

great!

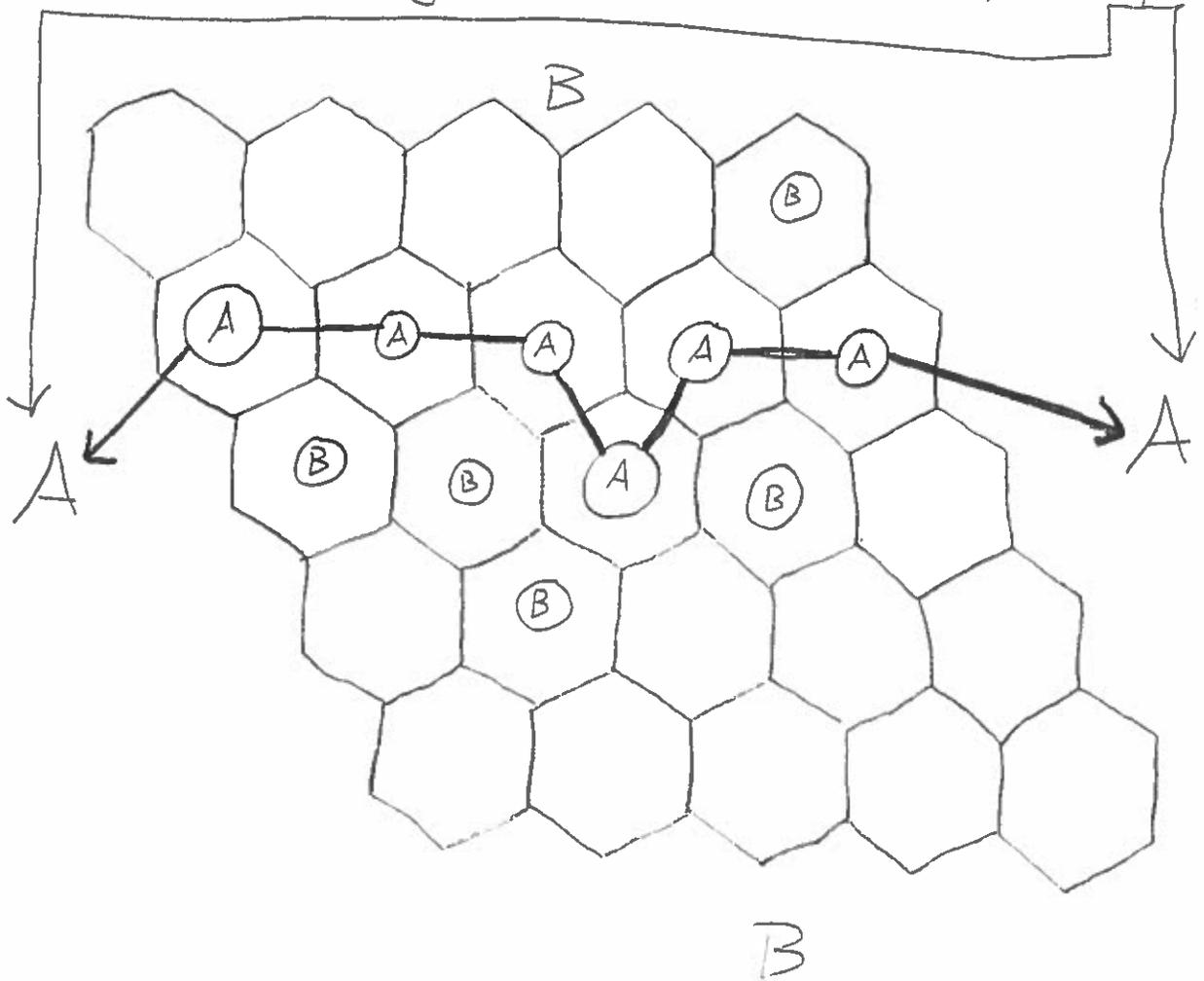
2.5/25

5 x 5 Tile game Proof

For the game below there are two players. Each player can put one tile per box per turn. The object of the game is to connect your tiles from one end of the board, to the other with no interruptions.

For the game below, (A) → will signify player 1's tile and his move on the board. (B) → will signify player 2's tile and move on the board.

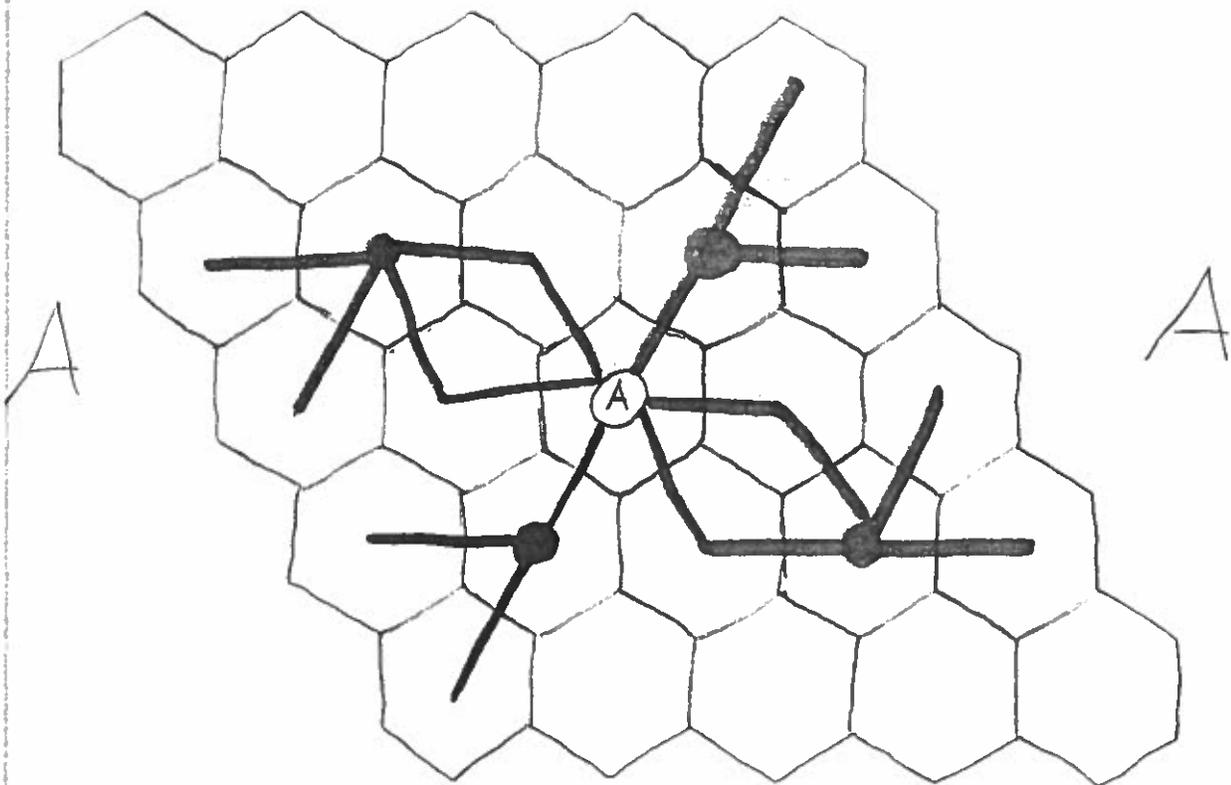
The game below shows Player 1 winning by using the strategy, explained later, to connect a tile bridge across his sides, labeled A.



Strategy

The winning strategy to this game is to go first and place your tile in the very center of the board.

The board below will showcase the routes to follow in order to win.



From here on:

- Route 1 →
- Route 2 →
- Route 3 →
- Route 4 →

And the circles within those routes are



the specific route's "main point."

For the board on the previous page, with player 1 making his/her first move in the very center, he/she will win by following the routes.

This paragraph will explain the left side of the game board, routes 1 and 2. If player 2 makes a move on any hexagon on route 1, the winning move must be placed on route 2's main point. If player 2 makes a move on any hexagon on route 2, the winning move must be placed on route 1's main point.

This paragraph will explain the right side of the game board, routes 3 and 4. If player 2 makes a move on any hexagon on route 3, the winning move must be placed on route 4's main point. If player 2 makes a move on any hexagon on route 4, the winning move must be placed on route 3's main point.

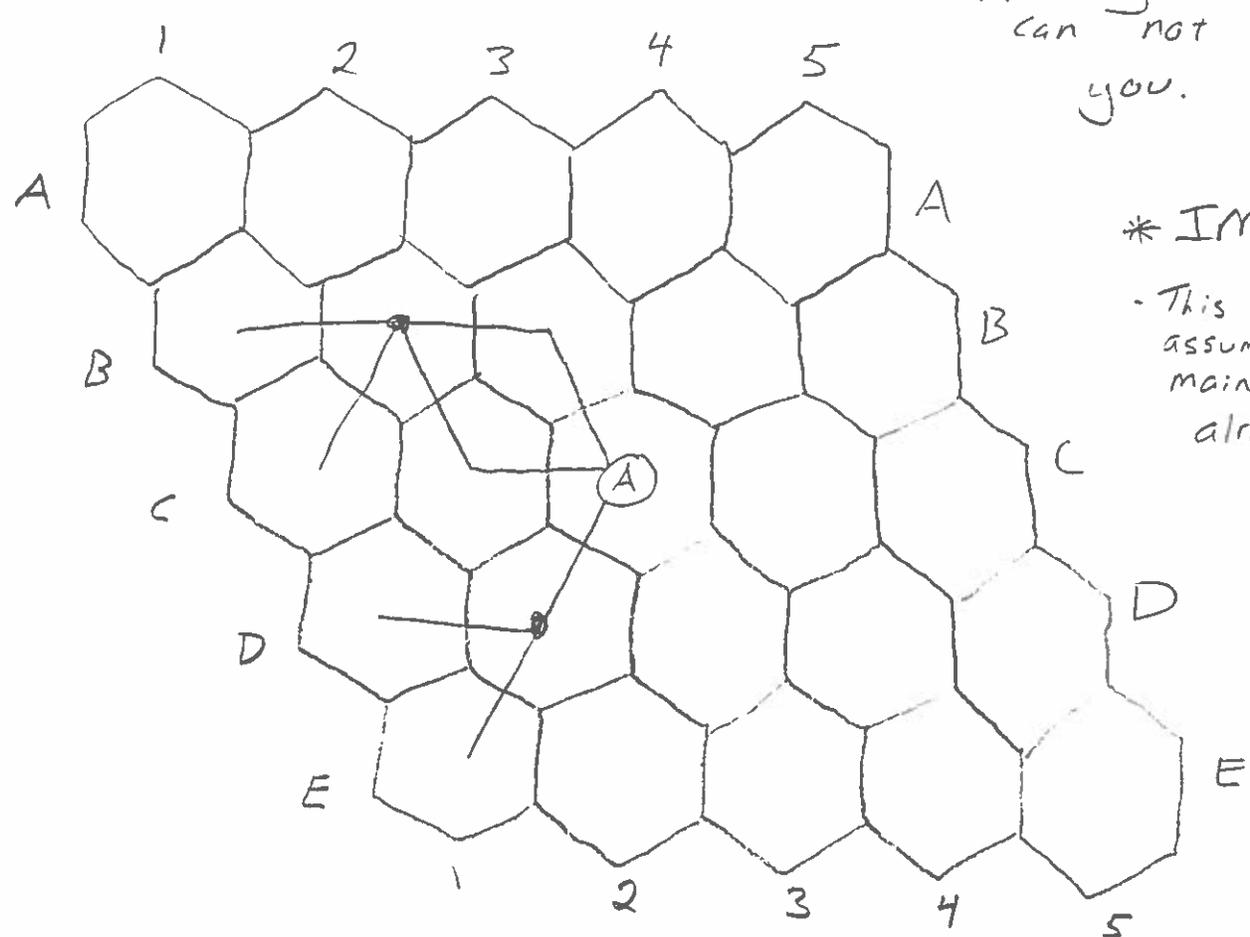
If player 2 makes a move on any hexagon not marked by a route, you can make your move along any route.

Once you make your winning second move, and player 2 makes his/her second move, all you must do to win is follow your route.

This will always work because once you place your stone on a main point, you have two options on the route to win. You will always be able to counter player 2's move this way by following a route.

One key aspect of the strategy I will show below. I have labeled each of the rows by letters, and slanted columns as numbers. Once you, the winning player, place your stone on a main point, and the opposing player places his in, for example, hexagon B1, you must place yours in C1, the spot next to it, highlighted by a route. This is so the

opposing player can not block you.



* IMPORTANT

- This page assumes a main point is already covered.

As long as you place your stone in the other option on the route, next to the opposing player's move. You will win by following all of the previous steps.

23/25

Nice!

The 6x6 game is more complicated than the 5x5 game as there is no clearly set middle tile. Instead, there are four central tiles: C3, C4, D3, and D4. Of these four, two are especially important. The tiles C4 and D3 touch each other thereby allowing a player to conquer the middle tiles if they claim both spaces.

The winning strategy in this game is to first claim one of the four central tiles, ideally C4 or D3 for the reasons listed above. By claiming C4, one wins the bottom left portion of the board, shown through the 5x5 game-winning strategy. When one chooses C4, they then will always have two options of bridging the gap to the edge of the board. The same is true of the tile D3, but in the top right portion of the board.

This is the easiest way to win the game, by claiming the two adjacent centermost tiles and then utilizing the strategy from the 5x5 game. However, that does not usually happen, as your opponent will probably take D3 if you take C4 or vice versa. 😊

If this happens, you must next choose the diagonal tile. For instance, if you went first and selected C4, and your opponent chose D3, if your goal was a vertical connection you would select B3. From there, you will have conquered the top left corner and can continue to win it using the 5x5 strategy of always having two options for the next move. If your opponent has blocked both of the most straightforward avenues of winning as outlined in green, one can use the light and dark blue arrows to win, or a combination of green, light blue, and dark blue.

To win horizontally, you would also want to go first and claim either D3 or C4. Ideally, one would claim both and thus

win the game, as outlined in yellow, by using the 5x5 strategy.
However if these avenues are blocked, there are other options.

Great so far, but what if you are blocked at D3?

How to win vertically

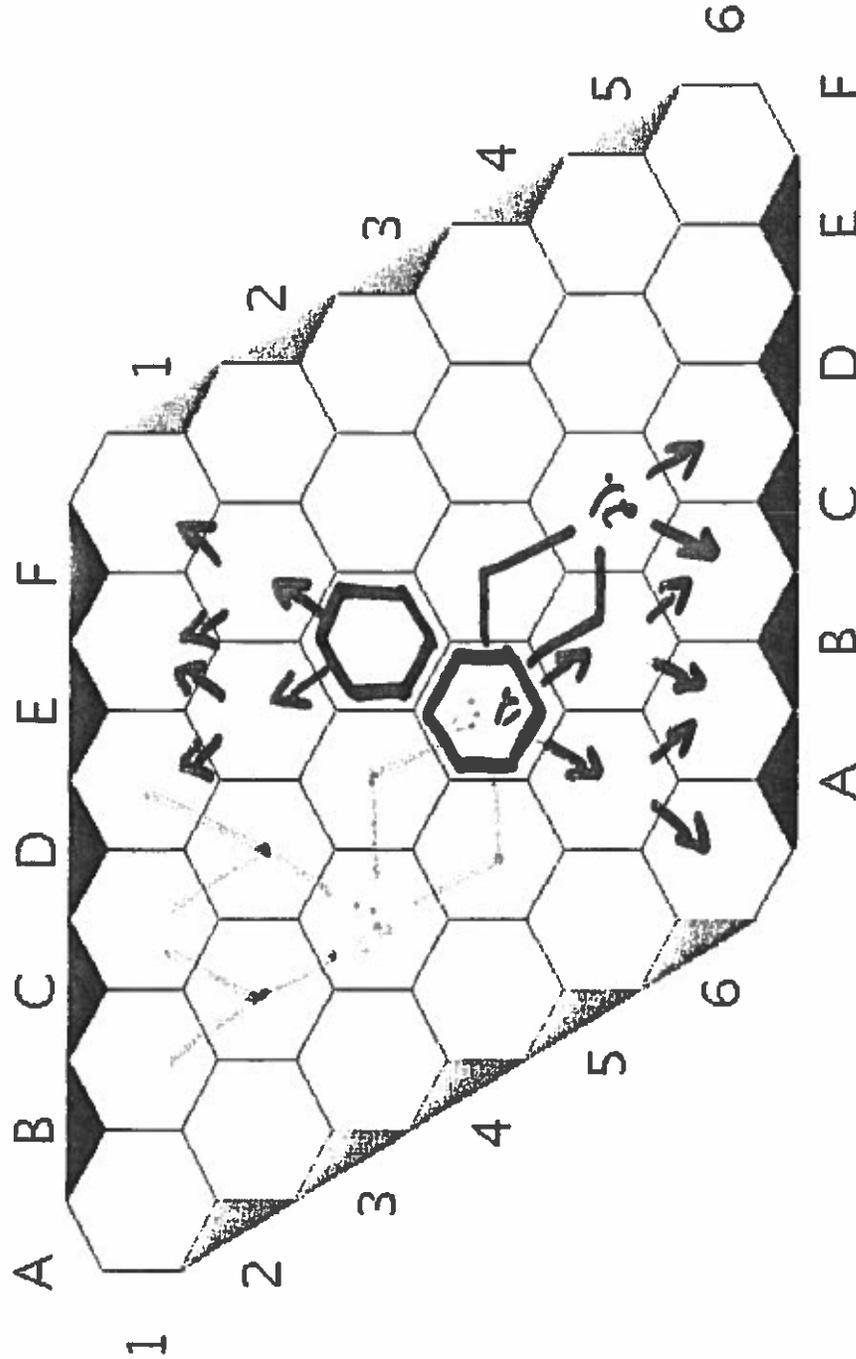


Figure 4.21: A regular 6 × 6 Hex board.

- = most straightforward way to win
- = 2nd option if opponent blocks D3
- = 3rd option if another player blocks

How to win horizontally

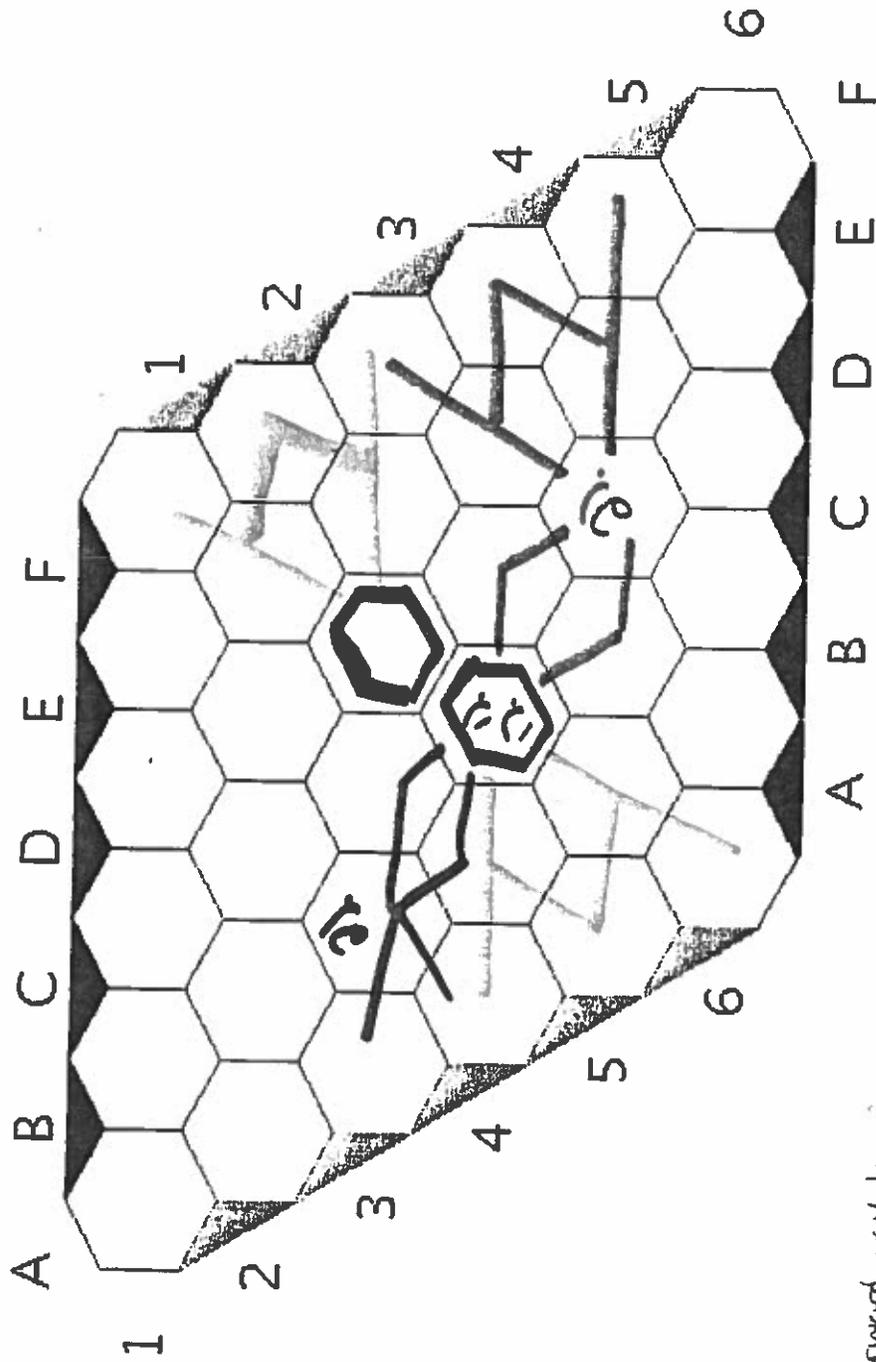


Figure 4.21: A regular 6×6 Hex board.

— = most straightforward way to win
■ = other avenues to win