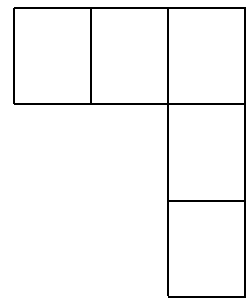
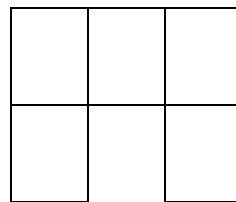
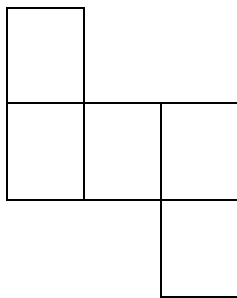
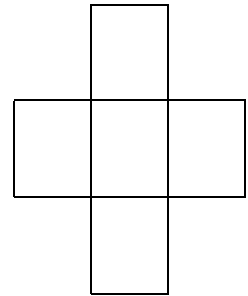
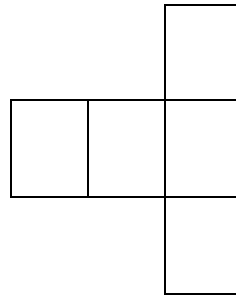
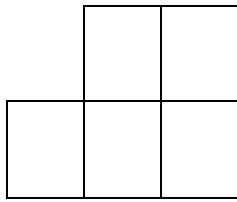
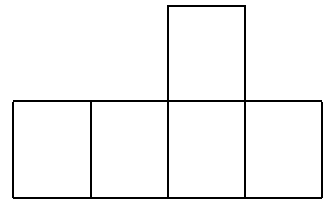
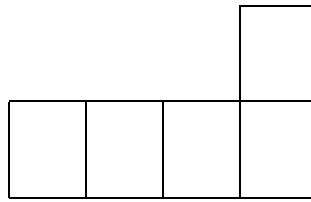
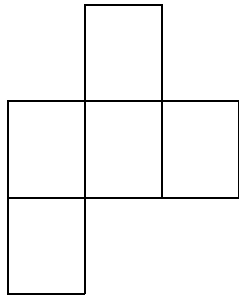


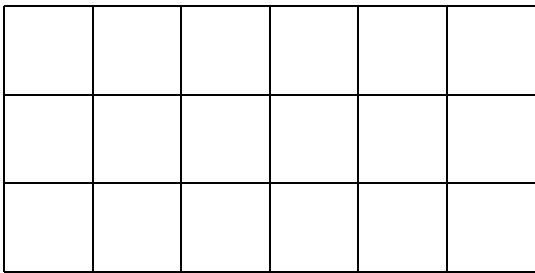
1. This assignment is about the game of Cram, which is played on a rectangular board with dominos (there are some alternative pieces, however). Players alternate placing a domino on the board so that it does not overlap any of those already on the board. The last player who makes a move wins the game. Play the game on and find Grundy values for all the positions given below:



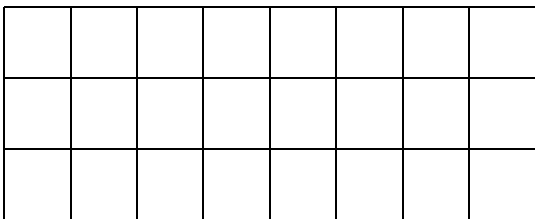
1. Continued



2. Next calculate the Grundy value of the 3 by 6 game shown below.



3. Finally, play the game on the grids below:



(a)


(b)


(c)