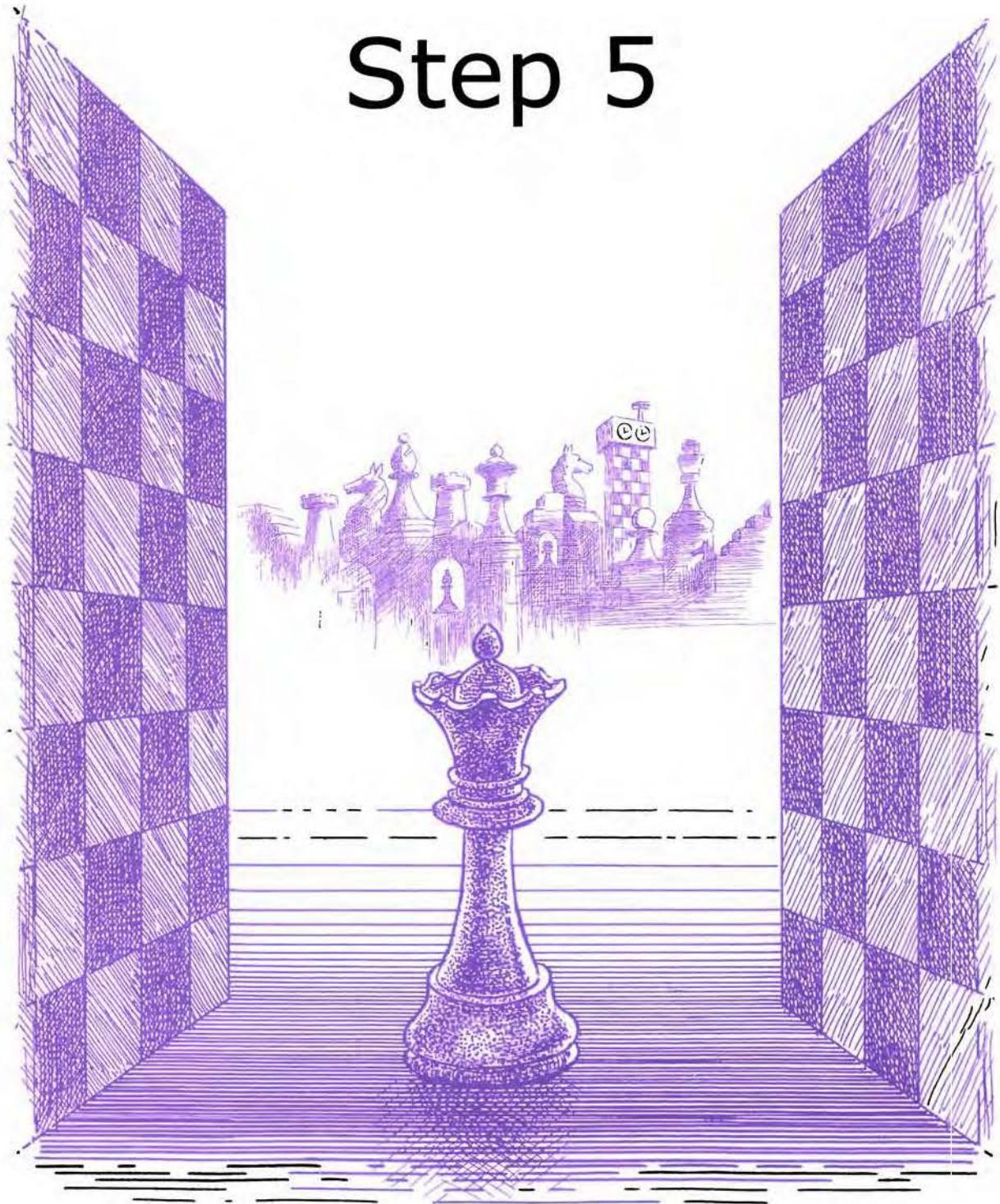


Learning chess

Step 5



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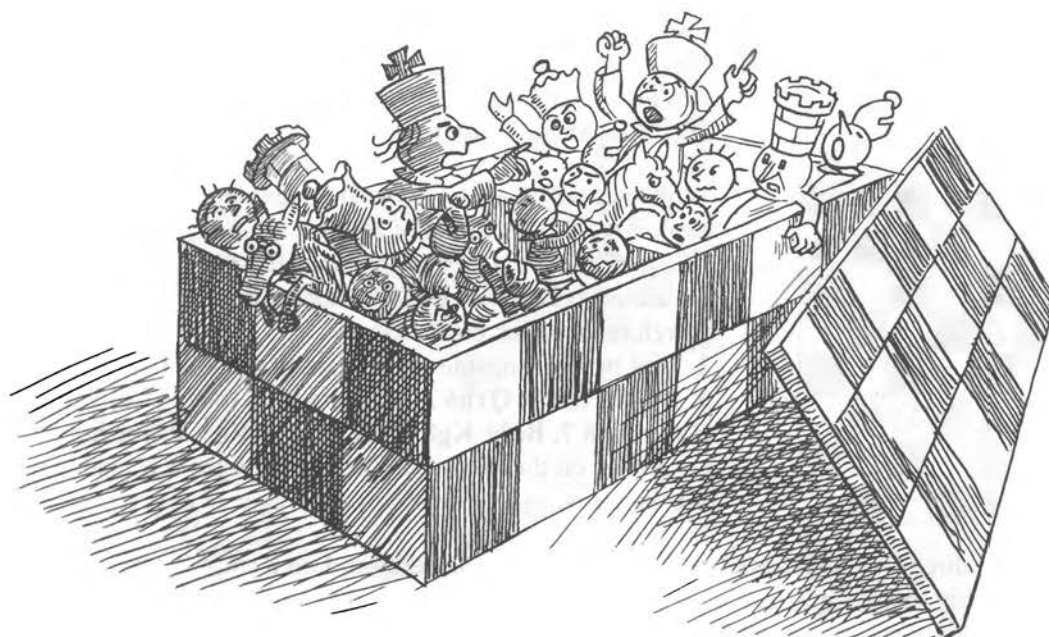
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Workbook Step 5



Name:	Date of birth:
Street:	Place:
Club:	Trainer:
1st step completed:	2nd step completed:
3rd step completed:	4th step completed:

Material and time

Evaluating a position in terms of material is easy. All you have to do is count: queen = 9 points, rook = 5 points, etc. Now that you have taken your chess skills to a higher level, you will find that this way of evaluating positions is too simplistic. It is also important to take into account the dimension of time – not the time on your clock, but the time on the board.



Lead in development

In the position on the left, White has a temporal advantage of three moves. White has already developed both his bishops and he has already castled.

Badly positioned pieces

On the right, Black requires two moves to bring the knight on a5 back into play.



White not only has a slight lead in development, but he can also exploit the poor position of Black's knight. The knight cannot take part in the defence of the kingside. Many of White's pieces are aimed at Black's king. The appropriate course of action is therefore an attack on the king:

1. Qa4 (to the kingside with a gain of tempo) **1. ... b6** **2. Qh4 h6** **3. Bxh6 gxh6** **4. Qxh6 Nb7** (there is no much else) **5. Ng5 Nc5** **6. Bh7+ Kh8** **7. Bc2+ Kg8** **8. Re3** and **9. Rg3**. White has a clear advantage on the kingside. The black knight was unable to join the defences.

The following three positions have been taken from a game between Leo Kerkhoff and Eddie Scholl. Kerkhoff cleverly exploits his lead in development while Scholl rather neglects to develop his pieces. The first diagram arises after **1. e4 d6 2. d4 Nf6 3. Nc3 g6 4. Bg5 c6 5. Be2 Nbd7 6. Nf3 Qc7 7. Qd2 b5?** (Black should have followed up with **7. ... Bg7**).

The side with the temporal advantage should:

- find concrete targets

- open up the position



White opens up the position to get at the uncastled king. This is well worth a pawn: **8. e5 dxe5 9. dxe5 Nxe5 10. Nxe5 Qxe5 11. 0-0-0 Be6 12. Bf3 Nd5 13. Bf4!**



A bishop sacrifice that cannot be accepted. White wins after **13. ... Qxf4 14. Qxf4 Nxf4 15. Bxc6+ Bd7 16. Rxd7**. The game continued **13. ... Qf6 14. Bxd5 Bxd5 15. Nxd5 cxd5**.



The position has been opened up and Black has not been able to develop his pieces. The end is near. **16. Qxd5 Qxf4+ 17. Kb1**. Black resigned. The position after **17. ... f6** is hopeless.

Test

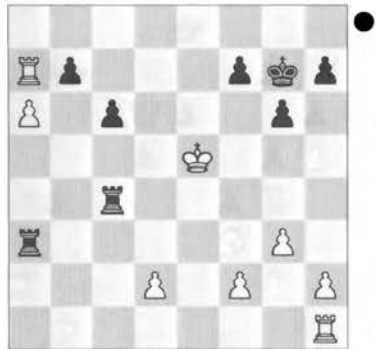
Mix (4th step): A



Test



Mix (4th step): B

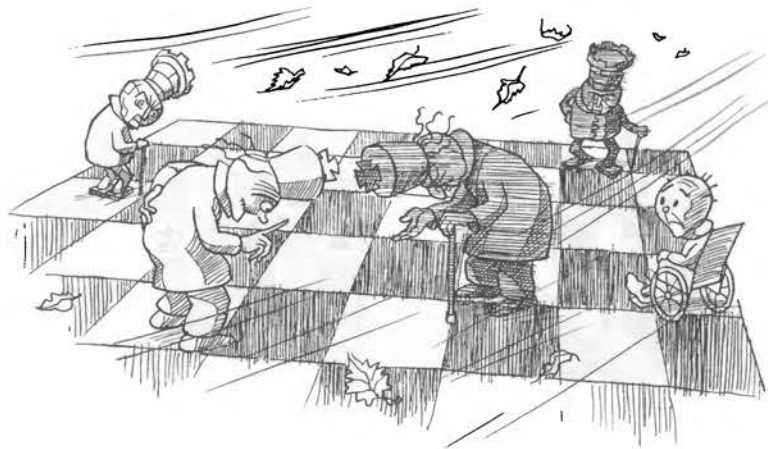


Mate



Mate in three: A

Mate



Mate in the ending: **A**

Pawn ending



Breakthrough: A

Pawn ending

Key squares: **A**





The use of pawns

Pawns are important. They have a number of different functions:



Protecting the castled king.



Defending pieces, by covering them (Nf6, Nc3) and shielding them off (Bd6).



Controlling squares, and thereby restricting the mobility of enemy pieces.



In both diagrams the pawns form a formation. We refer to this formation as the **pawn structure**.

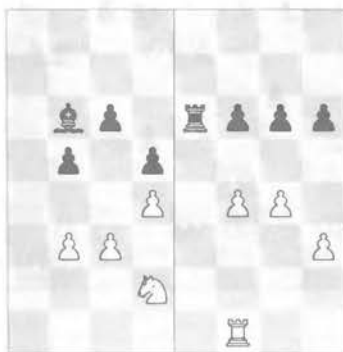
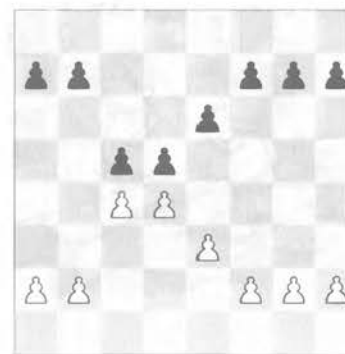
The pawn structure has not yet been fully determined. On the left, only the pawns on e4 and e5 are fixed.

On the right, the structure is almost completely fixed.



In those positions where pawns can capture each other there is **tension**.

On the left, the pawns on d4 and e5 are attacking each other; hence, there is tension in the centre. At right, there is tension in the cluster of pawns on c4, d4, c5 and d5. It is usually advantageous to maintain the tension.



Demolishing the structure of your opponent can give you the advantage.

On the left, Black demolishes the white structure with 1. ... b4. This move leaves White with a weak doubled b-pawn. On the other side White plays the strong 1. f5. On the right, 1. f6 demolishes the castled king's protective pawn shield.



Mini plan



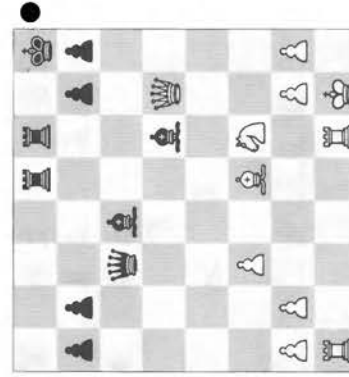
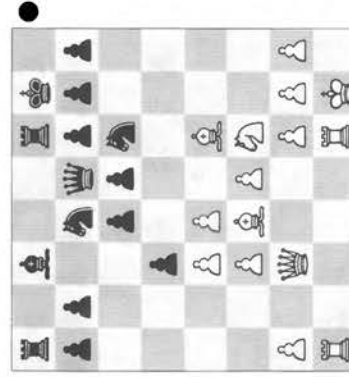
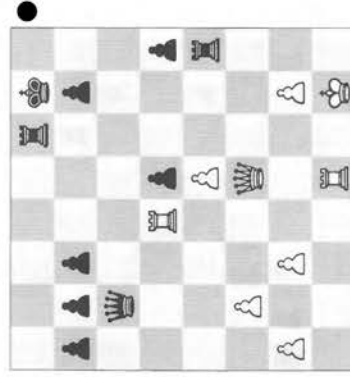
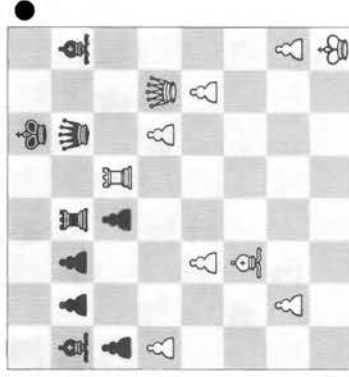
Pawn structure: A

Test

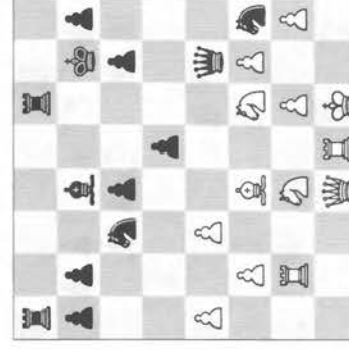
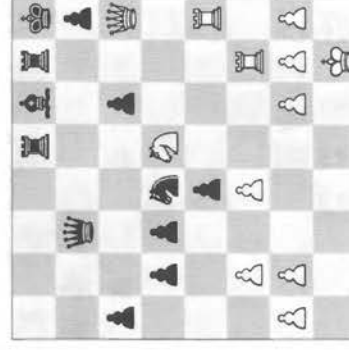
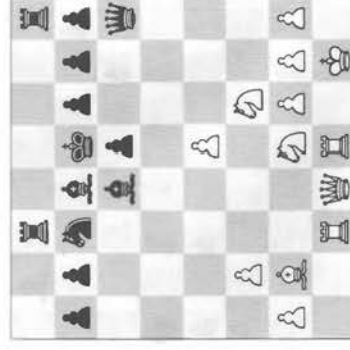
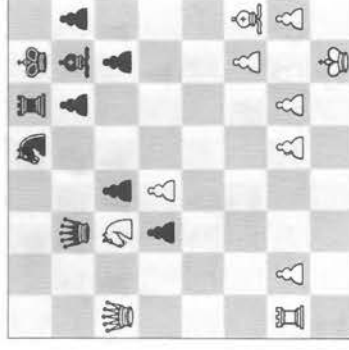
Mix: D



Test



Mix: E



Pawn race

The march of passed pawns towards their promotion squares can be likened to a race. A lot of things can happen during such a race.



The race in this diagram is not very exciting. The white pawn queens; the black pawn gets no further than the 3rd rank: **1. b6 g4 2. b7 g3 3. b8Q.**



Both pawns require a further three moves. But note that White will queen with check on b8: **1. b6 g3 2. b7 g2 3. b8D+.**



Reaching the finish line at the same time does not always lead to a draw. Here White has a winning X-ray check: **1. h7 b2 2. h8Q b1Q 3. Dh7+.**



Another tie. This time there is no X-ray check. Rather, Black is mated: **1. e7 f2 2. e8D f1Q 3. Qa4 mate.**



A one-sided race. White's pawn simply marches on, but Black's king is outside the square of the pawn: **1. g6 d3 2. Kf3** and White wins.



White is ahead, but the black king is inside the square of the pawn. White can shield off the king and win: **1. Kb5 Kd6 2. Kb6 Kd7 3. a6 Kc8 4. a7.**



White must be careful. After **1. Kb6** Black queens with check. White must assist the pawn by **1. Ka6 g2 2. c7 Kd7 3. Kb7.**



Racing with **1. ... e5** is bad. White will pick up the new queen with **Qf8+** and **Qe8+**. Black should go after the a-pawn with **1. ... Ke7.**



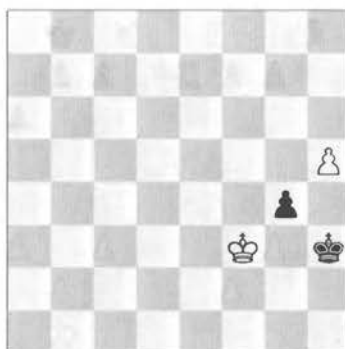
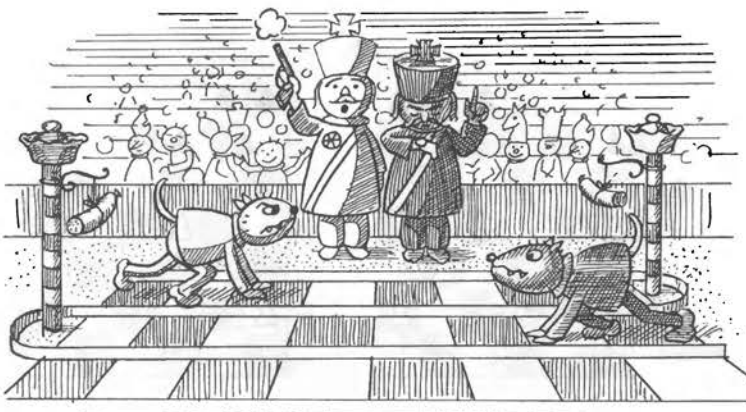
The white pawn is doomed while the black pawn is free to go. All the same, White can draw with **1. Kf7** (threatening **2. e6**) **1. ... Kxe5 2. Kg6.**

Pawn ending



Pawn race: A

Pawn ending



Pawn race: B

Strategy



Seventh rank: A



Luring away + mate: A



Discovered attack

A double attack can be set up with the help of five different types of preparatory move:

- **luring**
- **eliminating the defender**
- **aiming**
- **chasing**
- **clearing**

The same types of preparatory move can be used to prepare a discovered attack. As you will probably recall, a discovered attack requires the presence of a battery. In some positions, the battery may not yet be effective or must first be set up. This is where the preparatory move comes in.



This position does not contain a battery yet. White sets up a lethal battery with **1. Qf2+**. The target piece (the queen on d4) is already in place. It does not matter how Black gets out of check. On the next move White gives check with the rook and then picks up the queen.

Preparatory move: **aiming**



The battery Rd1/Bd3 is in place. It is as yet ineffective, since **1. Bxg6 Qxg6** does not give White anything. White must therefore chase away the knight on g6 with **1. h5**. The knight is lost. If it moves away, White will unleash the battery with **2. Bh7+**.

Preparatory move:
eliminating the defence



The battery on the d-file does not yet work, since the rook is obstructed by two of White's pieces. White needs to play two clearing moves. The best method is **1. Bxb7 Bxb7 2. Nf5+**, winning the queen.

Preparatory move: **clearing**



The battery on the c-file lacks an attacking target. White can lure the queen into the rook's range with **1. Nc7**, the point being that **1. ...Qxc7** is met by **2. Bf8+**. If Black does not take the knight, then White will win the exchange.

Preparatory move: **luring**



The battery Bb3/Nc4 lacks an attacking target. The front piece (the knight) can give check. What is needed is a target for the back piece. We can find one by chasing the rook to g8; White wins the exchange after **1. Bg7 Rg8 2. Nd6+**.

Preparatory move: **chasing**

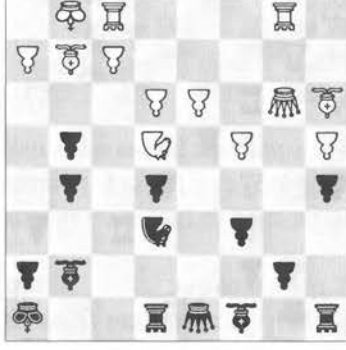
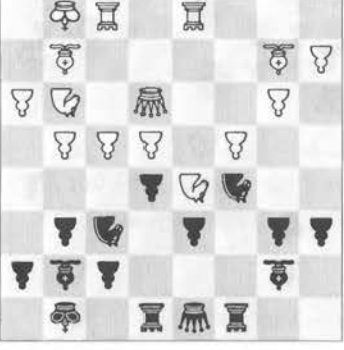
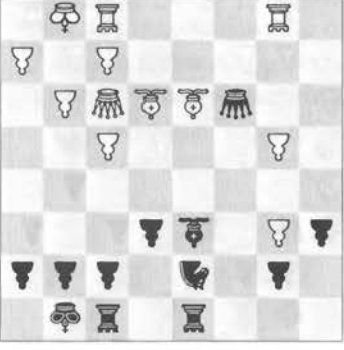
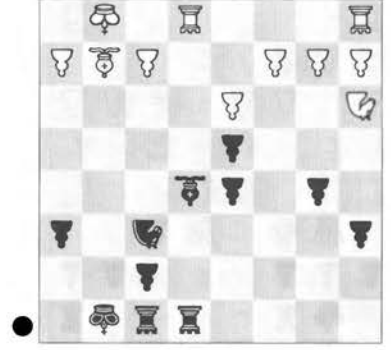
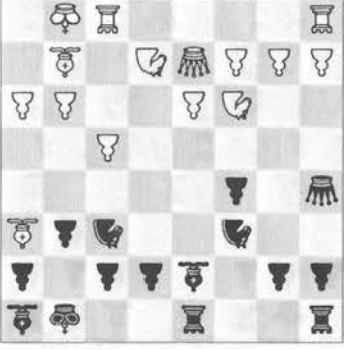
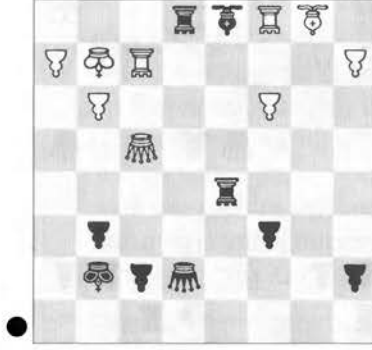


This position concludes our overview of preparatory moves. The back piece (Bb3) and the front piece (Rc4) are both ready. The back piece has an obvious target (Qf7). But what about the target of the rook? Is it the king? No. Material? No. A square? Yes! It is mate after **1. Rh4 Qe7 2. Rxh7+ Kxh7 3. Qh4#**.

Discovered attack



Preparatory move: A



Preparatory move: B

Discovered attack

Double attack



Discovered attack: A



Double attack



Discovered attack: B

Pin

Preparatory move: **A**



Pin



Preparatory move: B

Test

Mix: F





Rook against pawn

The struggle between rook and pawn is tense if the king of the side with the rook is not too close by. If the following principles are correctly applied, this type of ending can be played correctly.



The win is easy if the king of the side with the rook is inside the square of the pawn and can approach it unhindered. On the left, White picks up the pawn after **1. Kc3 e3 2. Kd3**. The side with the pawn has an easy draw if the enemy king is too far away. At right, Black draws after **1. Kb6 e2 2. Kc5 Kf2**.



Strategy for the rook side:
The king must approach the pawn from the side opposite to the enemy king. Thus, on the left White plays **1. Kc6 c3 2. Kb5 Kd3 3. Kb4 c2 4. Kb3**. On the right, the king is unable to approach, so the rook side must drive away the enemy king: **1. Ra2+ Kf3 2. Ra8 e3 3. Rf8+ Ke2 4. Kg2** Not **1. Ra8 e3 2. Rf8+ Kg1. Kg1**.



The king is on the right side, but approaching the pawn directly does not work: **1. Kf7 e4 2. Kf6 e3 3. Kf5 e2 4. Kf4 Kd3 5. Kf3 Kd2**. The rook is misplaced. Correct is **1. Rd1+ Kc3 2. Re1 Kd4 3. Kf7** and White is in time. The diagram on the right shows that cutting off the enemy king on the 5th rank or higher is always winning: **1. Rf5 d3 2. Rf3**.



Strategy for the pawn side:
Shielding off and advancing the pawn is all the pawn side can do. The former is usually better than the latter. On the left, Black draws with **1. ... Kf4**. He is lost after **1. ... Kf2 2. Ke4 g3 3. Ra2+**. On the right, **1. ... d3** loses. The right method is **1. ... Kd3 2. Kb5 Kc3 3. Rc8+ Kb3 4. Rd8 Kc3**.



Endgame

Rook against pawn: **A**



Endgame

Rook against pawn: B



Strong square

A square is strong if:

- it cannot be controlled by one of the opponent's pawns;
- it is, or can be, occupied by one of your own pieces.

Strong squares are significant only if they are on or close to the part of the board where the action takes place. The battle for strong squares includes the following elements:



Creating a strong square

With 1. c4 White gains control of the square d5. This square cannot be controlled by any of the black pawns.

On the right, White can create a strong square on d5 by taking on d6. The c7-pawn can then no longer control d5.



The route to a strong square

On the left Nd7 is better off on the strong square d4. This can be achieved with Nb8-c6-d4 or, even better, with gain of tempo: **Nd7-c5-e6**.

White is down an exchange but has compensation in the form of a strong square on c4. He can reach c4 by **1. Nd2**. Note the function of the pawn on a5.



Eliminating the defender

On the left White cannot occupy d5, since it is protected by the c6-pawn. White can exchange this pawn with **1. b5**, securing d5.

On the right, Black can eliminate the defender of d4 by **1. ... Bg4** and **2. ... Bxf3**.



Denying your opponent a strong square

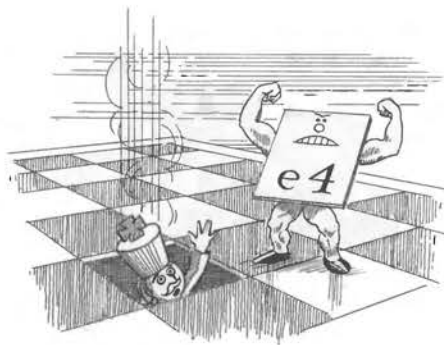
On the left, Black threatens to occupy a strong square with **1. ... Nd7** and **2. ... Nc5**. Hence, White must play **1. Bh3**.

On the right, White threatens to play his knight to d5. Black can prevent this with **1. ... a6** **2. Bxc6** (otherwise **2. ... b5**). Black conquers d5.



Strategy

Strong square: A



Eliminating the defence

Luring away + mate: **B**





Defending

The following 9 positions contain examples of various defensive strategies. These include defending against mate, the loss of material and pawn promotion. We recommend that you study them well!



White threatens mate on g7. Black cannot protect g7, but he can save himself with a counter pin: 1. ... Df4 2. Dxf4 Bxe5.



White threatens mate on e8. Black can protect e8 by means of a double attack: 1. ... Rh4+ 2. Kg3 Rh8.



Black survives with the help of a pin and an in-between move: 1. ... Qf7 2. Rxf7 Rxd1+.



Black can escape the X-ray attack with a gain of tempo: 1. ... Rc4 2. Rxc4 Rd8+ (a check in-between) 3. bxc4. The rook is safe.



Sadly, 1. ... Kf8 2. Rxe7 Dxe7 3. Dxc8+ fails. The double attack can be avoided by trapping the rook: 1. ... Qf7 2. Rxe7 Qxe6+ 3. Rxe6 Kf7.



Black's gamble 1. ... e2 (1. ... Bf6!) paid off; after 2. fxe7 Bd4+ White resigned. White could have won with 3. Ne3! (X-ray protection of f1).



Black counterattacks. Is there a better move than 1. Qd2? There is! 1. Qxh7+ Kxh7 2. Rxd4, and 2. ... Nc2 is met by 3. Be4+. White remains an exchange up.



The c-pawn cannot be won without losing material, but the new queen can. After 1. Ba3 c1Q 2. Rxb2 White wins with a discovered attack.



The knight can cover f1 with a gain of tempo: 1. Ka3! b5 2. b4+ Kb6 3. Nd5+ Kc6 4. Ne3 winning. The passed pawn is stopped with the help of a double attack.

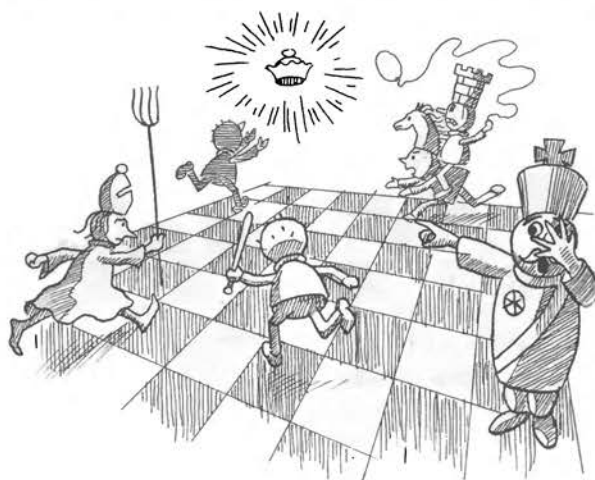
Defending

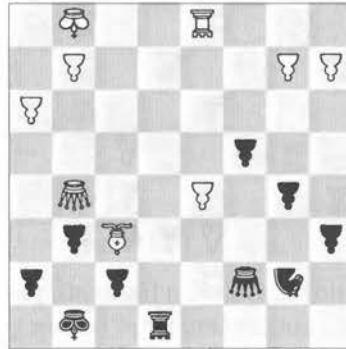
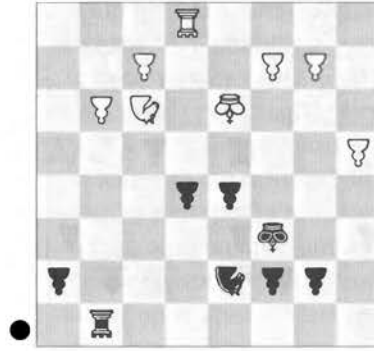
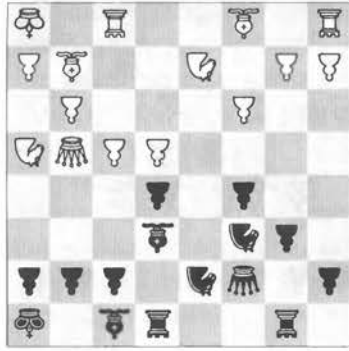
Defending against mate: A



Defending

Defending against a passed pawn: **A**



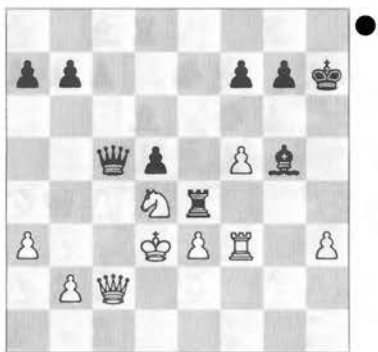


Defending against threats: A

Defending

Eliminating the defence

Mix: **A**



Rook ending

Rook endings occur quite often. It is therefore important to be able to recognize winning and drawn positions. In each of the following positions White is a pawn up. In some cases this is sufficient to win the game, but not in others.



The black king is **in front of** the pawn. This is the best spot for a defending king. All the black rook needs to do is switch back and forth on the 6th rank until the pawn reaches e6. Then the rook must be played to the 1st rank to give checks 'from behind':
1. ... Ra6 2. e5 Rb6 3. Ra7 Rc6 4. e6 Rc1 5. Kf6 Rf1+.
 Black continues to give check or else wins the pawn. Draw.



A similar situation, but much less favourable for Black, whose pieces are restricted to the back rank. Since the rook is tied, the defensive method as illustrated in the previous example is not available. White has an easy win; after **1. Rg7+ Kf8 2. Rh7 Kg8 3. f7+ Kf8 4. Rh8+** he nets the black rook with an X-ray check.



This position differs from the previous one in one crucial respect: the kings and pawn have been moved one file to the right. This one file means the difference between a win and a draw. After **1. Rh7+ Kg8 2. Rg7+ Kh8** the board turns out to be too small, and thus White is unable to win. There is not enough room for the white rook to the right of the king.



The defending king is cut off. This costs Black half a point. White wins with **1. Re1+ Kd7 2. Re4!** (a move to remember!) **2. ... Rh1 3. Kf7 Rf1+ 4. Kg6 Rg1+ 5. Kf6 Rf1+ 6. Kg5 Rg1+ 7. Rg4.** This winning method is called **building a bridge**. White cannot make any progress without 2. Re4. 2. Kf7 is met by 2. ... Rf2+ 3. Kg6 Rg2+ 4. Kf6 Rf2+ 5. Ke5 Rg2 and the king is forced to retreat.



The distance between king and enemy rook is an important factor in rook endings. The more distant the check, the more effective it is. In this position the distance is too small. After **1. ... Rg7+ 2. Ke8 Rg8+ 3. Kf7 Rh8 (3. ... Rd8 4. Ke7) 4. Rh1 Rd8 5. Ke7.** Although **4. ... Rxh1** is better, Black will still draw the short straw after **5. d8Q.**



Here the distance between the white king and the black rook is sufficiently large for a draw. If Black keeps giving check, he can obtain a draw: **1. ... Rh7+ 2. Ke6 Rh6+ 3. Ke5 (3. Kf5 Rd6) 3. ... Rh5+ 4. Ke4 Rh4+ 5. Kd3 Rh8** and Black wins the pawn. It is important that in this type of positions the defending king is on the 7th rank, and not on the 8th rank.

Rook ending

Mate: **A**



Rook ending

X-ray check: A



Attack on the king



Attack on a castled king: A

Attack on the king



Attack on a castled king: B

Open file

Files without pawns are called **open files**. Open files can be used to invade the opponent's position. Such an invasion is most effective on the 7th rank, since this is where most of the opponent's pawns are positioned. Using an open file involves four different, but related aspects:

- opening a file
- using an outpost
- gaining control of an open file
- preventing the opponent from using an open file



Opening a file

White opens the d-file by **1. dxe5**, thereby undoubling Black's f-pawns. The first is more important, since White can occupy the open file. After **1. ... fxe5 2. Rd1** the rook can go to d7. We know from the lesson on the 7th rank that the rook is very active there.



Opening a file

Although White can open the a-file with **1. axb6**, he cannot actually conquer it. The right strategy in this position is to wait. White should first play **1. Ra3** and **2. Rea1** and only then take on b6. Black will then have to give up the a-file.



Using an outpost

White cannot gain control of the c-file immediately. He must threaten to double his rooks with **1. Rc5**. Black now faces an unpleasant choice. After **1. ... Rxc5 2. dxc5** White gets a protected passed c-pawn, while Black is left with a vulnerable pawn on d5. If Black does not take, he will lose control of the c-file.



Take control of an open file

In this position White and Black are both controlling the d-file. White can chase away the black rook with **1. Bf6**. White gains control of the d-file, regardless of whether Black takes on d1 or moves away his rook.



Preventing the opponent from using an open file

It would appear as though White is controlling the d-file. Black is unable to oppose rooks. However, he can make sure that the white rooks will not invade his position. Black can seal off the d-file with **1. ... Nd5**.



Preventing the opponent from using an open file

Black must prevent the white rook from invading the 7th rank. Exchanging on d4 does not help; rather, Black must create an outpost with **1. ... Rd5**. After **2. Rxd5 exd5 3. Re1 Kf6** the white rooks are effectively harmless.

Strategy

Open file: **A**







Draw

In bad positions you can try to play for a draw. This can be achieved by forcing stalemate or by making sure that your opponent is left with insufficient material to win.



Forcing stalemate

When your own king cannot play anymore, the strategy to force stalemate is simple: give away your last pieces.

On the left, White gives away his pawns: **1. d8Q+ Kxd8 2. c7+** and Black is forced to take the pawn now or on the next move.

On the right, Black gives up his rook: **1. ... Rg2+ 2. Kh3 Rg3+**. If White takes, it is stalemate. Black has what is called a 'rampant rook'.



The king can still play

The black bishop can take the queen, but the resulting pawn ending is totally lost. Again, Black can save himself by stalemating his king.

After **1. ... Kh8** White has nothing better than **2. Qxf7** (after a king move Black would be winning!) and Black is stalemated.



A piece can still play

On the left, Black can still play with his king, his queen, and his a-pawn. However, he can obtain a draw with **1. ...**

Qa3+. If the queen is taken, the pawn on a3 blocks the a-pawn and takes away b4 for the king. After **2. bxa3 b2+** Black escapes with a draw.

On the right, the g-pawn is pinned. White can save himself with the strong **1. Qf4+**. After **1. ... Qxf4** it is stalemate.



Mate is no longer possible

Winning with a knight alone is impossible. All White has to do is get the black a-pawn. After **1. Kb3 Nc1+ 2. Ka4** White wins the a-pawn or is stalemated after **2. ... Kb6**.

On the right, White is after the f-pawn. He can obtain a draw with **1. Ne7 f4 2. Ng6 f3 3. Ne5 f2 4. Ng4 f1Q** (4. ... f1N 5. Nf6!) **5. Ne3+**.



The pawn has advanced too far

In both parts a 4-point material plus does not suffice for a win. On the left, the black king is trapped after **1. Kc1**. The knight is unable to chase the king away from both c1 and c2. On the right, Black keeps moving his king from g7 to h8 and back. White must lose the h-pawn or allow stalemate.



Insufficient material plus

Being an exchange up in the absence of pawns is usually insufficient for a win. On the left, White obtains a draw after **1. Nb6+ Kb7 2. Nc4** and **3. Nxa3**.

On the right, White wins the h-pawn after **1. Bh4 Kg6 2. Bg3 Kg5 3. Kxh3**. With correct play, Black's material plus is insufficient.

Draw



Stalemate: **A**

Draw



Insufficient material: A



The wrong bishop

Suppose that your opponent has only his king left. You still have material on the board, but, unfortunately, you are unable to give mate. This is the case when you have a knight, a bishop or a pair of knights (a six-point plus!). Tough luck! Under very special circumstances, the combination of a bishop and a pawn is also insufficient to win the game. In such cases we call the bishop **the wrong bishop**.



On the left, the side with bishop and pawn has an easy win. For instance: **1. a6 Kb8 2. Kb6 Ka8 3. Be4+ Kb8 4. a7+**.

On the right, we have a similar position, but a quite different result! The bishop and the corner square do not have the same colour. After **1. h6 Kh8 2. Kg6 Kg8 3. h7+ or 3. Bb3+** Black is stalemated.



A bishop whose colour is different from that of the corner square is a 'wrong bishop'. If the defending side has his king in the corner or within reach of the corner, the game will end in a draw. On the left, this is not the case. The pawn marches on after **1. Bb4 Kb3 2. Kb5**. On the right, the king cannot reach a8: **1. Kd5 Kd7 2. Bf4! Kc8 4. Kc6**. White wins.



On the left, the combined force of bishop and pawn denies the black king access to the corner. Black is helpless after **1. ... Kc8 2. Kb2**. The same is true on the right of the diagram. Here **1. Kh2 Ke7 2. h7** wraps up. On the right, assistance of the king is required: **1. Bh7! Kf6 2. Kf4 Kf7 3. Kf5 Kf8 4. Kf6** winning.



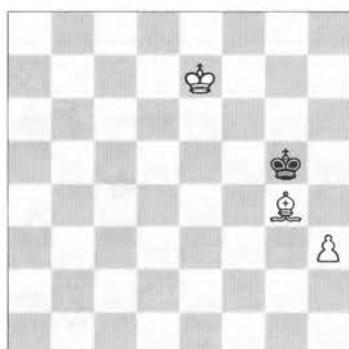
In the final two positions the defending king manages to reach the corner.

On the left, Black salvages a draw with **1. ... Ke4** (and not **1. ... Kf4 2. Kd4 2. h5 Ke5**, and Black is en route to the sanctuary on h8. The correct move on the right is **1. ... Ke7**. Bad is **1. ... Ke8? 2. Bd5 Ke7 3. Kg5**, and the king will not reach the corner.



Endgame

Wrong bishop: A



Test

Mix: K







Learning chess Step by Step

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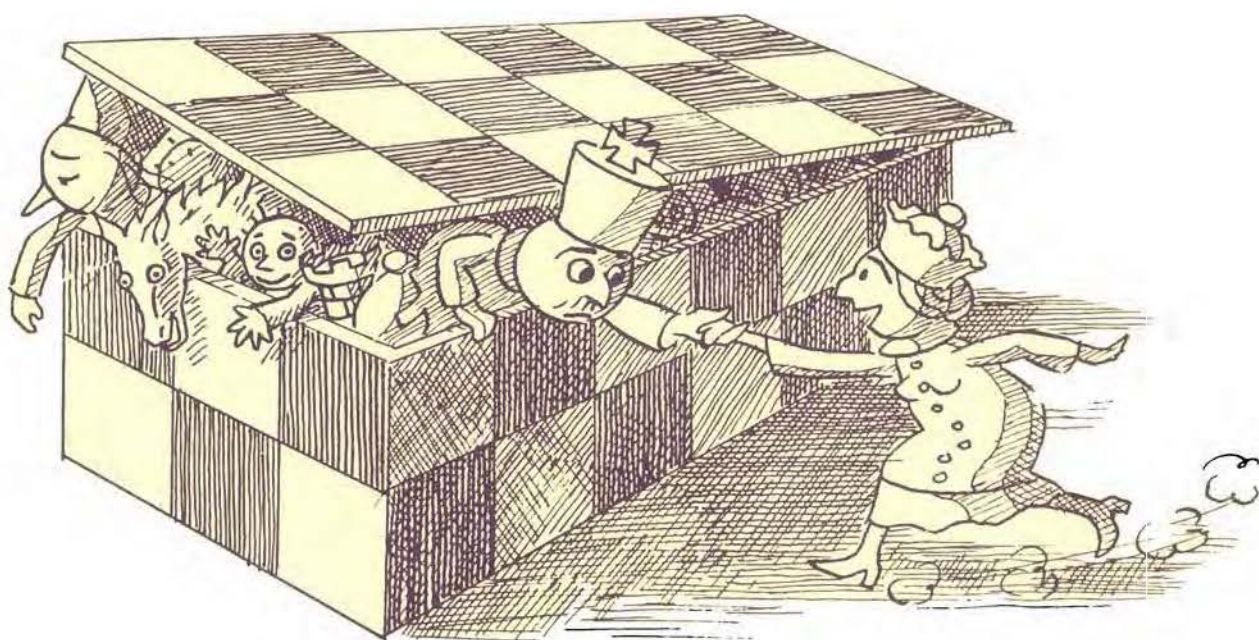
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