

Theory of Computation

Homework 4 Due: 2011/12/13

Problem 1. Please calculate $\phi(313716)$ and $77^{192960} \bmod 313716$. (You need to write down the steps explicitly. Providing merely the final result is not satisfactory.)

Problem 2. Show that $\text{NP} = \text{co-NP}$ if there exists an NP-complete language that belongs to co-NP.