

Problem 7.24. Let

$CNF_k = \{\langle \phi \rangle \mid \phi \text{ is a satisfiable cnf-formula where each variable appears in at most } k \text{ places}\}.$

Part a. Show that $CNF_2 \in P$.

Proof. □

Part b. Show that CNF_3 is NP-complete.

Proof. □