduce from Clique)
5. Extra Credit: Problem 25-1
6. Extra Credit: Exercise 34.1-5
7. Extra Credit: Problem 34-3