1. [1 mark] In your own words, explain what it means for two games to be equivalent.

2. [2 marks] Recall that the game notation (left options, right options) for the game 2 is $\{1\mid\}$.

   a) Give the game notation for the game 1.

   b) Draw a domineering or hackenbush position equivalent to the game 1 (you do not need to prove equivalence).

3. [2 marks] Which of these are true? Explain. $*0 = *$. $*1 = *$. $*2 = 2$.

4. [5 marks] Below are two domineering games G (with 4 cells) and H (3 cells). For G and for H, draw the complete game tree: do not prune any options. Explain why G and H are both in the outcome class N. Find a game K such that G+K and H+K are in different outcome classes. Are G and H equivalent? Explain briefly.
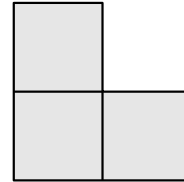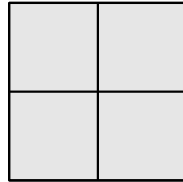
Recall in CGT: player Left is bLue/soLid, player Right is Red/dashed.

5. [1+4 marks] a) Draw the negative of the game above left.

b) Prove that the sum of the game from (a) and the game above right is a P-position.