## Challenge Problem 32: Dots and Boxes

In the game of Dots and Boxes, two players take turns drawing horizontal or vertical line segments between adjacent points in a grid. A player scores a point if they complete a  $1 \times 1$  square, and a player who completes a square gets another turn immediately.

In the current game it is Player 2's turn. Determine which player will win if both players make their best moves.

