

Theory of Computation

homework 3
Due: 11/19/2013

Problem 1 Prove that the following language is coNP-complete.

$$L_{\text{coNP}} = \{\phi: \text{a Boolean formula that is satisfied by every assignment}\}.$$

Problem 2 Given a set $S = \{a_1, a_2, \dots, a_n\}$ and value T , we want to know that is there a subset $S' \subseteq S$ such that $\sum_{a_i \in S'} a_i = T$. Prove that this problem is NP-complete.