Do you have a chessboard at home? Get it out, grab another person and let’s play a game! If you don’t know how to play chess, don’t worry!

You Will Need:

- Two players
- A chessboard or checkerboard
  
  *If you can’t find a board, then you can draw an 8 × 8 grid on a piece of paper.*

- A rook (as shown)
  
  *If you can’t find a rook, then you can use a coin or any small object in place of the rook.*

How to Play:

1. Place the rook in the bottom left corner of the board.

2. The two players will alternate turns moving the rook. Decide which player will go first.

3. On your turn, you can move the rook as many squares as you want either to the right or up.
   
   *You must move the rook at least one square and you cannot move the rook both right and up on the same turn. And of course you cannot run the rook off the board!*

4. The player to place the rook in the top right corner of the board wins the game!

**Play this game a number of times.** Alternate which player goes first. Is there a winning strategy for this game? Does the winning strategy depend on whether you move the rook first or second?

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*A strategy is a pre-determined set of rules that a player will use to play the game. The strategy dictates what the player will do for every possible situation in the game. It’s a winning strategy, if the strategy allows the player to always win, regardless of what the other player does.*

**Variation:**

- Cover up the bottom 3 rows of the chessboard and start with the rook in the new bottom left corner. Play the game with the same rules. Does this change the winning strategy?

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**More Info:**

Check out the CEMC at Home webpage on Monday, March 30 for a discussion of a strategy for this game. We encourage you to discuss your ideas online using any forum you are comfortable with.

We sometimes put games on our math contests! Check out Question 2 on the 2003 Hypatia Contest for another game where we are looking for a winning strategy.