

CS 2502/486 2008 Assignment 1

Due: October 10

Note: Question 3 below requires programming. Further instructions will be provided in a tutorial.

1. **[20 pts]** Exercise 2 of Chapter 2 in the book.

2. **[20 pts]** Exercise 3 of Chapter 4 in the book.

3. **[80 pts]** Exercise 8 of Chapter 4 in the book.

Note that you will need to refer to Exercise 5 of the chapter for the $C \bullet m$ notation, to Exercise 6e for how to generate sets of random clauses, and to Exercise 7e where the easy-hard-easy pattern is described. For additional background on this question, you can find

- reference [293] at <http://www.cs.sfu.ca/~mitchell/papers/ai92-hsat.ps>,
- reference [83] at <http://http.cs.berkeley.edu/~christos/sat.ps>.

4. **[30 pts]** Exercise 4 of Chapter 5 in the book.