Mathematics of Voting – Homework #3

#1 Prove the Gibbard-Satterthwaite Theorem as a corollary of Arrow’s Theorem.

These next couple of problems are pretty open-ended…

#2 Develop what seems like a reasonable way to measure how often a non-dictatorial voting system is susceptible to Arrow’s theorem, and apply your measure to the various voting systems we’ve looked at.

#3 Develop what seems like a reasonable way to measure the manipulability of a non-dictatorial voting system, and apply your measure to the various voting systems we’ve looked at.