

Quiz 2

1. Consider the following language, TFSAT:

Instance: A Boolean formula ϕ . (Note that ϕ need not be in 3CNF.)

Question: Does ϕ have some satisfying assignment, f , and also some unsatisfying assignment, g ?

(In other words, TFSAT is the language of formulas that are satisfiable but not tautological. A formula is tautological if it is true under every truth assignment.)

Prove that TFSAT is NP-Complete.