



LAMC Chess Week 2
6/25/19

Endgames: Basic Checkmates

Last week, we talked about the first stage of a chess game -- the opening. In today's lecture, we will talk about the third and final stage, known as the endgame.

There is no clear definition of what constitutes an endgame. Normally, we classify a position as an endgame if:

- a) The queens have been exchanged¹, or
- b) The majority of pieces have been traded.²

Since the endgame is normally reached after many moves have been played, it often occurs that one side obtains a **material advantage** -- e.g. they have more pieces than the opponent. In this lecture, we will talk about how to win when one has a significant such advantage -- an extra queen or an extra rook, as shown in diagrams 1 and 2.

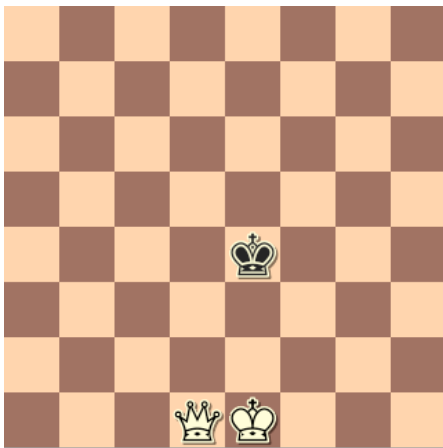


Diagram 1

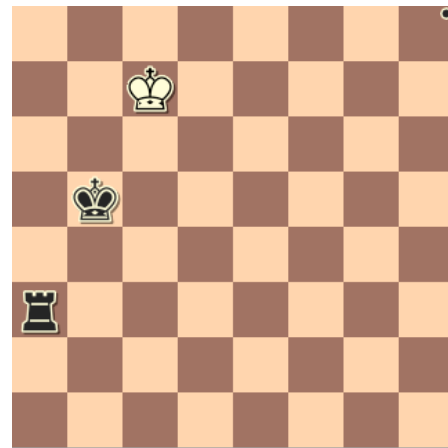


Diagram 2

¹ Recall that an *exchange* occurs when both players capture a piece of the same type, usually on consecutive turns.

² The words *traded* and *exchanged* can be used interchangeably.

The Box Method

From the first lesson, we know that pieces are most mobile when they are placed in the center. It is difficult to give checkmate with just a king and queen when your opponent's king is placed in the center. Therefore, we should try to chase our opponent's king away from the center and restrict him as much as possible by **putting him a box**, as shown in the next diagram. *(It is recommended to pull out a chess board and play out the given moves).*

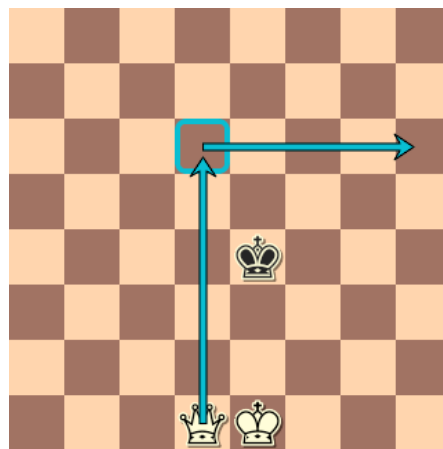


Diagram 3

By playing **1.Qd6!**, white immediately puts the black king in a box: now all the squares outside the rectangle d1-d6-h6-h1 are inaccessible to the black king. White's next step will be to **tighten the box**.

Let's say black plays **1...Kf3**. Then white plays **2.Qe5!**, further restricting black's king, as shown in diagram 4:

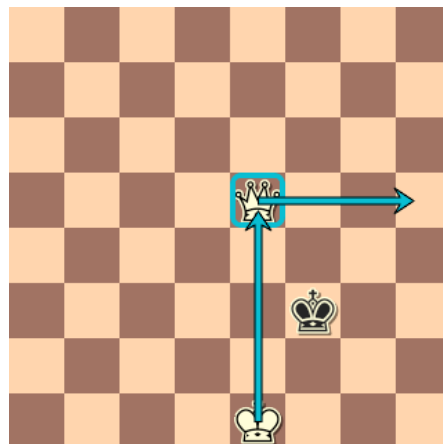


Diagram 4

Assume black plays **2...Kg4**. A queen cannot give checkmate by itself -- it needs the help of the king. White's next step will be to bring in his king with **3.Kf2**.

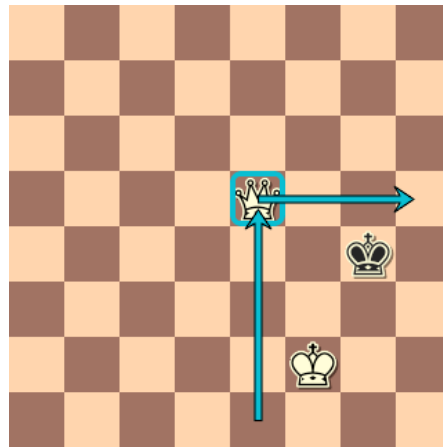


Diagram 5

Next, black plays **3...Kh4**. White keeps bringing white's king closer to black's with **4.Kf3**. Black's king is so restricted that he only has one move at his disposal: **4...Kh3**. Now white has three ways to deliver checkmate:

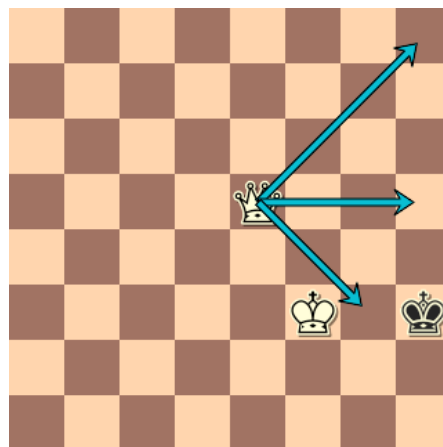


Diagram 6

We can use a similar method to checkmate with a rook:

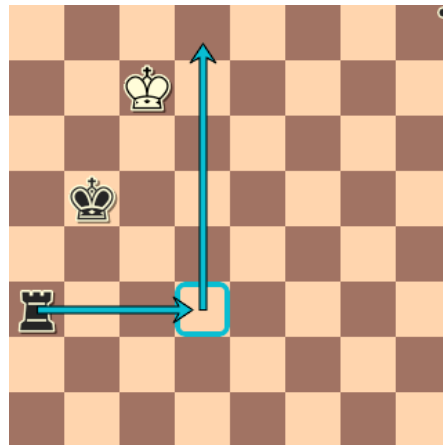


Diagram 7

By playing **1...Rd3!**, black **boxes in white's king**. Now white cannot move outside the rectangle a3-d3-d8-a8.

Let's say white plays **2. Kb7**. Then black can **tighten the box** with **2...Rc3!**, as shown in the next diagram:

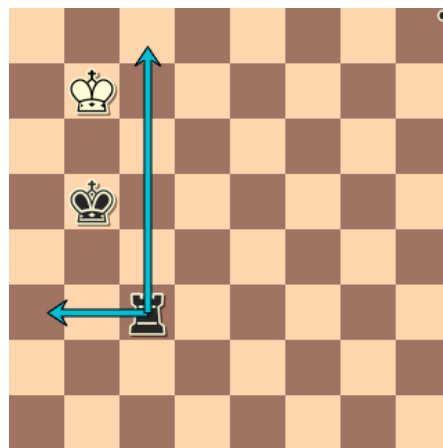


Diagram 8

White's king is forced to give up yet more space with **3.Ka7**. Then black brings in his own king with **3..Kc6** (see diagram on the next page). Remember: we cannot checkmate with a rook by itself -- it needs the king's support!

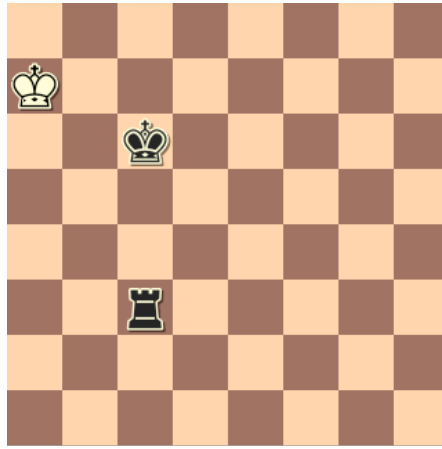


Diagram 9

White moves **4.Ka8**, all the way into the corner! Now the white king has only two squares at its disposal: b8 and a7. Let's take one away: **4...Kc7**.

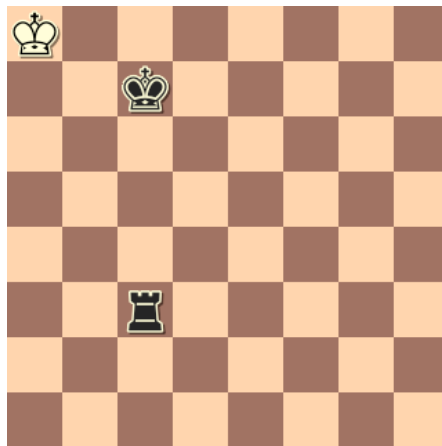


Diagram 10

White is forced to play **5.Ka7**. Note how badly white's king is placed: black can already give checkmate with **5...Ra3#**, as shown in Diagram 11.

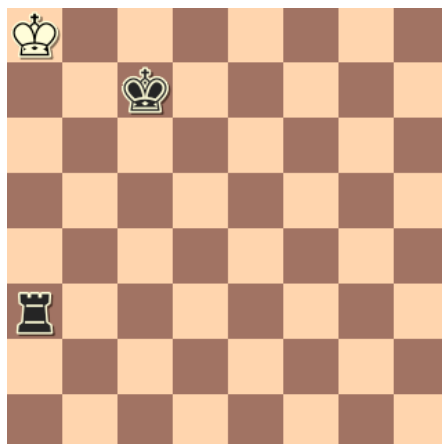


Diagram 11

Summary:

Today we learned how to checkmate with King + Queen vs. King and King + Rook vs. King. The most efficient way to do this is via the **Box Method**, which falls into basic steps:

1. First, bring the king as close as possible to the opponent's king
2. Secondly, use the queen or rook to restrict, or **box in** the opponent's king as much as possible.
3. After repeating steps 1 and 2 several times, your opponent's king will be forced into the corner. In this case there is only one thing left to do: Checkmate!