

HW Assignment 5 (Due date: November 14, Monday)

1. [Encoding, 10 points] Exercise 34.1-4, page 1060.
2. [Graphs, 10 points] Exercise 34.2-2, page 1065.
3. [NP, 10 points] Show that the Integer Factorization problem is in NP
(*hint: use the fact that PRIMES is in P*).
4. [Reduction, 10 points] Exercise 34.3-2, page 1077.
5. [Reduction, 10 points] Exercise 34.4-1, page 1084.
6. [NPC, 20 points] Exercise 34.5-1, page 1100.
7. [NPC, 10 points] Exercise 34.5-5, page 1100.
8. (*) [Polynomial Time, 10 points] Exercise 34.1-5, page 1061.