A Board Game for Two Players: MKCess

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Abstract

In this paper we are going to describe a board game for two players. In this issue are presented basic rules and necessary conditions for describing a winner. Two type of boards are presented for the same rules for the game. In this issue have not presented analyses or winning strategies for the game. Possible generalization schemes of the game are presented at the end of article

Intoduction

Chess inspired us for describing an other board game. From Chess for this game we took chessboard, wich has a little modifications. Knight, which has saved its move. Each player has under his/her possession a Knight: one is white and the other one is black as in ordinary Chess game. To make game interesting and many time playing game, we suggest a rule for describing Knights positions on a board. The target destination of each player is to have last move as well as to restrict apponent's moves at the same time. As You can see, it is very easy to play this game, only You need to have a pice of paper and a pencil. Each of players can take number 1 and number 2 respectively and after each move could put number in a appropriate position and made unreachable previous positions.

Game boards and Rules

Are there games without rules? As the answer to this question with high probabality is not, it is convinient to start to describe rules for our game. First type board is a 6x8 Chess board as despicted in pic. 1a and 1b. Second type board is a 8x8 board as shown in 2.





Rules

- 1. First of all, we suggest that for the first type boards starting positions of knights are symmetric acording to left-top and to right-bottom corners of a board as depicted in 1a and 1b. For second type boards starting positions are symmetric to number 1 and number 2 squares for each respectively.
- 2. As usually, first move belong to a player, who under his/her possession has a white knight. Also this is not nessesary condition, it can be changed according to appointment, which can be taken between players before a game session starts as well as it is not matter which corner is belong to whom.
- 3. Knights are preserve they moves as described in Chess.
- 4. After each move, old positions are not allowed to be used again.
- 5. Players must have the same figure for a play, for instance, one player can not use a knights and the other a king. They both use either knights or king
- 6. A player is a winner, if last move belongs his/her (see 3)



Questions and future possible generalizations

Practicaly there is not any restrictions on the figures of the game, moreover instead of Knights can be used any figure from Chess game. One thing is clear, that for some figures the game can be played very slowly, as a direct consequence of their moves coming from Chess. There is not restrictions on the boards. Boards can and must have any form to make the game more interesting. They can have forms from very ordinary ones to the "Crazy" forms, may be with hidden symmetries as well as with apparent symmetries. The other generalization of the ordinary game is to use boards from pic. 1 and pic. 2, where there are some positions, which are not allowed to visit by figures. This version of the game can be considered as a game, where some moves were done before the game is started.

Future analysis of this game I hope to start with finding of answers for these questions.

Question 1

For which boards (size, form) as well as for which figures, we have games equivalent to our ordinary game, with rules described at "Rules" section of this article.

Question 2

For the game with ordinary rules and boards from pic. 1 and pic.2 find initial positions for which

- 1. The first player, who started the game is a winner
- 2. The second player, who started the game is a winner.

Question 3

Try to find answers for the questions of the "Question 2", when boards from pic.1 and pic.2 have changeable sizes

References

[1] http://en.wikipedia.org/wiki/Chess