An Introduction to Pawn Endings

Opposition; the Fundamental Position; Key Squares; and the Rule of the Square.

This lesson examines basic concepts of pawn endings: Opposition; the Fundamental Position; Key Squares; and the Rule of the Square.

“Opposition”

When the kings face each other one square apart, the side on move has to give up control of at least one of the squares between them, allowing the other king to advance and gain territory. (Or the other king can choose to continue opposing the first king.) Therefore, when two kings face each other, the side NOT on move has the opposition.

Who is on move is critical. If it is White's turn, the game is a draw. Either he moves to d6 and stalemates Black, or he surrenders the pawn. If it is Black's turn, he must move away from d8 and therefore give up protection of e7 which is the only square from which White can force the pawn to queen. You must be able to recognize, several moves in advance, whether you can reach this position with your opponent to move!

In order for White to reach this position with Black to move, White’s king had to have been in front of the pawn in earlier play. Thus we come to -

"Key Squares"

In Diagram 3, the stars denote "key squares."

Kings can be one square apart on a file, a rank, or a diagonal; it doesn't matter. Opposition is common in escorting a pawn to promotion, in penetrating the enemy's position, and in many checkmating situations.

Diagram 2 shows one of the cornerstones on which pawn endings are built. It is vital to know this Fundamental Position, as well as related ones, in order to be successful in endgame play!

If the White king can occupy any of the key squares, the pawn will queen. It is clear that if the White king stands on c7, d7, or e7, he controls the promotion square and the pawn will queen.

If the White king is on d6 and the Black king is on d8, White wins as follows:
1.Ke6
(1.Kc6 leads to the same thing.)
1… Ke8
2.d6 Kd8
3.d7 etc.

If the White king is on e6 (or c6), the win is also simple. First, let's look at how to win with Black's king at d8.
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1. Kd6! Ke8
   (1…Kc8 leads to the same result.)
2. Kc7 and wins.

With the White king on e6 and Black’s king stands on e8, then White wins by advancing the pawn.

1.d6 Kd8
2.d7 Kc7
3.Ke7 and wins.

Note that when White’s king and pawn are both on the sixth rank, White wants the opposition! Thus, we can see that White always wins if he can get his king in front of his pawn standing on the fifth rank. As White, you should try to get to this position; as Black you should try to avoid it!

If the pawn is farther back then, excluding rook pawns, White always wins **when the king is two squares in front of his pawn**. If the king is **only one square in front, he wins only if he has the opposition**. So, in Diagram 4, the result depends on who is on move.

![Diagram 4](image)

White to move:
1.Ke5 Ke7
2.d5 Kd7
3.d6 Kd8!
The defender should always go straight back!!
4.Ke6 Ke8
5.d7+ Kd8 with a draw.

Black to move:
1… Ke7

![Diagram 4a](image)

2.Kc6 Ke6
3.d5+ Ke7
4.Kc7! …
White controls the final three squares the pawn has to cross and so will win.

However, it is easy to see that if White’s king is **two squares in front of the pawn**, he wins because he has an extra tempo if he needs it.

![Diagram 4](image)

The fight for key squares varies depending upon which pawn is involved. The promotion of central pawns (c-, d-, e-, and f-pawns) is straightforward. However, knight pawns (b- and g-pawns) and rook pawns (a- and h-pawns) require special attention because of the potential for stalemate.

![Diagram 5](image)

Diagram 5 illustrates how to promote a knight's pawn.

1.Kc7! Ka8
2.Kb6! Kb8
3.Ka6! Ka8
4.b6 Kb8
5.b7 and wins.
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However, the immediate advance of the pawn is a blunder! Not,
1. b6?? Ka8
2. Kc7 stalemate.

Neither does
1. b6?? Ka8
2. Kb5 Kb7!
work for White. For example,
3. Kc5 Kb8!
ALWAYS retreat straight back when defending this type of position!!
4. Kc6 Kc8
5. b7 and we have reached Diagram 2 with White on move, so the game is drawn.

Diagram 6 shows the special considerations involving a rook's pawn. In order to draw, Black must be able to get his king to the corner (or even to any square in front of the pawn.) The key squares for White are g7 and g8 – shown with stars (or b7 and b8 for the a-pawn); for Black, the key squares are f8 and f7 – show with “x”s.

In order to keep Black’s king out of the corner, White must play
5. Kh7 whereupon Black can trap White's king against the side of the board with
5… Kf7!
6. h4 Kg8!
7. h5 Kg7
8. h6 Kg8 - and White gets to chose his draw! He either stalemates his own king or his opponent's!

If White can not get in front of the pawn and the defending king is in good position, proper technique will hold the draw. Any time you are defending this situation, you must always retreat straight back!! You will then be able to oppose your enemy’s attempt to get in front of his pawn. This technique works from any place on the board!

"Rule of the Square"

When the kings are not near the pawn, it is important to be able to determine if the enemy king can prevent the pawn from reaching its
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"queening" square. One method is simply to count the moves each side needs. If the numbers are equal, the king can stop the pawn. If the king’s number is one greater than the pawn’s, the king can stop the pawn only if it is the king’s turn to move. If the king’s number is two or more greater than the pawn’s, the king cannot stop the pawn regardless of who moves first.

Another method of determining this is called "The Rule of The Square." Draw a square with the pawn in one corner and the "queening" square in another. If the enemy king is inside the square, or with the move can step inside the square, it can stop the pawn. If not, the pawn cannot be stopped.

Diagram 8, below, illustrates “The Square.” The outcome depends on whose move it is! Here, “The Square” consists of all squares included within the boundary of a4-a8-e8-e4.

An easy way to determine the size of “The Square” is to run a line diagonally from the pawn to the last rank and then back to the same rank as the pawn.

An important exception occurs when the pawn stands upon its original square. In that case, “The Square” must be formed as if the pawn was already on the third rank!

These situations are fundamental to the understanding of simple king and pawn endings. You must learn them thoroughly and be able to use them in your decision making about whether to swap your last piece(s) or pawn(s). Very often the key to the correct handling of situations earlier in a game depends on knowing these endings and whether or not they can be reached.

White to move wins:

1.a5 Ke4
2.a6 Kd5
3.a7 Ke6
4.a8Q+ and wins.

Black to move draws:

1... Ke4
2.a5 Kd5
3.a6 Ke6
4.a7 Kb7
5.a8Q+ Kxa8 =.