Institut for Matematik og Datalogi
Syddansk Universitet

February 8, 2010
JFB

DM508 – Algorithms and Complexity – 2010
Lecture 4

Lecture, February 8

We began on NP-completeness, from chapter 34 in the textbook and the section by Papadimitriou and Steiglitz from the course notes.

Lecture, February 10

We will continue with NP-Completeness, covering Cook's Theorem and beginning on some reductions from known NP-Complete problems. Note that I will mostly use the notes for Cook's Theorem (the proof that SAT is NP-Complete); the textbook is too vague.

Lecture, February 15

We will continue with NP-Completeness, covering more reductions from known NP-Complete problems.

Problems to be discussed on February 17

Do problems:

1. 34.3-7 (34.3-6 has the definition of complete you need).
2. 34.4-4, 34.4-5, 34.4-6, 34.4-7.
3. 34.5-1, 34.5-2, 34.5-4 (you may check on pages 1044–1045 for a hint, which is 1128–1129 in the third edition).