
paper minesweeper

evgeny lakshtanov

department of mathematics &
CIDMA, university of aveiro

Similar version to the well-known and popular game Minesweeper, but which is to be used without a computer, with the aid of pen and paper only, or as a table game.

This game can have different difficulty levels, from the more basic to the more complex. The game field consists of a table with open cells, that is, with numbers. The goal of the game is to determine, in the empty fields of the game field, where, for instance, the treasure box, in the didactic application, or where the mines, in the ludic application, are.

The number in a given field is equal to the number of neighbour fields that contain treasure boxes/mines. The player shall, for instance, mark with a cross the fields where he/she believes that the treasure box/mine is, and with, for instance, a dash the fields he/she considers to be empty. At the end, the player can confirm if his/her answers are correct, through a solutions table.

A corresponding Portuguese patent was registered under number 1319/2009 (as well as a trademark “paper minesweeper”). Due to the popularity of “Minesweeper” and the potential of this new entertaining and educational board game, it is expected to have a wide use in the future.

The development of initial configurations for the “paper minesweeper” was done using a mathematical technique usually used for quantum mechanics.

