

Dealing with hard problems III

AVA Fall 2005, week 7

October 10

Content Introduction to approximation algorithms. Approximation algorithms for Vertex Cover, weighted and unweighted versions, MAX-3SAT, and TSP.

Litterature

- Chapter 35 in CLRS. Pages 1022-1033
- Ausiello et al., Chapter 2. (Handed out at Lecture 7.)
- Have a look at <http://www.nada.kth.se/viggo/problemlist/compendium.html>.

Exercises

- Exercises from CLRS: 35.1-2, 35.4-1, and 35.4-3.
- Problem from CLRS: 35-1(a-e, not f).

Hand-ins

1. Problem 35-4 from CLRS page 1051.
2. Exercise 35.1-5 from CLRS page 1027.