Math Perspectives - Final Project

Due – at final exam

1. Choose three games we have discussed in class or on exams or choose a similar game we haven't seen before.
2. For each of the three games choose a position and determine it's Nim-value.
3. Then play the sum of these three games against an imaginary opponent who is an expert at these games. Decide if you want to go first or second . Then show what moves might be made if you play perfectly. Note that your first and most critical decision is deciding who goes first.

Note that if you choose a trivial position (say three subtraction games each with a zero pile), the calculation will be trivial also as will the amount of credit awarded. On the other hand, we don't need to see hundreds of moves to see if you understand addition of games.

This is your last chance to show that you understand these "Combinatorial Games", as they are called.