

# Proof Portfolio Problem 1

Before beginning you should read the proof portfolio document carefully. It is very important you read the information about academic honesty.

## Problem 1 - Play, Conjecture, Prove

Most Wednesdays in class we'll have a "play, conjecture, prove" problem. Our first one was the "tag out" game. A running list of these will be kept on Blackboard. In class we'll have some problem, for which you will "play" by working on the problem with your group. Then, either during class or after class, you'll make a conjecture about something you believe to be true. Your conjecture should be something that is possible to prove, but is not trivial. It's worth checking your conjecture with me. Lastly, you'll prove that conjecture and turn in a typeset theorem and proof as your problem 1.

For this problem you can work with one other person (and I recommend you do, since writing your own conjectures will be challenging!).