Institut for Matematik og Datalogi
Syddansk Universitet

April 13, 2018
JFB

DM553 – Complexity and Computability – 2018
Lecture 13

Lecture, April 12

We covered the proof that SATISFIABILITY (actually CNF-SAT) is NP-Complete, from section 7.4 in Sipser's textbook. We also covered the proof that SUBSET-SUM is NP-Complete from chapter 34 in CLRS.

Lecture, April 17

We will show that HAMILTONIAN CIRCUIT is NP-Complete. Then we will start on lower bounds from section 2.4 in the notes, which can be found through Blackboard, by clicking "Course Materials". (Part of this is also in section 8.1 of CLRS.)

Lecture, April 24

We will cover sections 2.4.3, 3.1, 3.2, and 3.3 from the notes.

Problems to be discussed on April 19

1. Do the problems left over from April 18.
2. 34.5-4. (you may check on pages 1128–1129 for a hint)
3. 34.5-5 (Warning: it is tempting to think that this one is completely trivial; it is not. Also, to make this easier, you may redefine the Set Partition problem to allow the same value appearing more than once.)
4. 34.5-6.
5. 34-2., 34-3.