

Warm Up: Jump Chess

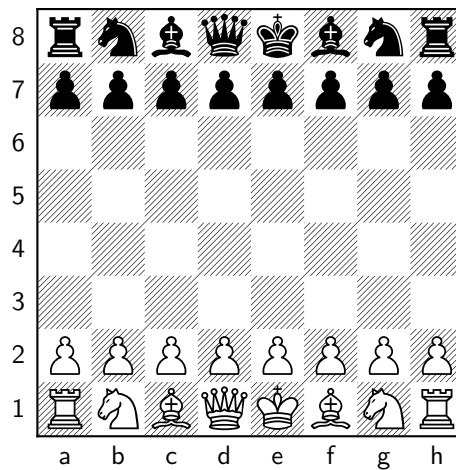
Prepared by Mark on January 23, 2025

Consider a normal game of chess with the following modification: we allow queens and rooks to jump as far across the board as they want, within their usual range of movement. As a result, queens and rooks may check the opposing king from a distance, ignoring any pieces in between.

With these modified rules, the outcome of a game can be determined.

Who wins, or do black and white draw with ideal play?

(As in regulation chess, white moves first.)



Solution

Win for white in 5 moves.

Trap black in the top row. If Black is kept in check every move, his ability to respond is limited and the game tree remains small.

Capture an opposing rook with $Rxa8+$. The king is in check and can't move, so black must capture this rook. If black recaptures with his other rook, respond with $Qh5\#$. Otherwise, black must recapture $Qxa8$. Now go $Qa4+$. If black captures with his queen $Qxa4$, then $Rxh8\#$. So, black must move $Kd8$.

Finish with the following:

$Qd4+$ $Ke8$

$Rxh8+$ $Qxh8$

$Qxh8\#$