Discrete Optimization

Moshe Rosenfeld

Hanoi 2011
`moishe@u.washington.edu`

Name:

1   Assignment - 9

Due: Thursday Nov. 24

0. **Draw the tree whose Prüfer code is $[2, 3, 2, 4, 2, 5, 2, 6, 2, 9]$.**

1. **How many non-isomorphic trees have exactly 4 internal vertices, each of degree 3.**

2. **How many different labeled trees have exactly 4 internal vertices, each of degree 3?**

2. **How many leaves does a tree with 100 internal vertices, each of degree 3 have?**

4. **How many different such labeled trees are there?**

5. **Find a minimum cut set in the netwrok flowiv (in the Supplement folder).**

5. **AIMMS: The managemnt of the mining company noticed that the capcaity of the smelters far exceeds the amount of ore produced by the mines. They want you to modify your model to be able to select a smelter to be closed down, and redistribute the load among the other smelter. Your model should be able to accept new data, decide which of the current smelters should be shut down and the new distribution of ore among the remaining smelters.**