

Advanced Topics in Computational Complexity

Exercise Session 7

Due 30.11.2015.

Exercise 1

Prove that there does not exist a formula of MDL that is equivalent with the EMDL formula $\text{dep}(\Diamond p)$.

Exercise 2

Write an NP algorithm for the model checking problem of PD.

Exercise 3

Prove that the satisfiability problem for PD is in NP.

Exercise 4

Prove by induction that PD is downward closed.