Quiz 2

1. Consider the following language, TFSAT:

   **Instance:** A Boolean formula $\phi$. (Note that $\phi$ need not be in 3CNF.)

   **Question:** Does $\phi$ 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.