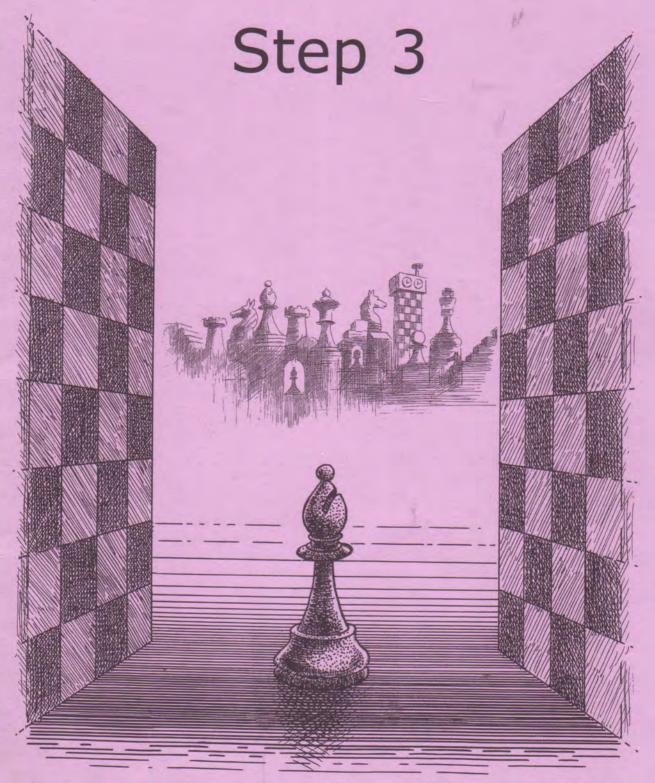
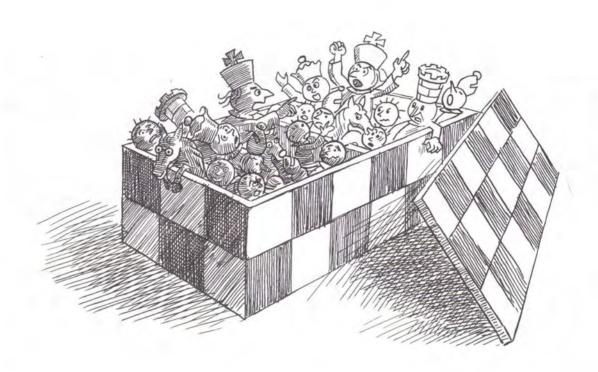
Learning chess



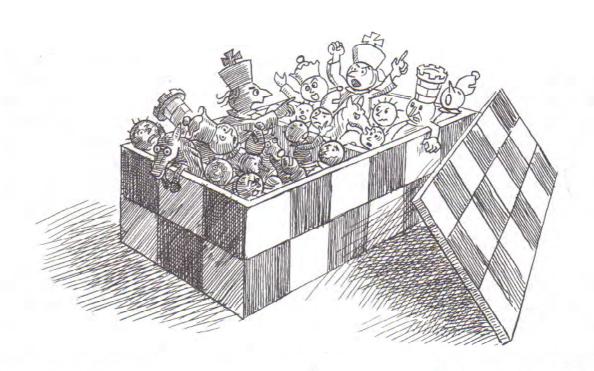
Rob Brunia, Cor van Wijgerden

Workbook Step 3



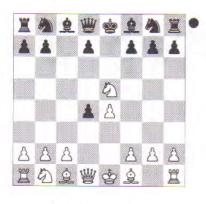
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Street:	Place:
School:	Club:
Learned chess from:	Chess trainer:
1 st step completed:	2 nd step completed:

Workbook Step 3



Name:	Date of birth:
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1 st step completed:	2 nd step completed:

Mix (2nd step): A



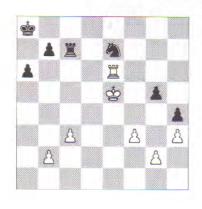


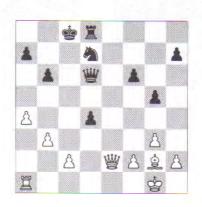


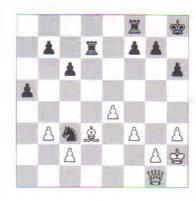






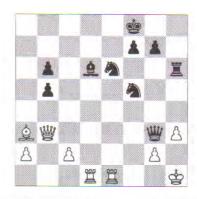












Mix (2nd step): B



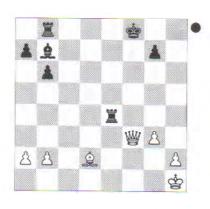




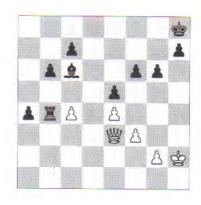






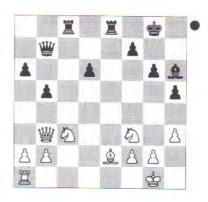




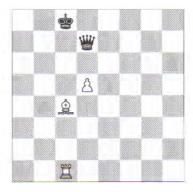






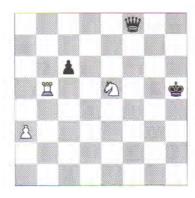


Discovered and double check

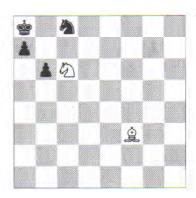


The discovered check is a special form of the discovered attack. The back piece of the battery (Rc1) is indirectly aimed at the king. The front piece will produce a gain of material with 1.

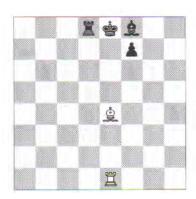
Bb5+. The rook gives check and the bishop attacks the queen.



The back piece in the discovered check always gives check. Because of the check this attack is much stronger in comparison with the discovered attack. In this position the white rook is attacked. Thanks to the discovered attack White can ignore this attack. He can win the queen with 1. Nd7+.



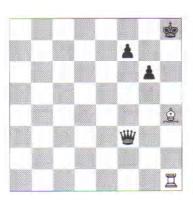
The front piece in a discovered check is not always aimed at winning material. An attack on a square is also a possibility. White plays 1. Nb4+ and this move forces the king to b8. After that, the knight gives mate on a6.



form of the discovered attack. Now also the king is the target piece.

Both the front piece (Be4) and the back piece (Re1) can give check. With the surprising move 1. Ba6 Black is checkmated. The black king cannot go out of both checks.

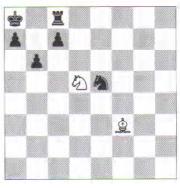
Double check is a special



Once 1. Bf6+ has been played, both black pieces are under attack. Nevertheless, the white pieces cannot be captured. After a double check, only a move by the king is possible.

Double check is therefore suitable to chase the enemy king in a mating net.

After 1. ... Kg8 White gives mate with 2. Rh8#.

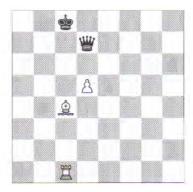


In this position a simple discovered check does not work because the bishop on f3 is under attack.

White should choose the double check with care: 1.

Nxb6+ Kb8 is not mate; the knight on e5 protects square d7. However, the other double check delivers mate: 1. Nxc7+ Kb8 2. Na6#.

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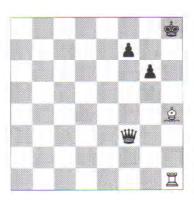
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4

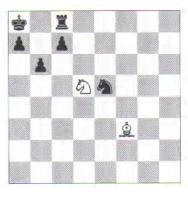
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Double attack

Discovered and double check: A























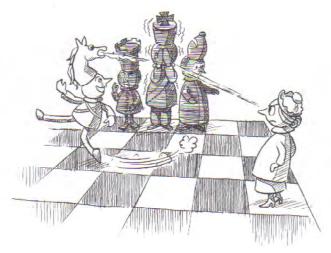


Mate in two (double check): A

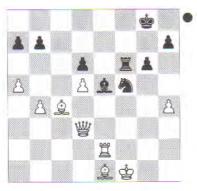






















Attack on a pinned piece



There are two pins in the diagram.

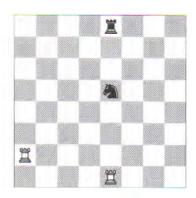
On the left Black is in trouble. The pinned bishop cannot be protected and he will be lost.

On the right, the pin is much less dangerous. The bishop is protected and White cannot profit from the pin.



The rook pins the bishop on d6, which is protected by the king. In order to make use of the pin, White must mount a second attack on the pinned piece.

After 1. Lc5 the black bishop is insufficiently protected and the two-fold attack is successful



White increases the pressure on the pinned knight with 1. Rae2. Pinning to material requires the same as pinning on the king: an extra attack on the pinned piece is necessary.

The knight may be played here and White must be careful with the attack. 1. Ra5 is poor because of 1. ... Nc4.



The bishop on d5 is pinned to the square d8. Without the bishop the white queen could give check on this square. White has to attack d5 once more. The move 1. Bf3 has no use, Black protects with 1. ... Qf5. The proper attack on the pinned bishop is 1. c4. It is clever to attack with the pawn as it is worth less than the bishop.



It is tricky that the front piece in 'material + material' can move away sometimes. When the back piece is a queen, a rook or a bishop a genuine battery arises, making a discovered attack possible.

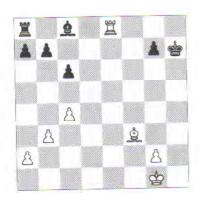
White had better give up the idea of 1. g4 because of 1. ... Ng3+.



A special form of the attack on a pinned piece is a combination of pinning and attacking.

In the diagram the rook on e7 is pinned, but the rook can take the queen on e4. So the pin is in fact useless. It is quite different after 1. Ra7. This pin has an appropriate name: the cross pin.

Attack on a pinned piece: A

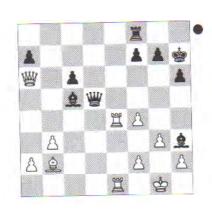


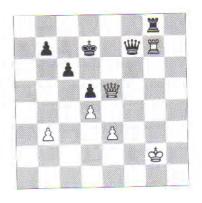


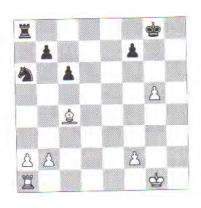




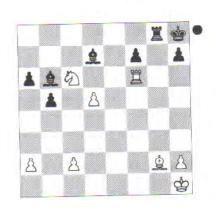












Attack on a pinned piece: B

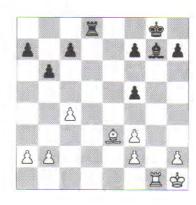
























Access and mating pattern



The black formation is not weakened yet. In order to win, White must undermine the castled position. He does this by capturing with the rook on a7.

White gains access to the black king by a sacrifice.

The position on the right occurs after the moves: 1. Rxa7+ Kxa7 2. Qa5 mate.





On the left the defences of the king are undermined in another way.

With 1. Ng6+ White forces his opponent to open the h-file. Once again White gains access thanks to a sacrifice.

The position on the right side occurs after the moves: 1. Ng6+ hxg6 2. Rh1 mate.



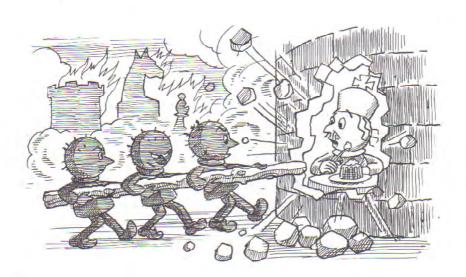
In order to know whether you can succeed with a sacrifice, you must be able to recognize mating patterns. If you know the mating pattern you can consequently go for it. Here are some examples.















Mate

Mate in two (access): A



4 mating patterns with 2 rooks



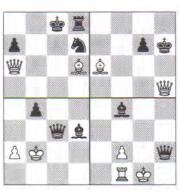












4 mating patterns with queen and bishop





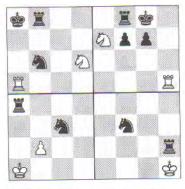






Mate

Mate in two (access): B



4 mating patterns with rook and knight











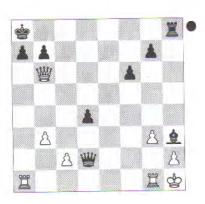


4 mating patterns with rook and bishop











Mate

Mate in two (access): C

















4 mating patterns



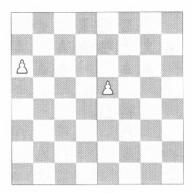






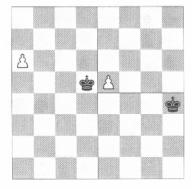


The square of the pawn



On the left we count two squares ahead of the pawn on a6 to the promotion square, then also two squares to the side of the pawn.

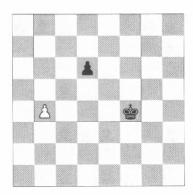
On the right we do the same with the pawn on e5. Three squares ahead and three squares to the side.



By counting in this way we have determined the square of the pawns.

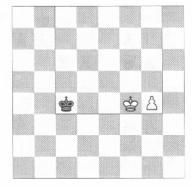
The square of the pawn on a6 are the coordinates a6-a8-c8-c6 and the square of the pawn on e5 are the coordinates e5-c8-h8-h5. On both sides the black king stands outside the square of

stands outside the square of the pawn. White to move promotes to queen. If it is Black's move, the king steps inside the square of the pawn and can stop the pawn.



In this diagram the king is inside the square of the pawn (b4-b8-f8-f4), but will not capture the pawn. His own pawn is in the way so that the king must make a detour:

1. b5 Ke5 2. b6 Ke6 3. b7 Kd7 4. b8D.



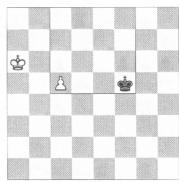
The black king is in the square of the pawn, but he cannot stop the g-pawn anymore. The white king shoulders off the black one:

1. g5 (or immediate 1. Ke5)

1. ... Kd5 2. Kf5 Kd6 3. Kf6 Kd7 4. Kf7 and the pawn can walk through unhindered.

Shouldering off the enemy king is a handy move in pawn endings. In this way

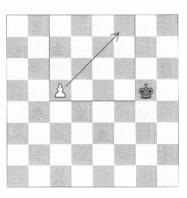
you eliminate your strongest



The black king is in the square of the pawn, but now the pawn gets support from his own king.

After 1. c6 Ke6 2. c7 Kd7 3. Kb7 the white kings helps to promote the pawn.

Supporting (helping) is another way to eliminate the enemy king.



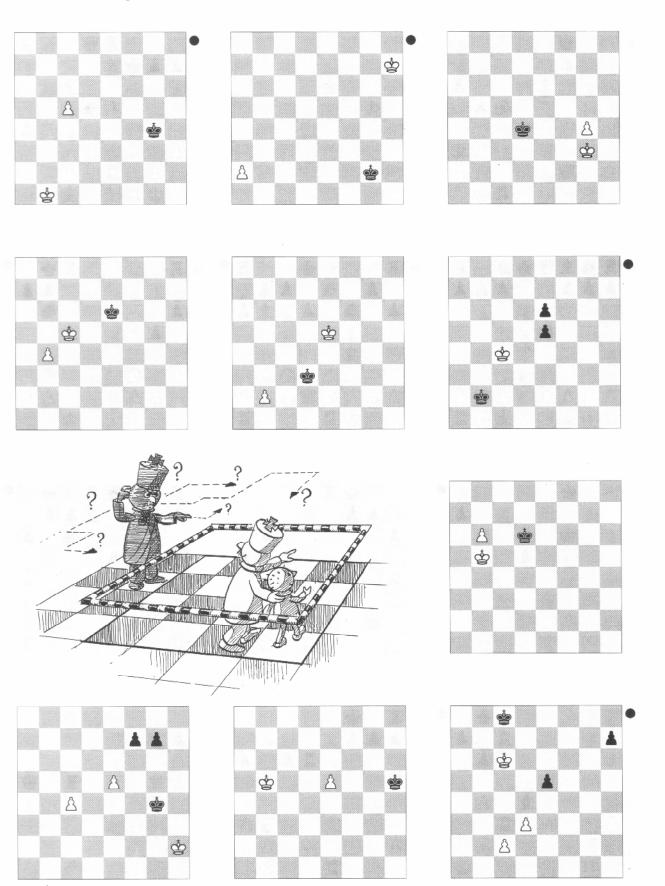
We can see at a single glance if the king is in the square of the pawn or not.

From the pawn we lead a diagonal to the other side in the direction of the enemy king (square f8 in this case). There we find the upper corner of the square. So the square is f8-f5-c5-c8. The black king is just positioned outside.

opponent.

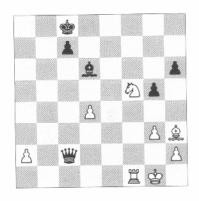
Pawn ending

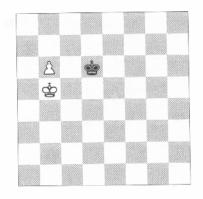
The square of the pawn: A

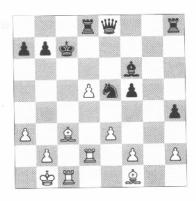


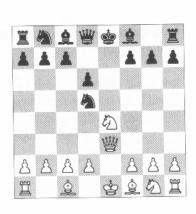
Test

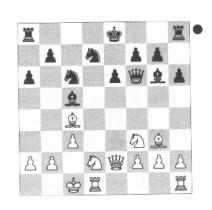
Repetition: A

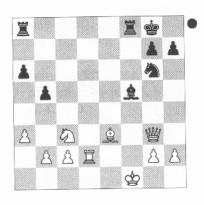


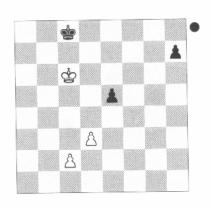


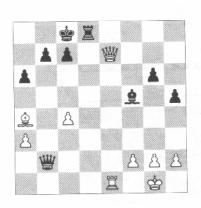




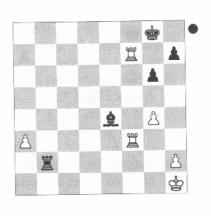


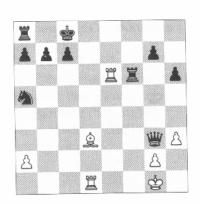


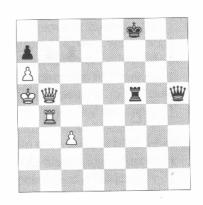






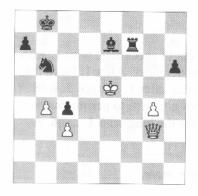


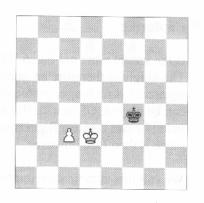


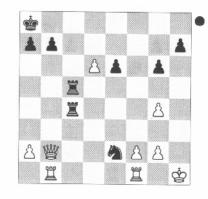


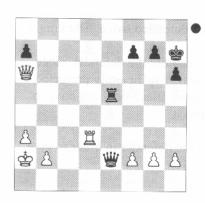
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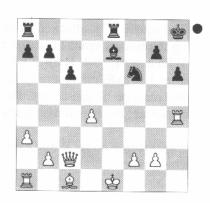
Mix: C

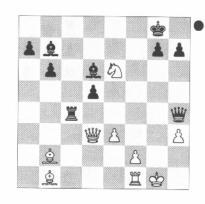


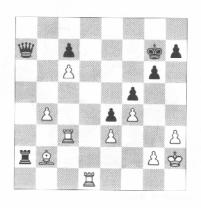


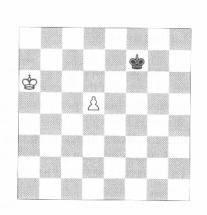


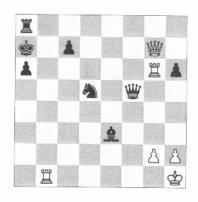


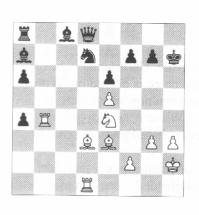


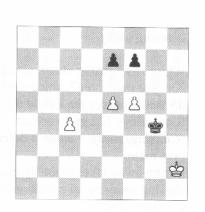


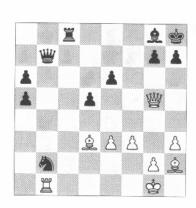














Capturing

If the knight were not on c6 White could checkmate with 1. Rd8. The knight is therefore an important defender. After 1. Bxc6 the square d8 is no longer protected so that after 1. ... bxc6 2. Rd8 can be played. Of course, Black does not have to permit checkmate; he can create a flight square for the king with 1. ... g6. A piece is then lost, however.

We call this combination capturing + mate.



The square h7 is attacked twice and defended twice. The knight on f6 protects against mate on h7.

With a sacrifice 1. Rxf6 White can capture the defender, since after 1. ... gxf6 the square h7 is no longer sufficiently protected and mate on h7 can follow. Here again, Black does not have to recapture, but in that case loses a piece.

Capturing + *mate*: White captures the defender in order to give checkmate.



Luring away

The white rooks could give mate on c8 and e8 if the bishop were not on e6. The bishop protects c8 and obstructs the way to e8. After the move 1. Rc8+, Black must take the rook and White can give mate on e8. The defender has been lured away by a rook sacrifice.





Chasing away

White has a strong attack along the g-file. Unfortunately he cannot give mate on g7, since the knight on e6 is defending. With 1. d5 White chases the knight away and can now checkmate. If Black plays 1. ... g6 to prevent mate, White wins a knight. (Chasing) away + mate: a defender is chased away in order to give mate.

Luring away takes place by means of capturing or a sacrifice, chasing away by an attack on an undefended piece or a piece with a higher value.

Capturing + mate: A

























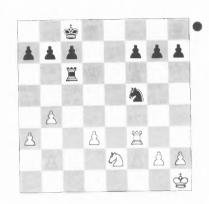
Luring away + mate: A





















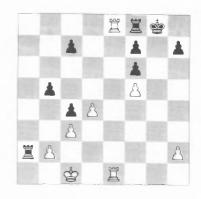




Chasing away + mate: A











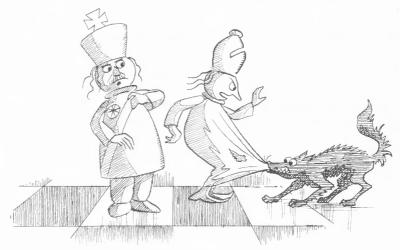












Defending against the double attack

The double attack by the queen is a dangerous offensive weapon. However, in some cases there are possibilities to mount a defence.



Interposing + protecting

The black queen gives check and also attacks the bishop (king + material). White defends with 1. Rf4. He is no longer in check and the bishop is defended by the rook.



Moving away + protecting

Both black pieces are threatened by the white queen. Black plays his knight to d6. He defends by moving away in such a way that the bishop is defended.



Capturing (exchanging)

Black threatens both mate on fl and the rook on g5. With 1. Qxf4 White exchanges the queens and after 1. ... Rxf4 he prevents checkmate on fl by 2. h3.

Counterattack



Attack on the king

The white queen attacks two pieces. Black can save them by giving check. He can choose between:

1. ... Bb5+

1. ... Rd8+

1. ... Rg3+

22



Attack on material

The queen threatens mate on e8 and attacks the rook on b1. Black has a fine defence in 1... Lb7 after which the queen is pinned.



Attack on a square

The white rook and bishop are in trouble. With 1. Rd1 White can threaten mate, so that Black has no time to capture the bishop.
An unfortunate choice would be 1. Re1, since 1. ... Qxb5 will follow and White cannot give mate.

Defending

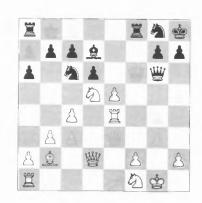
Defending against a double attack: A

























Double attack (queen)

Temptation: A

























Mini plan

Weakening the opponent's pawn structure: A

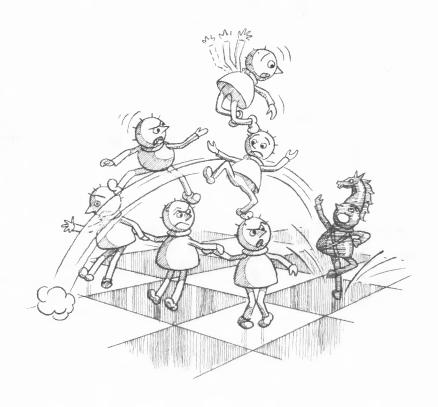




















Insufficient material

On the left White has a knight and Black a bishop. Neither player can force checkmate.

On the right White has a two knight advantage, but still cannot force checkmate. Although it is possible to checkmate with two knights, but then the second player must play follishly. Draw through insufficient material:





Perpetual check

On the right White can move the king to b1, but the black queen can give check on d1. We then get 1. Kb1 Qd1+ 2. Ka2 Qa4+, etc. This could go on forever; in chess we use the name perpetual check.

On the other side White keeps giving check on g6 and h6 without the black king being able to escape. If you are behind in material, or you are in danger of losing, **perpetual check** can provide a rescue!



Perpetual attack

White is behind in material on the left-hand side, and is thus happy with a draw. Black rescues his rook with 1. ... Rb8, White responds with 2. Qc7 and the rook must return to a8. White forces a repetition of position.

On the right, White is also down in material. He again is lucky to draw. The threatened black queen has to move to h8, and White pursues here with **2. Ng6**. Draw by repetition of position.



Agreement

Although both sides are equal in material, Black seems to be in better position, since the king has penetrated white's position. But what must black do now? White continues to move his bishop from f7 to g8. A draw is agreed upon since neither player can expect to win.

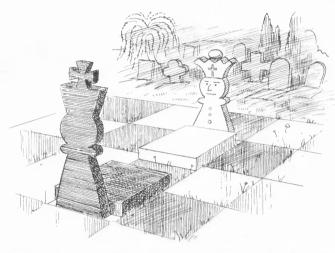
Beware: It is only allowed to offer a draw if it is your move. You play a move and you offer a draw.

Perpetual check: A























Stalemate: A

























Mix: A

























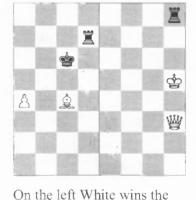
X-ray



The rook on c1 gives check and the enemy king must retreat. The rook on c8 is lost. The attack by the white rook works right through the king, like an X-ray, thus the appropriate name is X-ray check.



The attack by the bishop works through the king to the knight, which will be lost. Sometimes the X-ray check needs support from one of its own pieces. It is essential that the back piece is not



The rook is worth more than the bishop. In such a position it doesn't make much difference whether the back piece can be protected or not by the

exchange with 1, Bb5+,

front piece.

On the right Black wins material thanks to the X-ray check. Not a whole queen because the king can protect the queen with 2. Kg4.





The rook attacks the bishop on b7. If this bishop moves, the other one will come under attack. Here we have an example of an *X-ray* attack, not on the king, but on other pieces.

The rook attacks less valuable pieces. In this position it is essential that the bishops are not protected. Front and back piece cannot protect each other.



The queen must step aside, after which the knight on e7 is under attack: an X-ray attack. The rook looks right through the queen. He has two vital helpers in this position: the bishops. One is protecting the rook and the other is attacking the knight. The knight is not protected well enough after a move by the queen.



Thanks to the X-ray possibilities of pieces like queen, rook and bishop the X-ray works well with other combinations.

In the diagram White plays 1. Bd5+ and he delivers a double attack with the bishop. Because of the black queen the bishop is protected.

The name: *X-ray protection*.

Double attack

X-ray check: A

























Double attack

X-ray attack: A























Test

Repetition: B

















































Test

Mix: E

























Defending against the pin



The black queen is pinned to the king by the bishop. With 1. ... Nd6 Black moves his knight between the bishop and the queen. The pin is made harmless by:

interposing



The pinned black rook is about to fall. Black can save himself, however, with the intermediate check 1. ... Qg6+. After the king's move to h1, Black moves the rook away.

The pin is made harmless by a **counterattack**, in this position on the enemy king.

Defending against a pin by:



The black rook is in an annoying pin against the king. By taking the bishop with the knight the pin is removed.

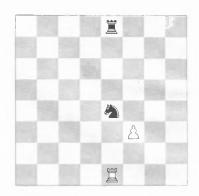
The pin is made harmless by:

capturing



The pin on the knight on d5 is problematic. By threatening checkmate on e1 with 1. ... Re8, the pin can be removed. Attacking the bishop with 1. ... Rb8 is also a defence, but less forcing. The pin is made harmless by a counterattack, on a square or on material.

- interposing
- capturing
- moving away with protecting
- counterattack on the king, material or square
- counterattack by a discovered attack



The knight is pinned and is attacked twice. With 1. ... Nf6 Black saves his knight, removes the pin and protects his rook.

The pin is made harmless by:

moving away with protecting



The bishop on d5 is in danger. White threatens 2. **Bf3**. But Black is to move and since the rook on d2 is unprotected he can defend himself with the move 1.... **Bxg2**+.

The pin is made harmless by a **counterattack**, in this case by a discovered attack.

Defending

Defending against a pin: A





















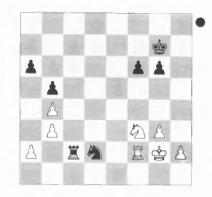




Defending

Defending against a pin: B

























Mobility

On an empty board the queen in the centre can move to no less than 27 squares; from a corner she can still go to 21 squares. On a board with more pieces this will never be possible: the opponent controls some squares and its own pieces can be in the way. The mobility of a piece depends on:

- its place on the board (by preference not on the edge or in the corner)
- the number of enemy pieces
- the presence of one's own pieces and pawns



We take a look at the mobility of the pieces:

Na8: poor due to the position on the board (temporarily)

Nb3: poor due to enemy pawns (temporarily)

Bf3: poor due to one's own pawns which are in the way (permanent)

Bg7: poor due to one's own pawns which are in the way (some future via f8)



You can **trap** enemy pieces with little mobility. In the upper left part, Black traps the knight: 1... **Kb7**. In the bottom left part, the knight will be lost after 1. **Kb1**. On the right, the bishop is protected, thus the attack with a piece of less worth is sufficient: 1... **f4**.



The black king and the rook on h8 are in bad shape. They cannot play a single move. Also the bishop on h6 cannot be played. Yet, there is a big difference: the bishop is very active because he controls two pieces.

Although Black is two exchanges up, his position is bad



In your own games it is useful to look for a piece of your opponent that has few squares to go to. You must take care that:

- you attack this piece
- you control all squares where the piece can go to In this position White traps the black queen with 1. Nc6.



The knight on b7 can jump to c5. It would be much better there than on b7. White to move notices this and plays

1. b4!

Suddenly the knight has no future, because jumping to d8 and f7 is no improvement. The white bishop can no longer go to b4. That is a pity, but **closing in** the knight is more important.



Sometimes it seems that you cannot trap a single piece. In this position you can easily attack the queen but she still has 6 squares to go to. All these squares are positioned on the 5th rank. A line piece like a rook can attack the queen and control all squares with one move: 1. Rb5.

Mobility

Trapping: A

























Mobility

Trapping: **B**

















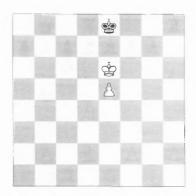








Key squares



The standard winning position.

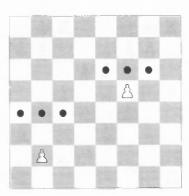
The king is on the 6th rank in front of his pawn. The king also may stand on d6 or f6. White always wins!

White to move:

1, Kf6 Kf8 2, e6 Ke8 3, e7 Kd7 4. Kf7 Kc7 5. e8Q.

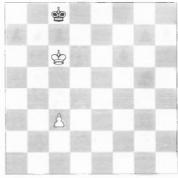
Black to move:

1. ... Kf8 2. Kd7 Kf7 3. e6+ Kg7 4. e7 Kf6 5. e8Q.



If the white king stands on one of the marked squares, White wins. For the pawn on b2, these are the squares a4, b4, and c4. For the f5-pawn, the squares are e6, f6, and g6. The squares on which the king must stand in order to win are called **key squares**. It is not important who is to move.

Be aware of the difference! The key squares for pawns on the 5th rank or higher are directly in front of the pawn.



If the king is on the sixth rank in front of his own pawn, White also always wins.

White needs only to move the pawn forward in order to reach the position of the previous diagram.



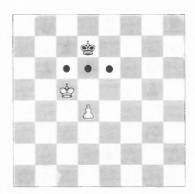
Before moving the pawn forward, the king must occupy the sixth rank.

After 1. Kf6 victory is sim-

A poor move is 1. f5, since after 1. ... Kf7, White can no longer win. See for yourself: 2. f6 Kf8!

The king must move straight backwards! Remember this move!

3. Ke6 Ke8 4. f7+ Kf8 with a draw.



The key squares for the d4pawn are: c6, f6, and e6. The white king must thus first occupy one of these squares. This can be accomplished by 1. Kd5! Black must move with the king: 1. ... Kc7 2. Ke6 Kd8 3. d5. The king remains on a key square. For pawns on the 5th rank they are directly in front of the

3. ... Ke8 4. d6 Kd8 5. d7 Kc7 6, Ke7.

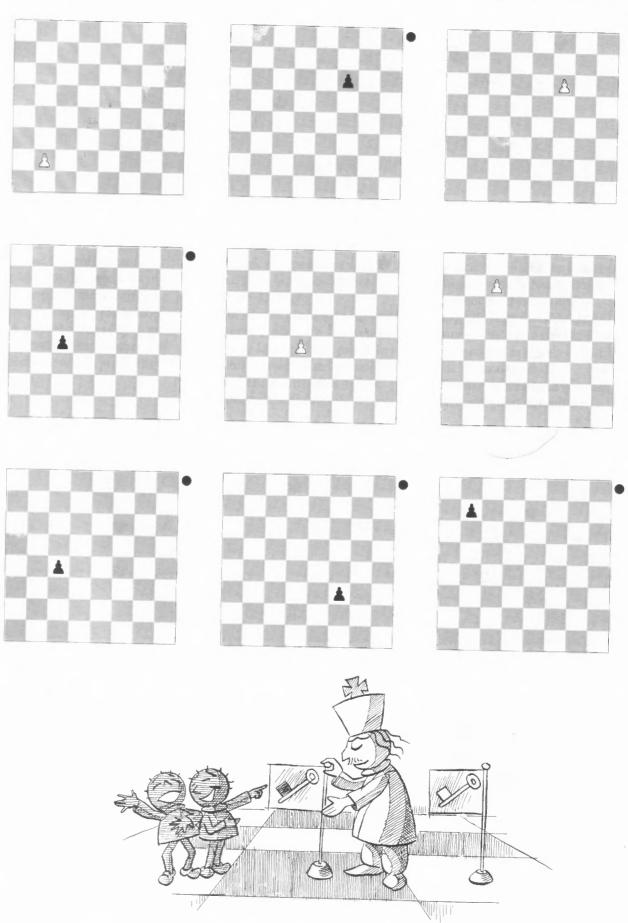


White's king occupies a key square. How to continue? On 1. Kg6 follows 1. ... Ke5. With the pawn on f4 the key squares are e6, f6 en g6. After 1. f4 Kf7 White cannot occupy one of these key squares. But after 2. Kf5 he again gains control over one. Have a look: 2. ... Kg7 3. Ke6 with an easy win.

42 Third step

Pawn ending

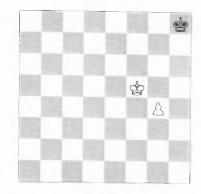
Marking the key squares: A



Pawn ending

Key squares: A





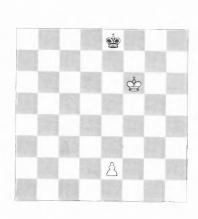


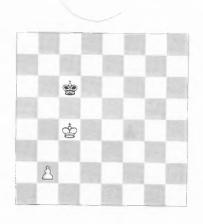


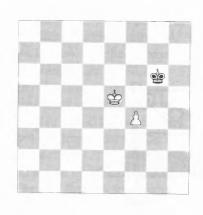


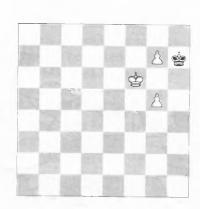














A pinned piece is not a good defender



In the diagram the knight on d7 is pinned and cannot move. Without this ability to move, the knight cannot carry out its protection of the bishop and the queen can simply capture the bishop. A pinned piece is not a good defender. That is especially the case with a pin to the king.



this by playing 1. Rxf6.
Black can recapture with 1.
... Bxf6 but loses a piece after 2. Rxg8.
In case of pinning to material there is a choice: not to take or to lose the back piece. In this position it makes no

difference. Black will lose

material anyway.

The bishop on g7 is pinned.

White takes advantage of



When a piece is pinned to an important square it is a great deal restricted in his functions. White can win the bishop with 1. Nxd5. Black cannot recapture with the c-pawn because of 2. Qc8 mate. The c-pawn is thus pinned and is unable to fulfil its protection on d5.

Pinned pieces (and pawns) are not good defenders.



The rook on g7 is pinned to the king by the bishop on c3. He cannot play a single move.

White profits by playing 1. **Qh7** mate.

A piece which is pinned to the king cannot carry out its protective function.



All types of the double attack are taking advantage of pinned pieces.

Pinned pieces or pawns against the king cannot defend at all.

In the diagram White wins the queen with the knight fork: 1. Ne5+.



The three types of the pin (pin, attack on a pinned piece and a pinned piece is not a good defender) can be combined into one.

White profits with **1. d5** by pinning the e-pawn and at the same time attacking the pinned bishop. White wins a piece.

Mate thanks to a pin: A

























Pin

A pinned piece is not a good defender: A

























Pin

A pinned piece is not a good defender: B

















































Orientation

Identify the threat: A























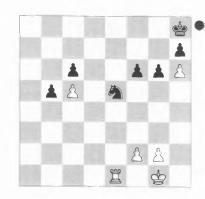


Orientation

Identify the threat: B

















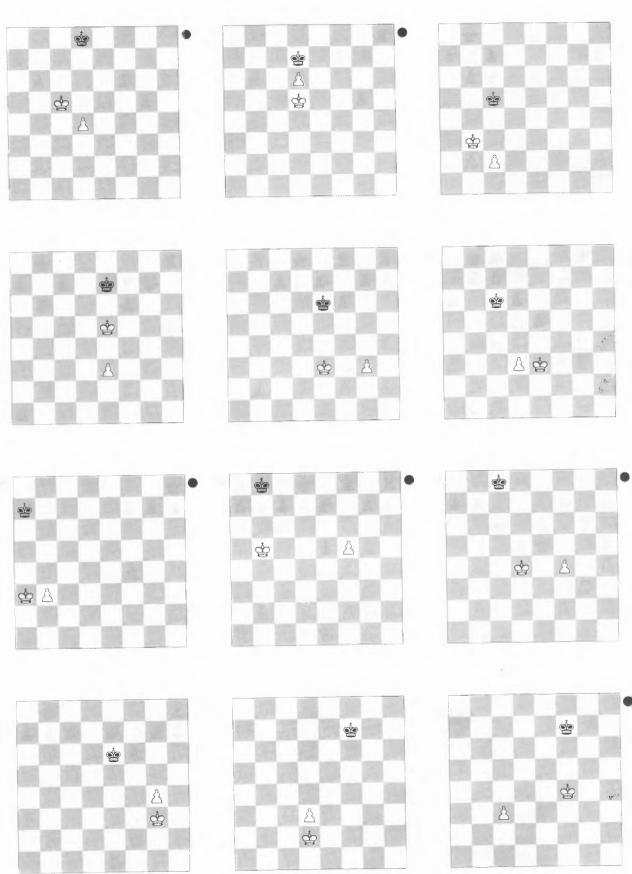






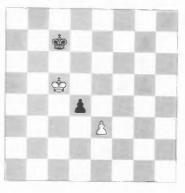
Pawn ending

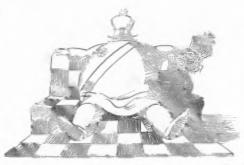
Key squares: B

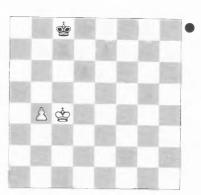


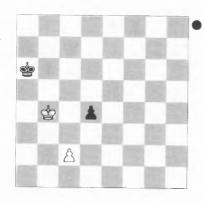
Pawn ending

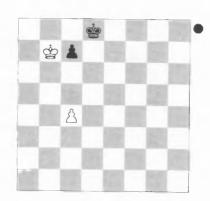
Key squares: C







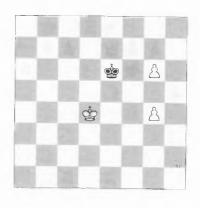


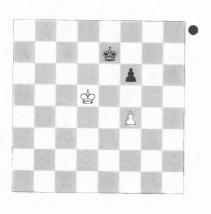


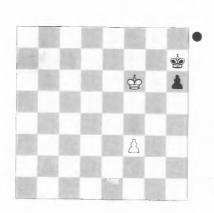


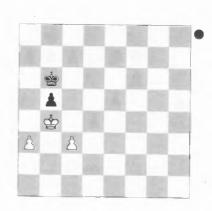












Test

Repetition: C

























Mix: F



















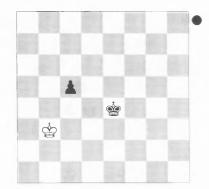






Mix: G



























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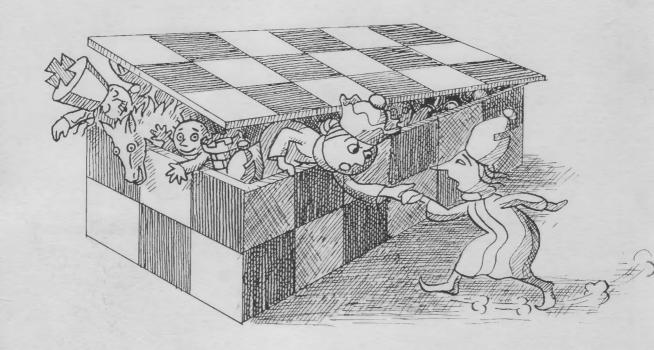
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