M-TORUS
by Mark Steere

Fig. 1 - Black wins
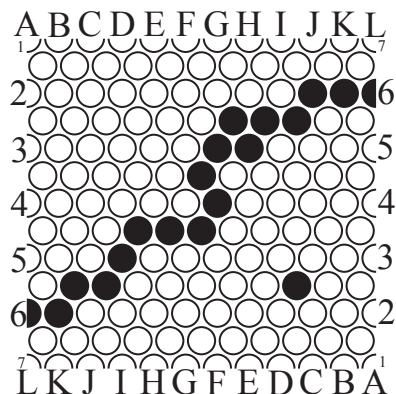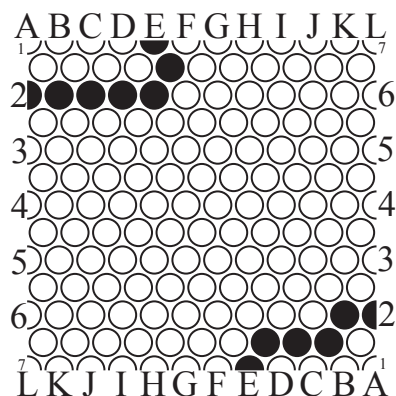

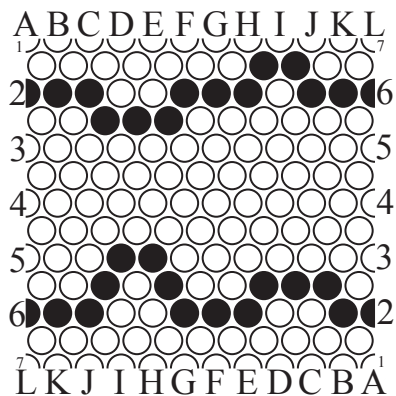**Fig. 2 - Black wins**

Fig. 3 - Not a win

Fig. 4 - Not a win

INTRODUCTION M-Torus is a two player game played on a hexagonal patterned board. The half cells at the top of the board match up with the half cells at the bottom of the board - **in reverse order**. Likewise, the half cells on the left side of the board match up with the half cells on the right side of the board, again in reverse order.

The board is initially empty. Each player takes possession of an entire set of stones of one color, black or white. Draws cannot occur in M-Torus. Mark Steere designed M-Torus in November 2008.

STONE PLACEMENT Players take turns adding their stones to unoccupied cells on the board, one stone per turn. Black makes the first placement of the game. Each player will always have a placement available on his turn and must make one.

OBJECT OF THE GAME There are two ways to win. You can
 a) form one simple loop around the top and bottom of the board, or
 b) form one simple loop around the left and right sides of the board.

In Figure 1 Black has won with a top-bottom loop. Note the link between half cell D at the top of the board and half cell D at the bottom of the board. For clarity, the white stones are not shown. In Figure 2 Black has won with a left-right loop. In Figure 3 Black has not won. He has formed a path that includes both a top-bottom loop and a left-right loop. It has to be one or the other, not a combination of the two.

In Figure 4 Black has again not won. He has formed a figure 8, not a simple loop. In Figure 5 Black has won with a top-bottom loop. While the path strays momentarily from the left side to the right side and back again, there is no left-right loop. In Figure 6 Black has again won. The path includes one top-bottom loop and zero left-right loops. The connecting path proceeds as follows: top D, left 3, right 3, right 4, left 4, bottom J, top J, top F, bottom F, bottom D.

AUTHOR'S NOTE Feel free to publish this rule sheet and to program the game of M-Torus for online or offline play. No licensing fee or royalties are expected. However please don't change the name or the rules, and please attribute the game to me, Mark Steere. My other games can be found at marksteeregames.com.
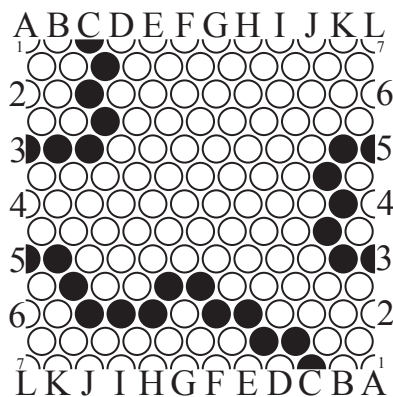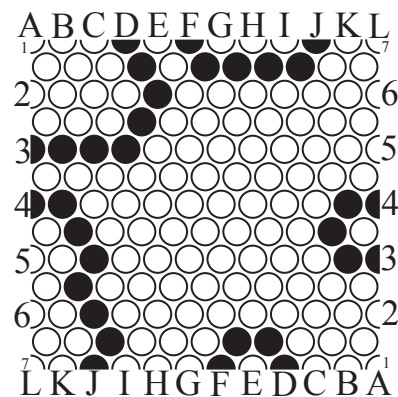

Fig. 5 - Black wins

Fig. 6 - Black wins