EECS 343: Theoretical Computer Science, Homework Exercise 13
due Monday, April 27, 2020 before class

Problem 1: If NP = coNP does that mean $\Sigma_k = \Pi_k$ for all k?

Problem 2: (Sipser 10.19) Prove that if NP $\subseteq$ BPP then NP = RP.

Problem 3: Prove that in an interactive proof, if the verifier is required to be a deterministic, polynomial time algorithm with no access to random bits, then the class of languages this system can decide is equal to NP, even if we allow an arbitrary number of queries to the prover.