

# HY 3

by Mark Steere

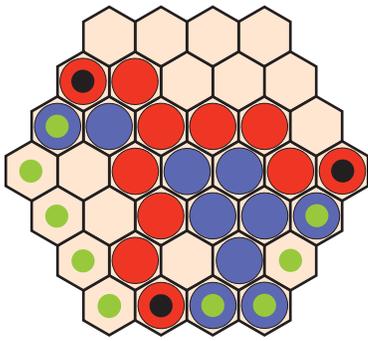


Figure 1

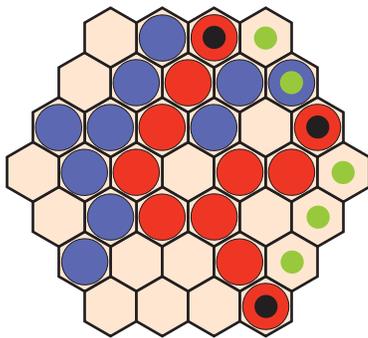


Figure 2

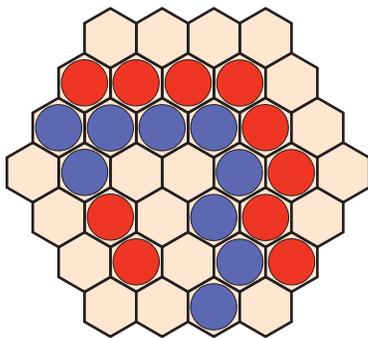


Figure 3

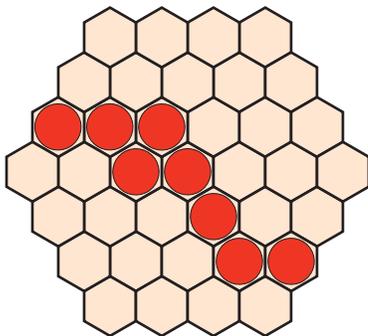


Figure 4

## INTRODUCTION

HY 3 is a two-player game played on a regular hexagonal board (all sides of equal length) of any size, initially empty. The two players, Red and Blue, take turns placing their own stones onto unoccupied cells of the board, one stone per turn, subject to the placement restriction. See **PLACEMENT RESTRICTION** below. Each player will always have a placement available. Red starts. Mark Steere designed HY 3 in September 2023.

## OBJECT OF THE GAME

To win, you must form a group of your stones such that:

1. At least two of the group's stones occupy perimeter cells.
2. The shortest perimeter path that includes all of the perimeter cells occupied by the group's stones comprises more than half of the perimeter.

In **Figure 1**, black dots mark the perimeter stones of the red group. The shortest perimeter path (black and green dots) that includes all of the perimeter cells occupied by the group's stones comprises more than half of the perimeter. Thus Red has won the game.

In **Figure 2**, the shortest such perimeter path does not comprise more than half of the perimeter, so this is not a winning position for Red.

Red has won in **Figure 3**.

## PLACEMENT RESTRICTION

You can't form a group with a shortest perimeter path (as described above) that's half of the total length of the perimeter.

**Figure 4** shows an **illegal red group**. (Blue stones are omitted for clarity.) The shortest perimeter path has length 9 which is half of 18, the total perimeter length.

## DESIGN NOTES

HY 3 follows Hexagonal Y and HY 2. HY 3, like the two games before it, is a way of ensuring that a winning Y will form with no possibility of a deadlock.

## AUTHOR'S NOTE

Feel free to publish this rule sheet and to program the game of HY 3. 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](http://marksteeregames.com).