## $\mathscr{T}_{\text {ransition to }} \mathscr{O}_{\boldsymbol{\mathcal { T }}}^{\text {dvanced }} \mathscr{M}$ Mathematics: assignments 1-4

There will be one proof to turn in over each of the next four class days. In groups of exactly four people, use the following method:

1) Everyone come up with a proof on your own.
2) Meet in a space with a board (such as the library or math lab)
3) Come up with another proof in a round-robin manner. (For example Alice writes one statement on the board. Then Bob writes a statement. Then Carol, then Dan, and then back to Alice)
4) Discuss the proof, fix the mistakes, and make it make sense. (Seriously, discuss it! If it doesn't make sense to you, it surely will not make sense to me)
5) Designate one person to record the proof you came up with. On his/her own that person should then prepare a version to submit, and make any additional changes as necessary.
