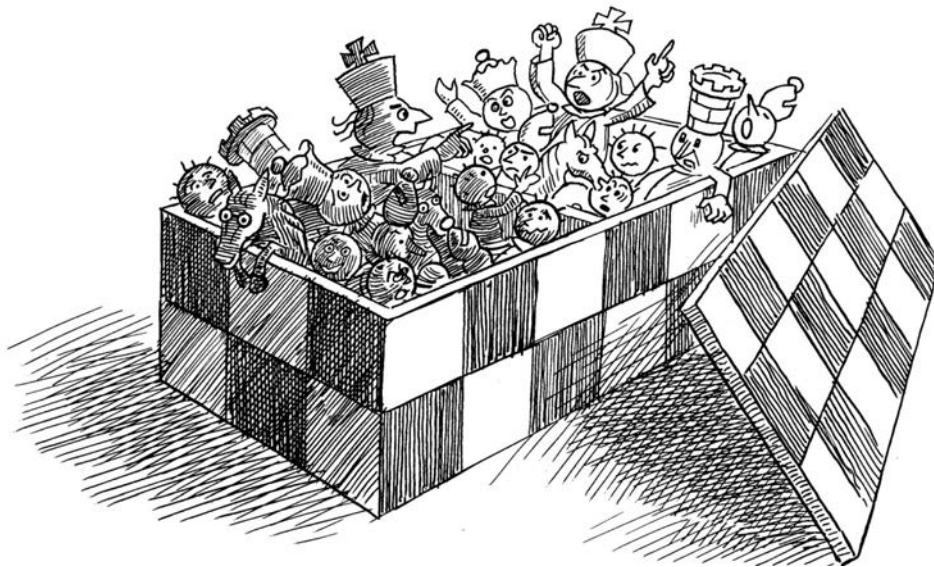


Step 3

Reminders



From the 5th edition onwards workbook Step 3 is published as an international version. We have decided to remove the reminders and make them available as a PDF file for downloading.

This means more exercises on the pages that have become available.

As a teacher you can now hand out the reminders one by one at the appropriate time. Please note that a reminder can never replace the lesson in the manual! (Manual for chess trainers Step 3).

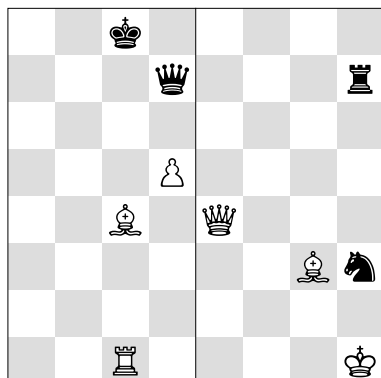
The page number at the bottom left refers to pages in the workbook with the corresponding theme of the reminder.

The solutions of all workbooks can be found on the website at:
<http://www.stappenmethode.nl/en/solutions.php>

Information and an order form can be found on our website at: <http://www.stappenmethode.nl/en/>

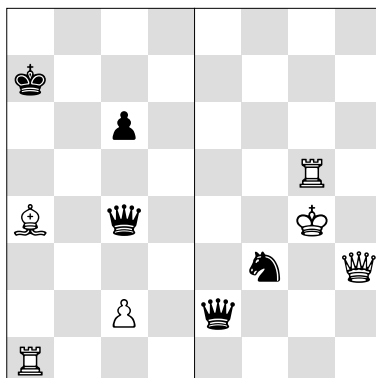
Discovered and double check

The subject of this reminder is one which we already know from Step 1 plus and Step 2 plus: mate by a discovered or double check. With both weapons you can win material as well.



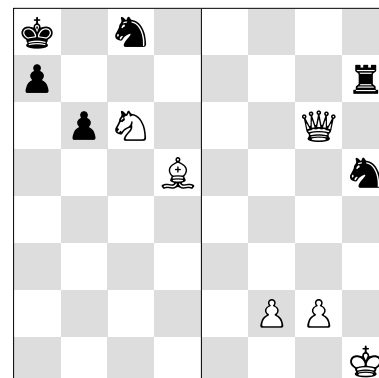
The discovered check is a special form of the discovered attack with the king as target. On the left the front piece will produce a gain of material with **1. Bb5+**. The rook gives check and the bishop attacks the queen.

On the right Black needs a double check because his rook is attacked: **1. ... Nf2+** (1. Ng5+? 2. Qxh7).



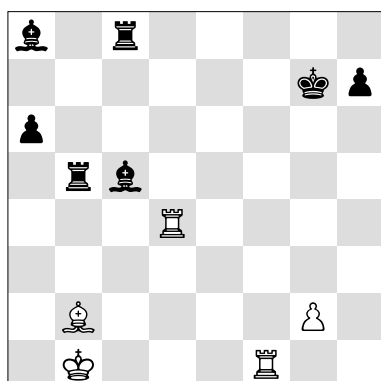
Sometimes you have to make a choice. On the left White opts for **1. Bb5+**. Because of the discovered check it is not important that the bishop is being attacked. 1. Bb3+ Qa6 is not as good.

On the right Black should not capture the rook without thinking (1 ... Nxg5+ 2. Kxg5). The winning move is **1. ... Ng1+**.

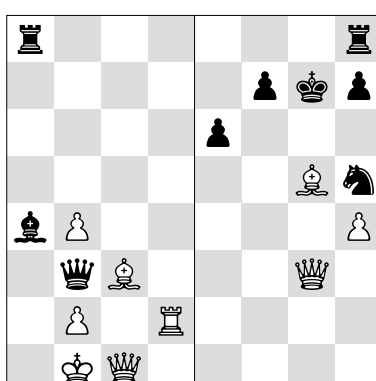


We use chasing, guarding and helping to checkmate (depending on the position). On the left White plays **1. Nb4+** and chases the king to b8. The knight then gives mate on a6 (chaser and guard).

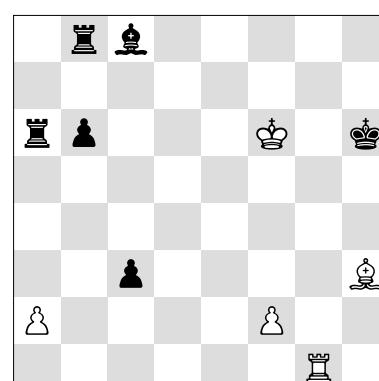
On the right Black mates with **1 ... Ng3 + 2. Kg1 Rh1#**. The knight protects the rook and is now the helper.



White is a piece down. Unfortunately, the back piece (Bb2) is attacked and pinned. Playing for a material gain by 1. Rd8+ is not a clever idea because of 1. ... Rxb2+. The pieces of the battery need some assistance. A third white piece must help. The white battery can chase the enemy king to a fatal square: **1. Rg4+ Kh6 2. Rh1#**.



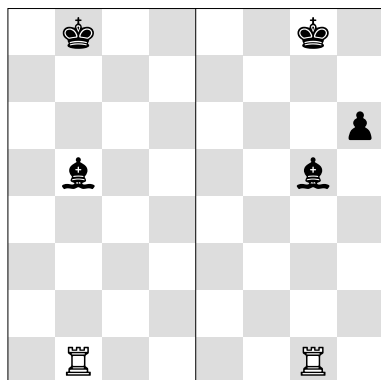
Beside chasing, luring is a possibility. A piece is sacrificed to lure the king to a fatal square. On the left a queen sacrifice lures the king into a discovered check: **1. Qa2+ Kxa2 2. Bc2#**. On the right the black king can escape after 1. Bf6+ Kf8. The better move is 1. Bh6+. It is mate after **1. ... Kxh6** (or 1. ... Ke5) **2. Qg5#**.



A discovered or double check is not possible. White does not have a battery. The smart move 1. Be6 to give mate on h1 is not smart enough. Black plays 1. ... Ra5 to interpose the rook after a check. Yet White can win. He simply has to set up the battery first. After **1. Rh1** Black will be mated: **1. ... Kh7 Be6#; 1. ... Ra5 2 Bf5#**.

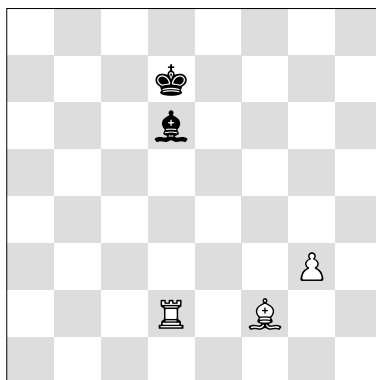
Attacking a pinned piece

A pin is often annoying but if the pinned piece is protected and not higher in value than the pinning piece, no material is lost. Fortunately, in many cases the attacker can still benefit from the pin.



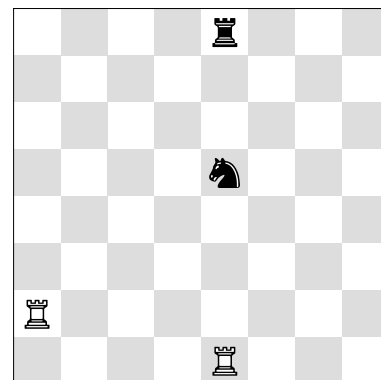
There are two pins in the diagram. On the left Black is in trouble. The pinned bishop cannot be protected and will be lost.

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



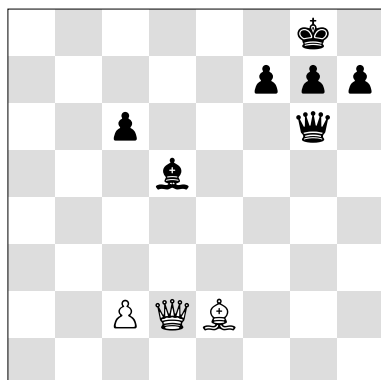
The rook pins the bishop on d6, which is protected by the king. In order to take advantage of the pin, White must mount a second attack on the pinned piece.

After **1. Bc5** the black bishop is insufficiently protected and the two-fold attack is successful.

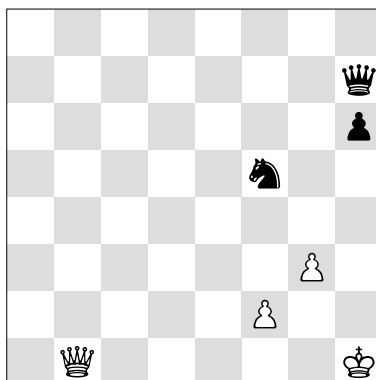


White increases the pressure on the pinned knight with **1. Rae2**. Pinning against material requires the same as pinning against the king: an extra attack on the pinned piece is necessary.

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

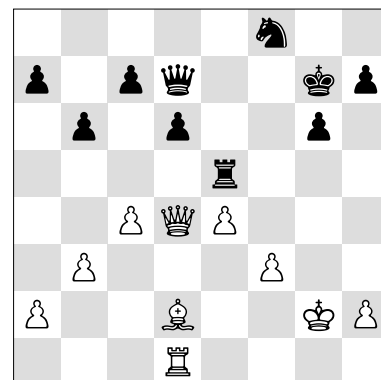


The bishop on d5 is pinned against the square d8. Without the bishop the white queen could give check on this square. White has to attack d5 once more. The move **1. Bf3** is no good, Black protects with **1. ... Qf5**. The proper attack on the pinned bishop is **1. c4**. It is clever to attack with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



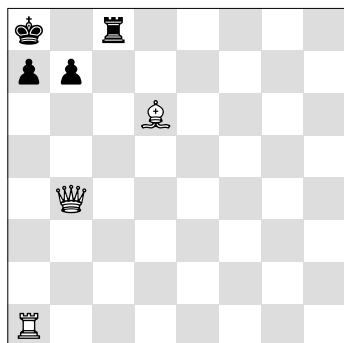
It is tricky that the front piece in 'material + material' can move away sometimes. When the back piece is a queen, a rook or a bishop a genuine battery arises, making a discovered attack possible.

White would do better to give up the idea of **1. g4** because of **1. ... Ng3+**.



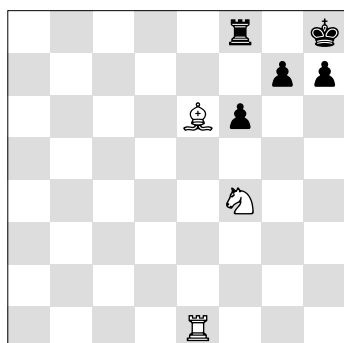
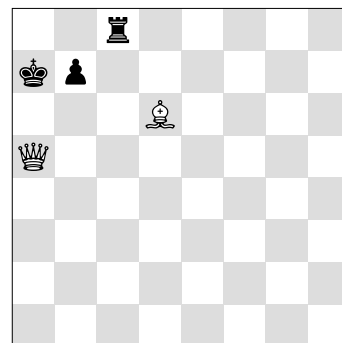
In the diagram the rook on e5 is pinned. White can attack the rook in two different ways: with the pawn and the bishop. The attack with the pawn is usually stronger. As always, we first must look to check that the opponent does not have a strong reply. After **1. f4** Black plays the double attack **1. ... Qg4+**. The correct way is **1. Bf4**.

Access and mating patterns



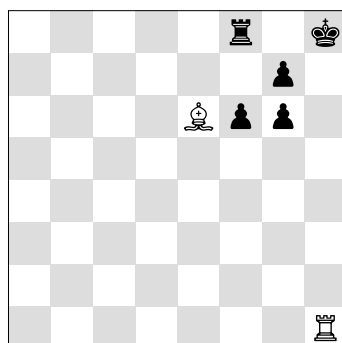
The black formation is not weakened yet. In order to win, White must undermine the castled position. He does this by capturing with the rook on a7. White gains **access** to the black king by a **sacrifice**.

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

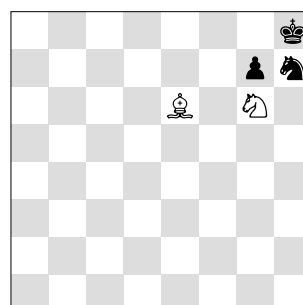
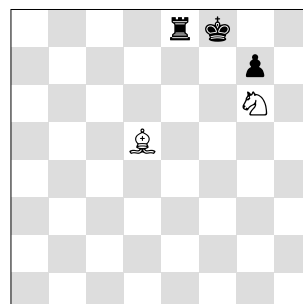
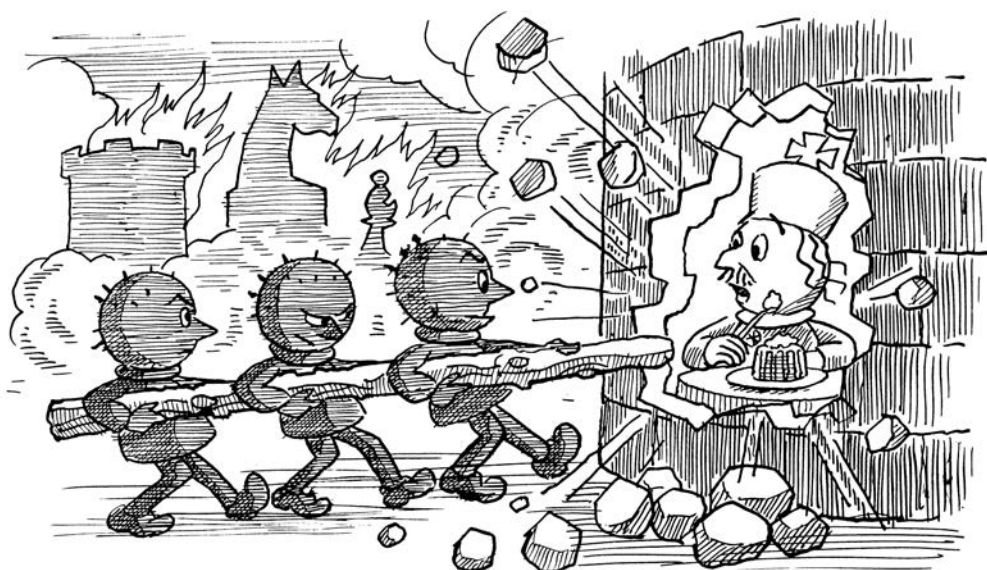
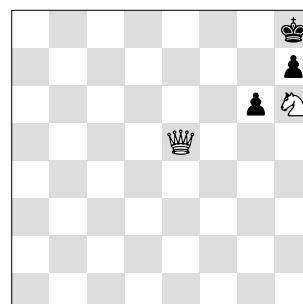
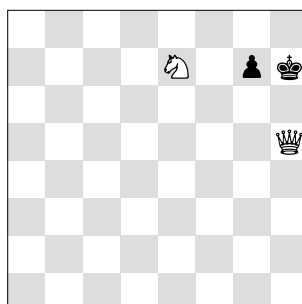
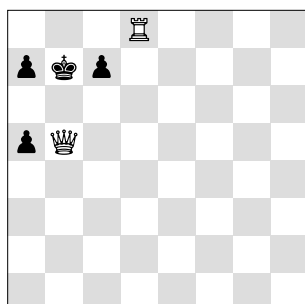
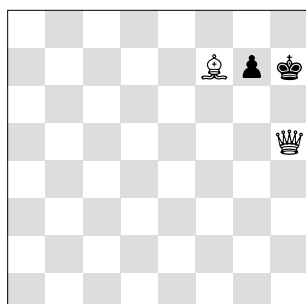


On the left the defences of the king are undermined in another way. With **1. Ng6+** White forces his opponent to open the h-file. Once again White gains access thanks to a sacrifice.

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

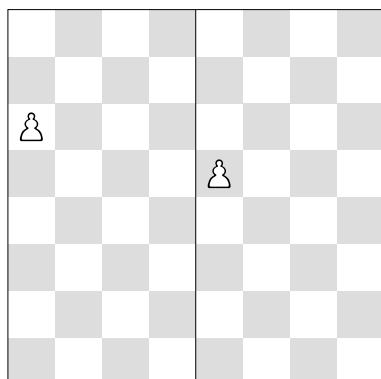


In order to know whether you can succeed with a sacrifice, you must be able to recognize mating patterns. If you know the mating pattern you can consequently go for it. Here are some examples.



Pawn ending: the square of the pawn

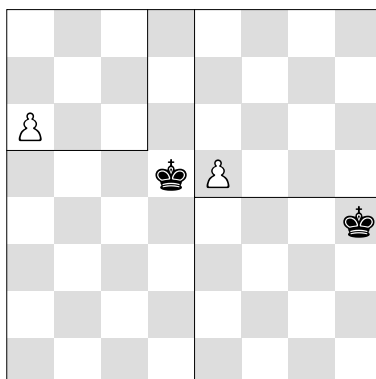
The endgame is the final part of a game of chess. Many pieces have been exchanged and the kings can now play an active role. We have reached a pawn ending, all the pieces have been captured. Fortunately you can still win, even when there is only one pawn left.



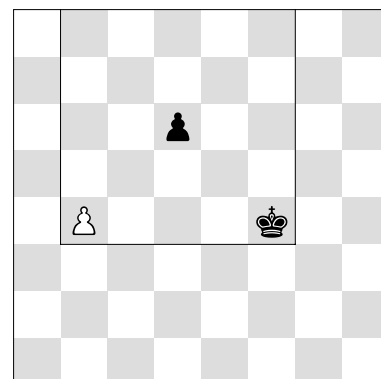
On the left we count two squares ahead of the pawn on a6 to the promotion square, then also two squares to the side of the pawn.

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

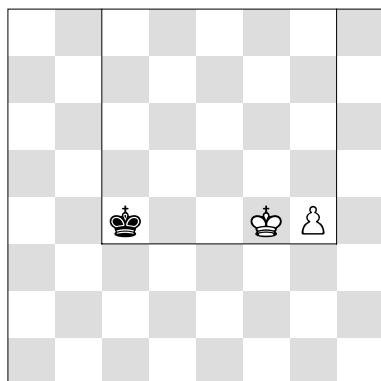
By counting in this way we can determine the square of the pawns. See next diagram.



The square of the pawn on a6 has the coordinates **a6-a8-c8-c6** and the square of the pawn on e5 has the coordinates **e5-e8-h8-h5**. On both sides the black king stands outside the square of the pawn. White to move promotes to a queen. If it is Black's move, the king steps inside the square of the pawn and can stop the pawn.

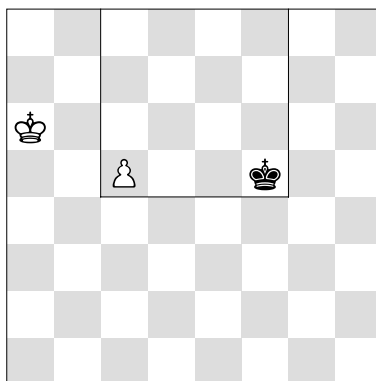


In this diagram the king is inside the square of the pawn (b4-b8-f8-f4), but will not capture the pawn. His own pawn is in the way so that the king must make a detour:
1. b5 Ke5 2. b6 Ke6 3. b7 Kd7 4. b8Q.



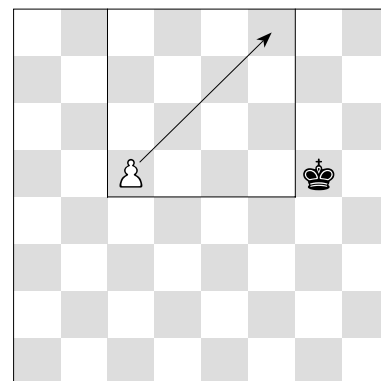
The black king is in the square of the pawn, but he cannot stop the g-pawn any more. The white king shoulders off the black one: **1. g5 (or 1. Ke5) 1. ... Kd5 2. Kf5 Kd6 3. Kf6 Kd7 4. Kf7** and the pawn can walk through unhindered.

Shouldering off the enemy king is a handy move in pawn endings. You eliminate your strongest opponent.



The black king is in the square of the pawn, but now the pawn gets support from its own king. After **1. c6 Ke6 2. c7 Kd7 3. Kb7** the white king helps to promote the pawn.

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



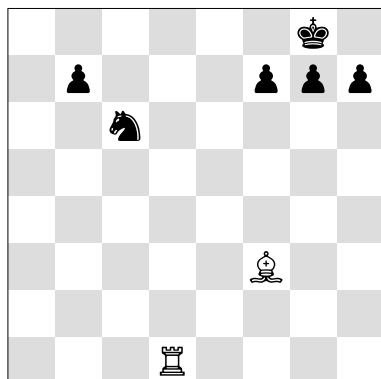
We can see at a single glance if the king is in the square of the pawn or not.

From the pawn we imagine a diagonal to the opponent's side of the board (the f8-square in this case). This gives us the upper corner of the square.

So the square is **f8-f5-c5-c8**. The black king is positioned just outside it.

Elimination of the defence

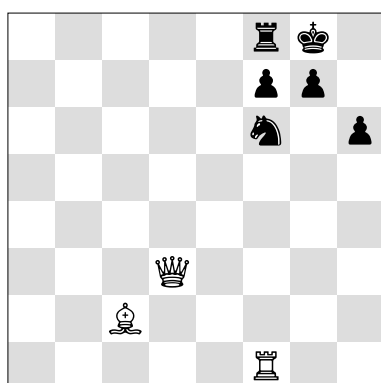
Defenders are pieces which protect other pieces or important squares. You can eliminate them and win material (Step 2). You can also eliminate the protecting piece in order to deliver checkmate.



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 d8-square 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.

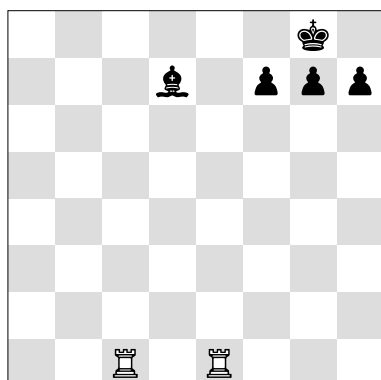
We call this combination **capturing + mate**.



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

White can capture the defender with a sacrifice, **1. Rxf6**, 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 he loses a piece.

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



Luring away

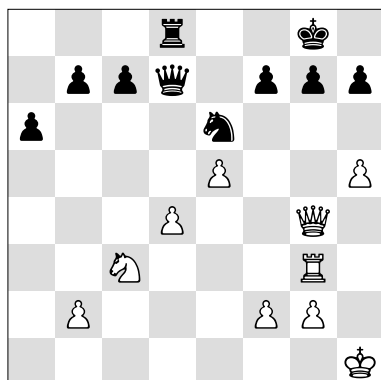
The white rooks could give mate on c8 or e8 if the bishop were not on e6. The bishop is protecting c8 and blocking the way to e8. After the move **1. Rc8+**, Black must take and White can give mate on e8. The defender has been lured away by the rook sacrifice. We call this combination: **luring away + mate**.



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 that square. With **1. d5** White chases the knight away and can now checkmate. If Black plays **1. ... g6** to prevent mate, White wins a knight.

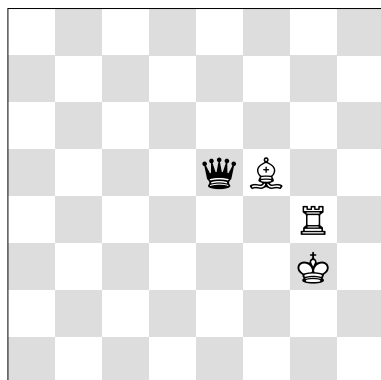
Chasing away + mate: a defender is chased away in order to give mate.



Luring away means diverting a piece by a capture or a sacrifice; chasing away involves an attack on an undefended piece or a piece with a higher value.

Defending against the double attack

The double attack is a dangerous offensive weapon, however, not every double attack wins material. In some cases there are ways to mount a defence.

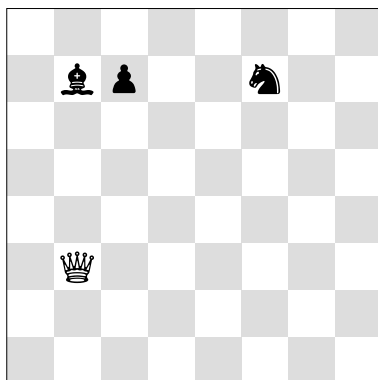


Interposing + protecting

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.

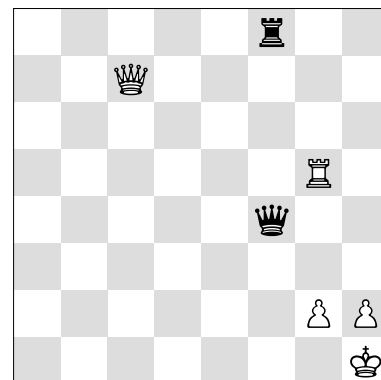


Moving away + protecting

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.

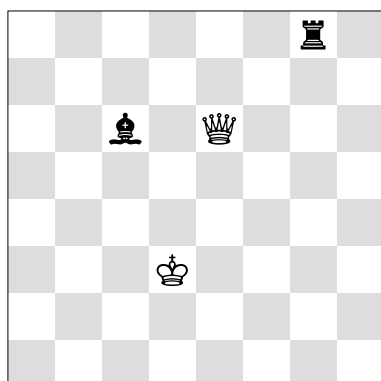


Capturing (exchanging)

Black threatens both mate on f1 and the rook on g5. With

1. Qxf4 White exchanges the queens and after **1. ... Rxf4** he prevents checkmate on f1 by **2. h3**.

Counter-attack



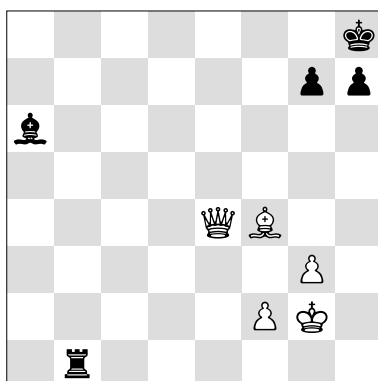
Attack on the king

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

1. ... Bb5+

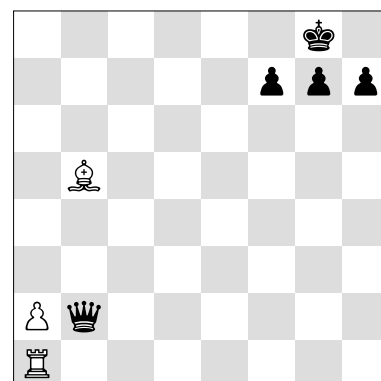
1. ... Rd8+

1. ... Rg3+



Attack on material

The queen threatens mate on e8 and attacks the rook on b1. Black has a fine defence in **1. ... Bb7** after which the queen is pinned.



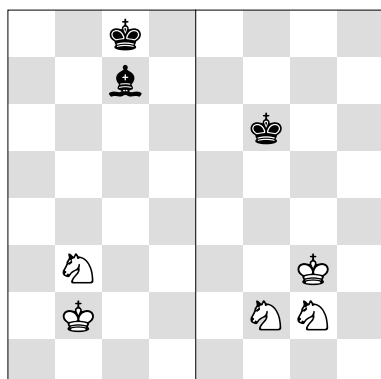
Attack on a square

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.

1. Re1 would be an unfortunate choice, since **1. ... Qxb5** will follow and White cannot give mate.

Draws

In bad positions, it is wise to stop playing for a win and be satisfied with a draw. In this reminder you will learn three useful ways to force a draw.

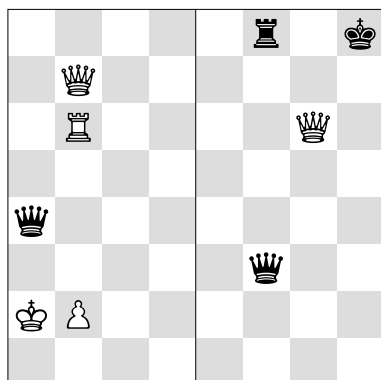


Insufficient material

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. It is possible to checkmate with two knights, but for that to happen the second player must play foolishly.

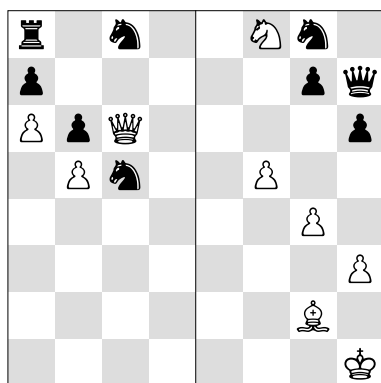
Draw through insufficient material:



Perpetual check

On the left 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.

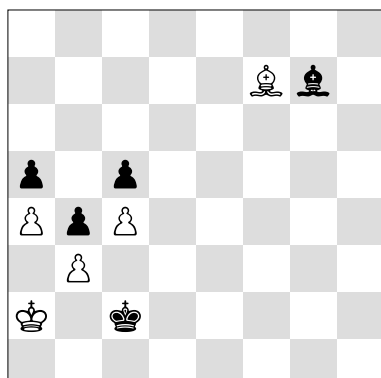
On the other side White keeps giving check on g6 and h6 without the black king being able to escape. If you are behind in material, or you are in danger of losing, perpetual check can provide a rescue!



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 the 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 it with **2. Ng6**. Draw by repetition of position.

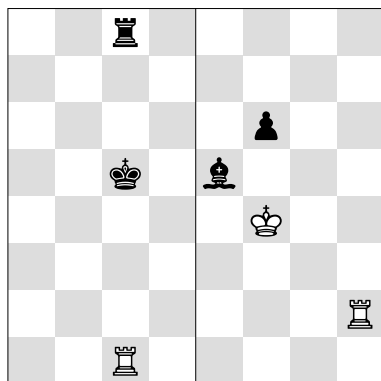


Agreement

Although both sides are equal in material, Black seems to be in a 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.

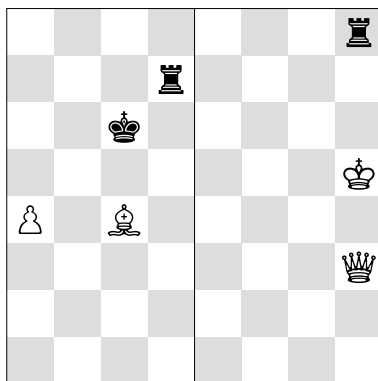
Beware: you are only allowed to offer a draw if it is your move. You play a move and then you offer a draw.

X-ray check and attack

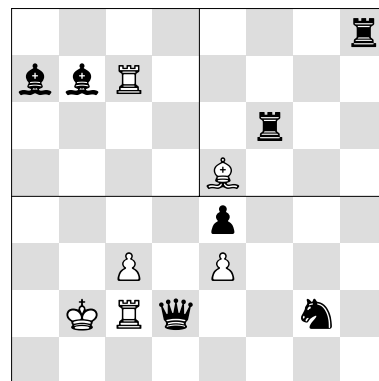


X-ray check

On the left the rook gives check and the king must retreat. The black rook is lost. The attack by the white rook works right through the king, like an X-ray, thus the name is X-ray check. On the left the attack by the bishop works through the king to the knight, which will be lost. Here the X-ray check needs support from one of its own pieces. The back piece is not protected.

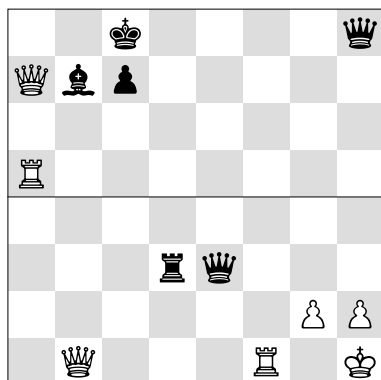


On the left White wins the exchange with **1. Bb5+**. The rook is worth more than the bishop. In such a position it doesn't make much difference whether the back piece is protected by the front piece or not. On the right Black wins material thanks to the X-ray check. Not a whole queen because the king can protect the queen with **2. Kg4**.

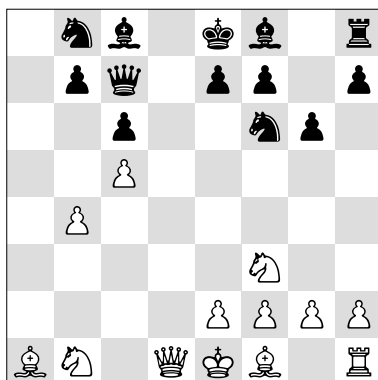


X-ray attack

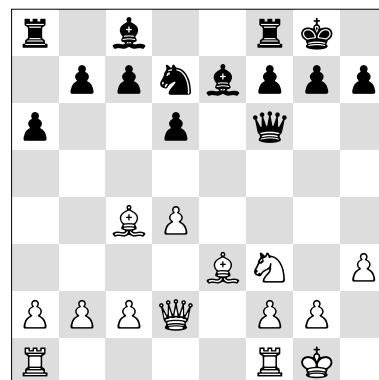
In the top left part of the diagram the rook attacks the bishop. White wins a bishop. On the right Black loses material although he can protect his rook. At the bottom the queen cannot protect his knight. An X-ray attack is successful if the front piece is worth more than the back piece. If the pieces are equal then it is important that both pieces are unprotected.



The twofold attack is a useful aid for the X-ray check and X-ray attack. At the top of the diagram White brings in the loot with **1. Qa8+ Bxa8 2. Rxa8+**. Square a8 is attacked twice. In the lower part the target is the rook on d3. After **1. Rf3** the rook is attacked twice and protected only once.



An X-ray attack can also win protected pieces. In this position White plays the strong move **1. Be5**. The queen is hindered by her own pieces.

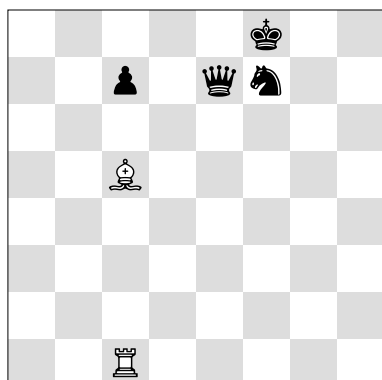


After **1. Bg5** the queen can no longer protect the bishop on e7. Own and enemy pieces prevent that.

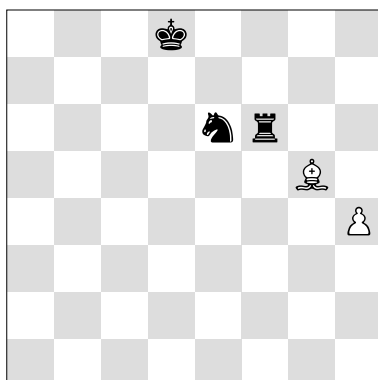


Defending against the pin

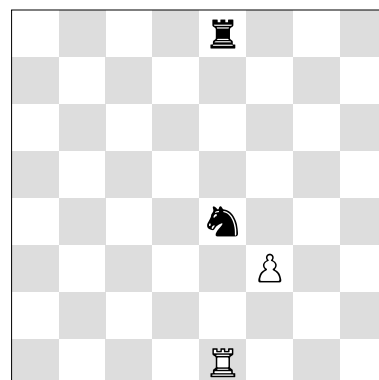
Pins can be tricky and sometimes they even cost material. Fortunately you can avoid losing material by employing some well known defensive possibilities.



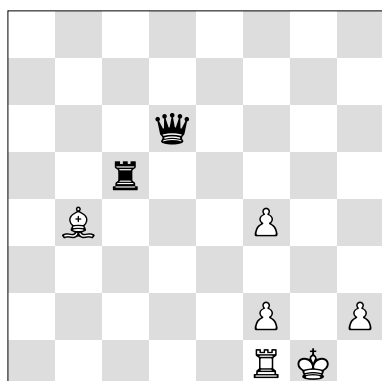
The black queen is pinned against the king by the bishop. With **1. ... Nd6** Black moves his knight between the bishop and the queen. The pin is made harmless by: **interposing**.



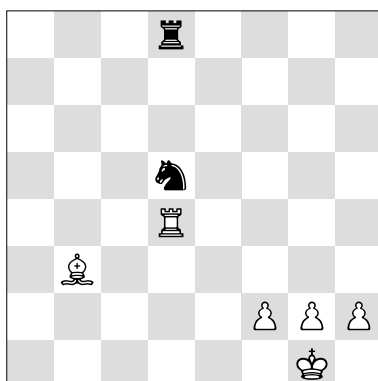
The black rook is in an annoying pin against the king. By taking the bishop with the knight the pin is removed. The pin is made harmless by: **capturing**.



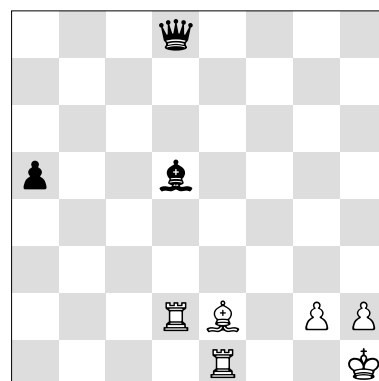
The knight is pinned and is attacked twice. With **1. ... Nf6** Black saves his knight, removes the pin and protects his rook. The pin is made harmless by: **moving away with protecting**.



The 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 **counter-attack**, in this position on the enemy king.



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 **counter-attack**, on a square or on material.



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 **counter-attack**, in this case by a discovered attack.

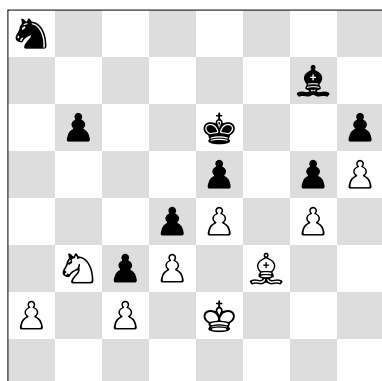
Defending against a pin by:

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

Mobility

On an empty board the queen in the centre can move to no less than 27 squares; from a corner it 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 position on the board (by preference not on the edge or in the corner)
- the number of opposing pieces
- the presence of one's own pieces and pawns



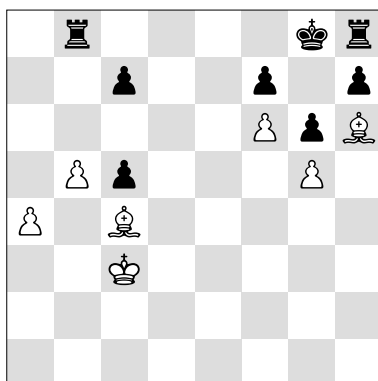
We take a look at the mobility of the pieces:

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

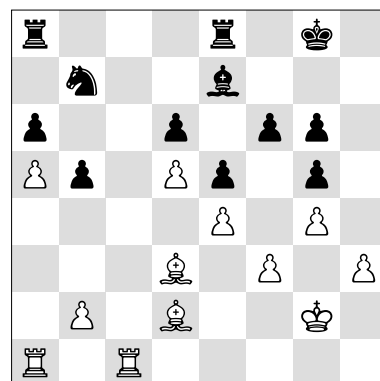
Nb3: poor due to opposing pawns (temporarily)

Bf3: poor due to its own pawns which are in the way (permanent)

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

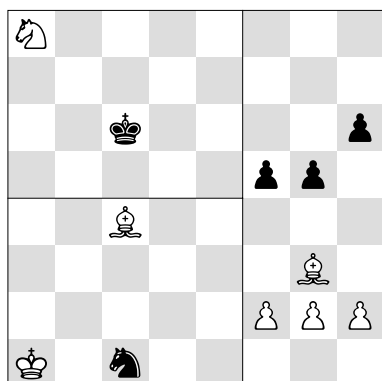


The black king and the rook on h8 are in bad shape. They cannot play a single move. Also the bishop on h6 cannot be played. Yet, there is a big difference: the bishop is very active because it is controlling two pieces. Although Black is two exchanges up, his position is bad.



The knight on b7 can move to c5. It would be much better there than on b7. White to move notices this and plays **1. b4!**

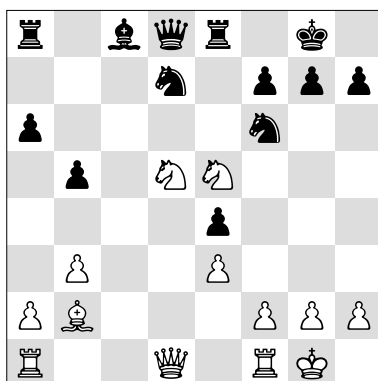
Suddenly the knight has no future, because moving to d8 and f7 is no improvement. The white bishop can no longer go to b4. That is a pity, but shutting in the knight is more important.



You can trap opposing pieces with little mobility. In the upper left, Black traps the knight: **1. ... Kb7.**

In the bottom left, the knight will be lost after **1. Kb1.**

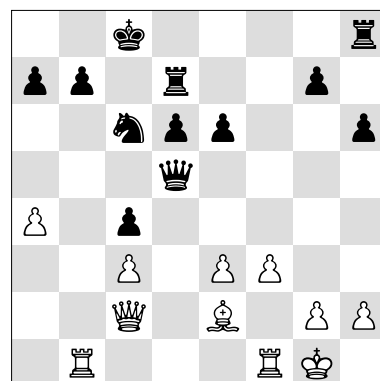
On the right, the bishop is protected, thus the attack with a piece of less worth is sufficient: **1. ... f4.**



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 the squares to which the piece can go

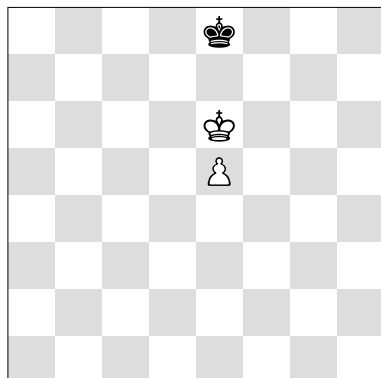
In this position White traps the black queen with **1. Nc6.**



Sometimes it seems that you cannot trap a single piece. In this position you can easily attack the queen but it 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.**

Pawn ending: key squares

Only one pawn is left on the board. The opposing king is in front of the pawn and it is controlling the promotion square. How can you win? Simple, place your own king in front of the pawn too.



The standard winning position

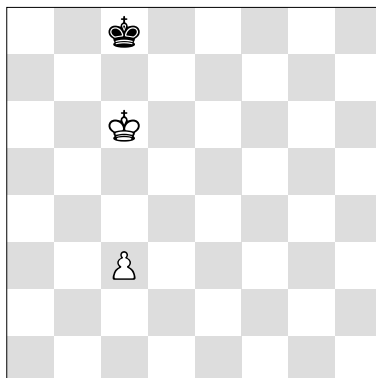
The king is on the 6th rank in front of its pawn. The king also may stand on d6 or f6. White always wins!

White to move:

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

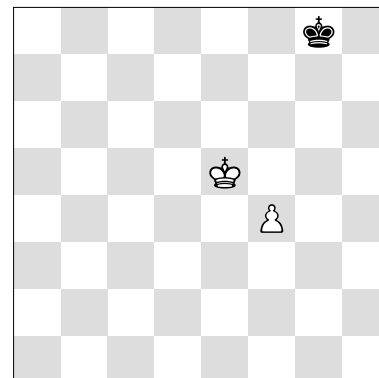
Black to move:

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



If the king is on the 6th rank in front of its own pawn, White also always wins.

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

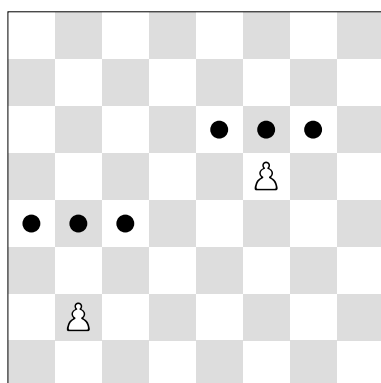


Before moving the pawn forward, the king must occupy the 6th rank. After **1. Kf6** victory is simple.

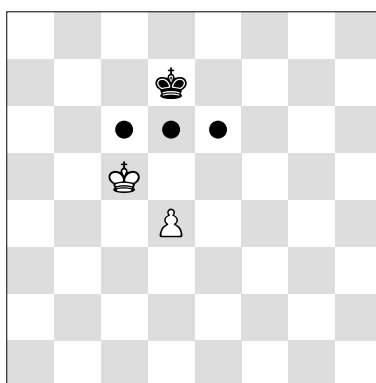
1. f5 is a poor move, since after **1. ... Kf7**, White can no longer win. See for yourself:

2. f6 Kf8! The king must move straight backwards! Remember this move!

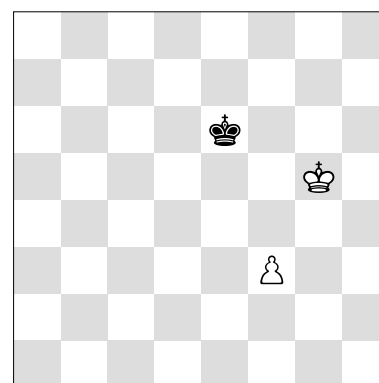
3. Ke6 Ke8 4. f7+ Kf8 draw.



If the white king stands on one of the marked squares, White wins. For the pawn on b2: *a4*, *b4*, and *c4*. For the f5-pawn: *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! The key squares for pawns on the 5th rank or higher are directly in front of the pawn.



The key squares for the d4-pawn 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 pawn. **3. ... Ke8 4. d6 Kd8 5. d7 Kc7 6. Ke7.**



White's king is occupying a key square. How should he continue? **1. Kg6** is followed by **1. ... Ke5**.

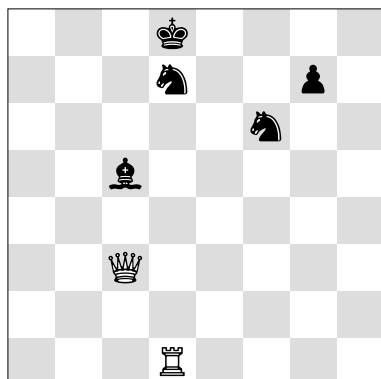
With the pawn on f4 the key squares are *e6*, *f6* en *g6*.

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.

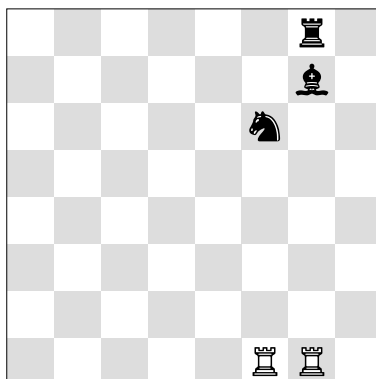
A pinned piece is not a good defender

Pinned pieces cannot play and if they can move, most of the time it is not wise for them to do so. Unfortunately there is more. In this reminder you will see that pinned pieces have another big disadvantage.



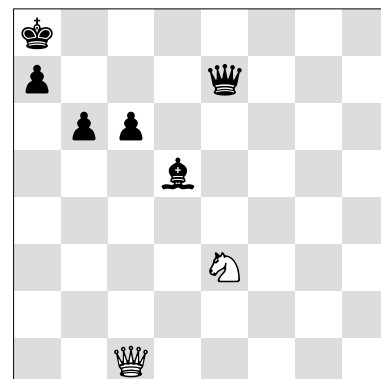
In the diagram the knight on d7 is pinned and cannot move. Without this ability to move, the knight cannot keep on protecting the bishop and the queen can simply capture the bishop.

A pinned piece is not a good defender. That is especially the case with a pin against the king.



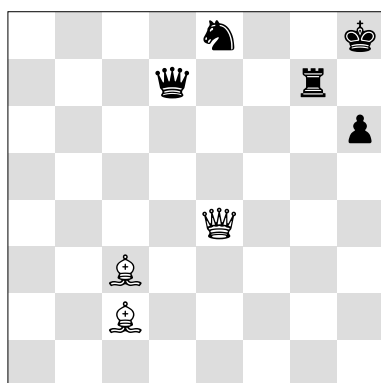
The bishop on g7 is pinned. White takes advantage of this by playing **1. Rxf6**. Black can recapture with **1. ... Bxf6** but loses a piece after **2. Rxc8**.

When there is a pin against material there is a choice for the defender: not to recapture or to lose the back piece. In this position it makes no difference. Black will lose material anyway.



When a piece is pinned against an important square it is greatly restricted in what it can do. 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 keep up its protection on d5.

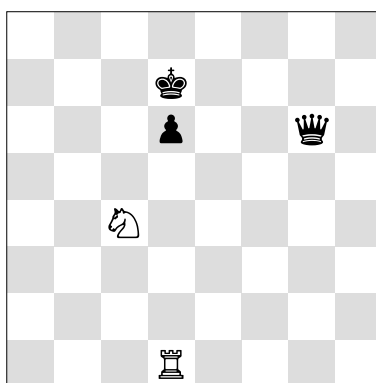
Pinned pieces (and pawns) are not good defenders.



The rook on g7 is pinned against the king by the bishop on c3. It cannot make a single move.

White profits from this by playing **1. Qh7#**.

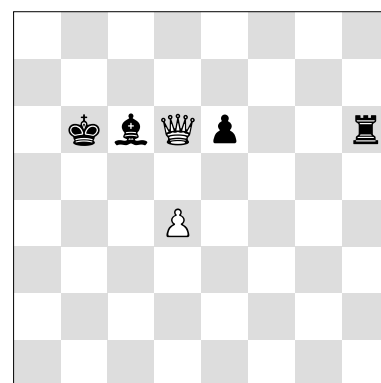
A piece which is pinned against the king cannot carry out any other protective function.



All types of the double attack can take advantage of pinned pieces.

Pieces or pawns pinned against the king cannot defend at all.

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



The three ideas about 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.