



Homework: Introduction to the Game Domineering

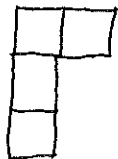
Due on Friday, October 2, not to be handed in

The game of Domineering is played by placing dominoes on a chessboard. Left must place her domino on two vertically adjacent squares, and Right must place his domino on two horizontally adjacent squares. Left and Right alternate moves, and the last player to move wins.

Since the board decreases in size as the game moves forward, Domineering is also played on "partial" chessboards, with some of the squares missing. In this exercise we will be playing on very small subsets of a chessboard.

- a) Argue that  has value 1 and that  has value -1. What would be a game with value 2? With value -2? With value 6?

- b) Find the values of all of the following games. It may help to write them in the form $G = \{G^L \mid G^R\}$, and compare them to Hackenbush games with the same values.



- c) In the $G = \{G^L \mid G^R\}$ notation, find the values of the following games. The values will not end up being numbers.

