

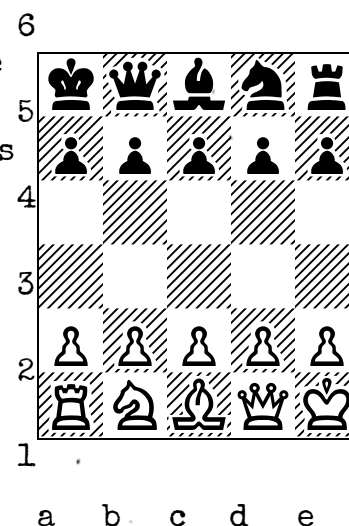
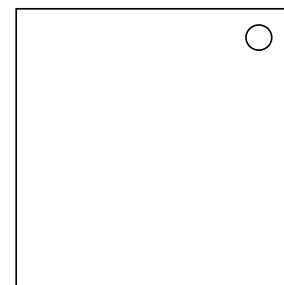
## On the Subject of Lousy Chess

*It's like playing random moves. Only worse.*

Two lousy [chess](https://www.chess.com/learn-how-to-play-chess) (<https://www.chess.com/learn-how-to-play-chess>) engines are playing against each other. It's up to you to predict their moves. The game is already in progress. Keep playing moves until the game comes to a conclusion.

The variant played is [MinitChess](http://wiki.cs.pdx.edu/mc-howto/rules.html) (<http://wiki.cs.pdx.edu/mc-howto/rules.html>). It's played on a 5×4 board with less pieces — see diagram. Bishops have the additional option of moving to any adjacent **empty** square, allowing them to change color. Furthermore there is

- no castling,
- no double pawn moves,
- no draw by repetition or moves after capture,
- pawn promotion only to queen,
- no “check” or “stalemate”,
- victory by king capture,
- victory when an opponent has no legal move,
- and draw after 40 moves by each side.



## The engines

Every engine follows these steps to determine their next move:

- If you can capture the enemy king, do so. Victory!
- Otherwise, determine the move(s) that meet the goal.
- If there's only one, that's the next move.
- If there are more than one, use the RNG explained below to determine which piece will move. And again to determine where it will move to.
- If there are none, continue to the next goal.
- If no goals can be met, the goal is any valid move.

RNG:  $n = \text{seed} + \text{current move}$  (both mentioned on the module). Count  $n$  valid moves that meet the goal, ordered alphabetically by starting location, then target location. (The very first possible move would be **a1-a2**, the last move would be **e6-e5**). Loop back to the first move if you reached the last valid move.

Distance is measured in straight lines. E.g. the distance between the queens in starting position is 7, between the kings is 9.

Where it reads "move" in the engine goals, capturing is evenly valid.

<b>The king must die!</b>	- Move a piece closer to the enemy king.
<b>White is lava!</b>	- Move a piece from a white tile to a black tile. - Move a piece from a black tile to another black tile.
<b>Black is lava!</b>	- Move a piece from a black tile to a white tile. - Move a piece from a white tile to another white tile.
<b>Queens wild (or rook/bishop/knight)</b>	- Move the queen (or rook/bishop/knight)
<b>We got this all wrong</b>	- Move a piece closer to the starting position of the enemy
<b>Mirror, mirror</b>	- Mirror the last move of the opponent using point reflection on the center of the board with the same piece as the opponent. - Move the same piece as the opponent.