

# Chess Endings



DELANCEY  
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## INTRODUCTION

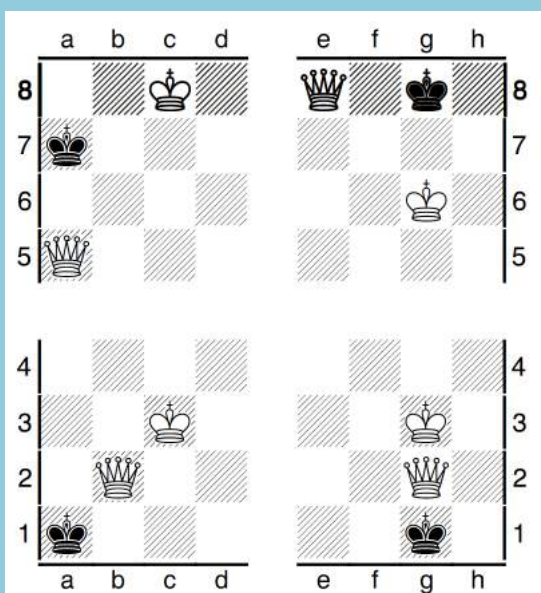
### BASIC MATES 1 – KING AND QUEEN V KING

Take a white queen and both kings.

Place them on a board so that the black king is in checkmate.

How many different checkmates can you find?

Do you think it will be easier to get checkmate if the enemy king is on the side or in the centre.



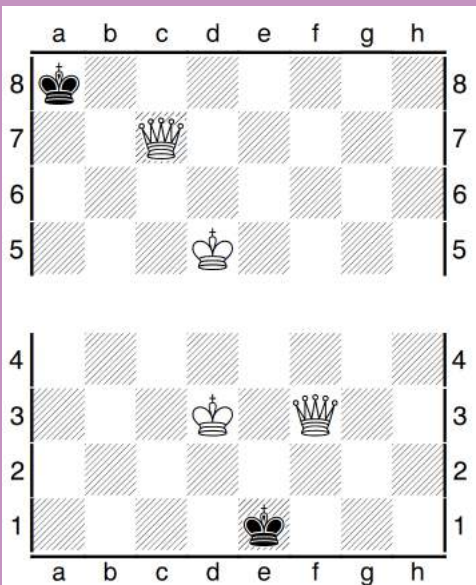
In each quarter of this diagram you'll see a different checkmate with king and queen against king.

Learn them. Remember them.

You'll see that there are two types of checkmate. The mates in the lower half of the diagram show the white queen next to the black king. The mates in the top half show the white queen checking along the side of the board, with the white king blocking the black king's escape.

Now do the same thing again, but this time you're trying to find stalemate positions, not checkmate positions.

Remember: if you're not in check and none of your pieces can make a move it's stalemate. The result of the game is a draw.



Here are two stalemate positions.

The position at the top is stalemate no matter where the white king stands. A queen a knight's move away from the corner will stalemate a king in that corner.

The position at the bottom would still be stalemate if the white king was on e3, c3, c2 or c1. The white queen controls all the squares around the black king except d2.

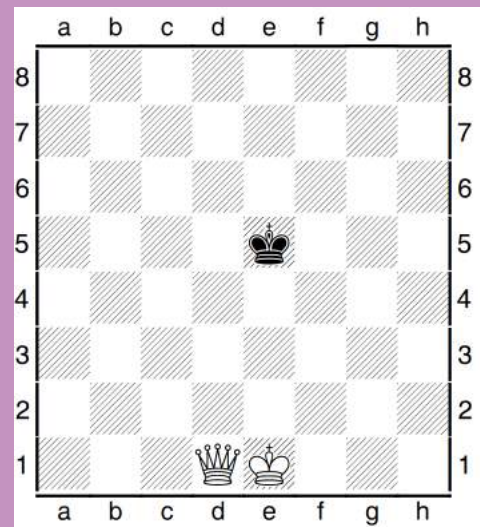
You'll often find yourself in a position where you have king and queen against your opponent's king.

You need to know how to force checkmate while avoiding stalemate. There are several techniques for doing this.

Let's start with this position

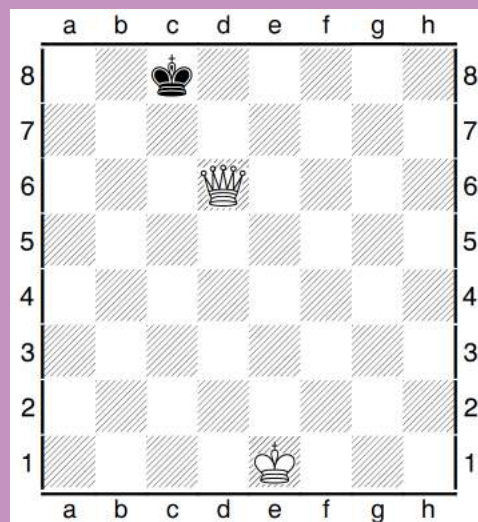
Start with a very simple method. All you do is place your queen a knight's move away from the black king. Then keep on doing the same thing until they are stuck on the side of the board. Just make sure you don't stalemate them in the corner.

Then approach with your king until you're close enough to get checkmate.



See how it works.

1. Qg4 Kd5
2. Qf4 Kc5
3. Qe4 Kd6
4. Qf5 Kc6
5. Qe5 Kd7
6. Qf6 Kc7
7. Qe6 Kb7
8. Qd6 Kc8



Now the black king is on the side of the board so you place your queen on the next row to stop them escaping, then bring your king up the board.

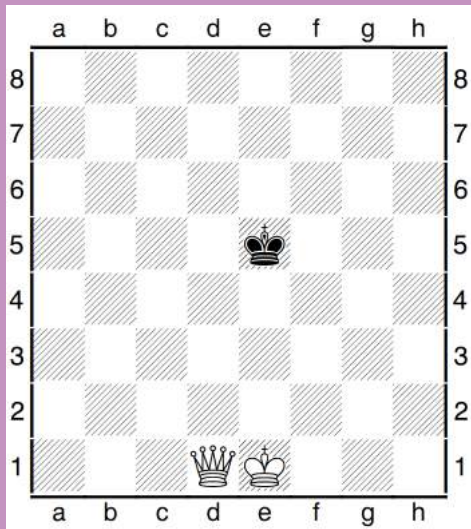
9. Qe7 Kb8
10. Ke2 Kc8
11. Kd3 Kb8
12. Kd4 Kc8
13. Kc5 Kb8
14. Kc6 Ka8
15. Qb7#

Get your chess set out and practise this method of getting checkmate with king and queen before you move on. Try it several times from different starting position to make sure you really understand how it works.

When you've done that, you can learn a different method which is usually a bit quicker.

This time we're going to follow a different and slightly quicker plan.

1. Place your queen one row away from the enemy king. Whenever they move towards the side, again move your queen to the next row.
2. Place your king two rows away from the enemy king.
3. Force the king towards the side of the board. Every time they move towards the side place your queen on the next row.
4. When the black king reaches the side, move your king towards them, keeping two rows away, until you can get checkmate. Remember to put your queen in place first to avoid stalemate.



Here's how it works.

1. Qg4

Placing the queen one row away from the black king. White plans to checkmate on the back rank.

1... Kd5

2. Kd2

Moving the king up.

2... Ke5

3. Kd3

Now the king's in place, two rows away from the black king.

3... Kd5

4. Qf5+

White checks and forces the black king back.

4... Kd6

5. Kc4

Putting the king in place again.

5... Kc6

6. Qe6+

Another check to force the king back.

6... Kc7

7. Kc5

The king moves forward again.

7... Kd8

**Black is setting a trap. What would you play next?**

8. Qf7

White remembers to put the queen in place first. If you move the king up to b6, c6 or d6 it's stalemate.

8... Kc8

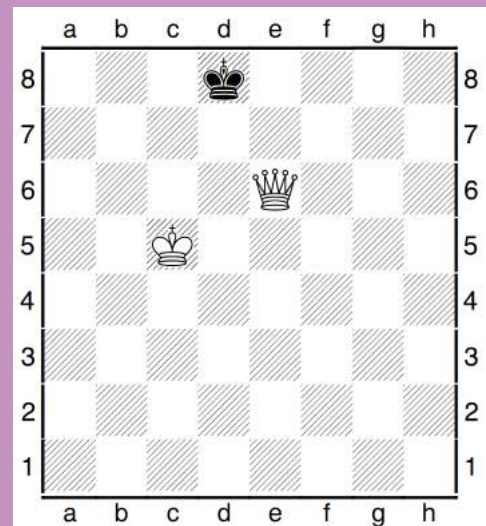
9. Kc6

Now it's time for the king to move in. It will be checkmate next move.

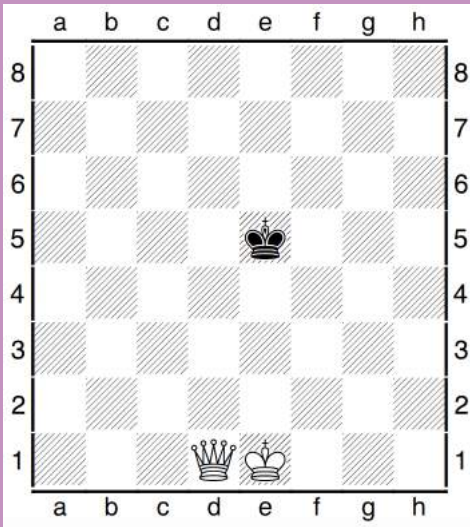
9... Kb8

10. Qb7#

Again, practise this method several times from different starting positions until you're confident you understand it – and know how to avoid the stalemate trap.



The quickest method is usually to use a combination of the two plans. Here's how the computer does it.



1. Qd7

Placing the queen a knight's move away from the enemy king, and trying to force them towards the white king.

1... Kf6

2. Kf2

Now the white king approaches.

2... Ke5

3. Kf3

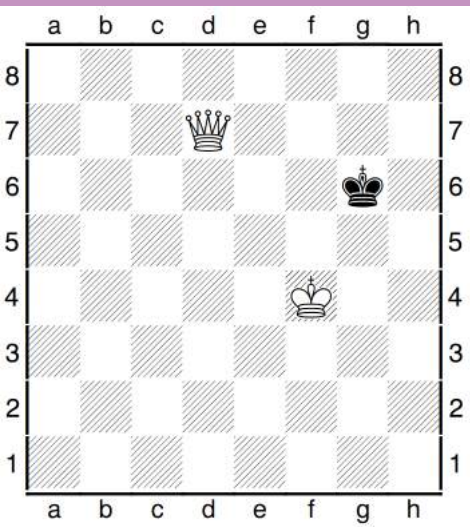
The white king approaches again.

3... Kf6

4. Kf4

The king moves into place, two rows away from the black king.

4... Kg6



5. Qe7

The queen moves a knight's move away from the black king, forcing them to the side.

5... Kh6

6. Kf5

The king moves into place. White's seen a checkmate next move.

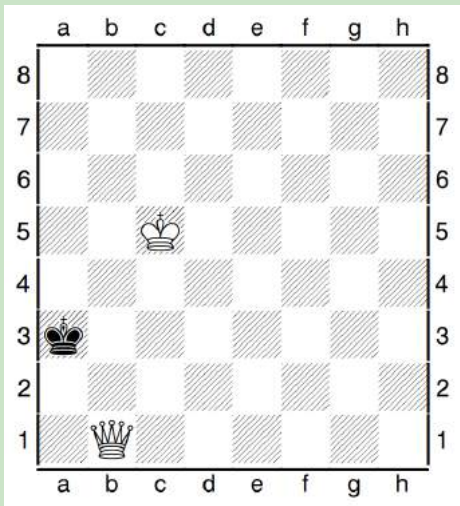
6... Kh5

7. Qh7# (or 7. Qg5#)

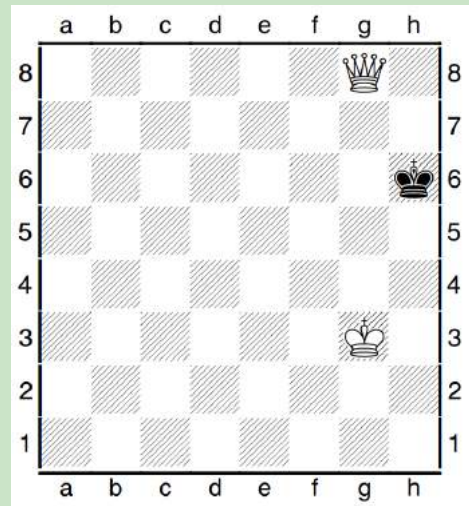
Keep on practising this ending using different methods and different starting positions until you're really confident about it.

To see how good you really are at king and queen checkmates, here's a quiz for you.

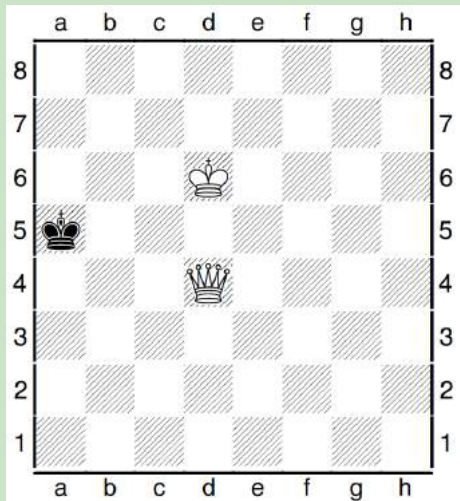
In each case you have to force checkmate in two moves (you play, your opponent plays, and whatever move is played you get checkmate).



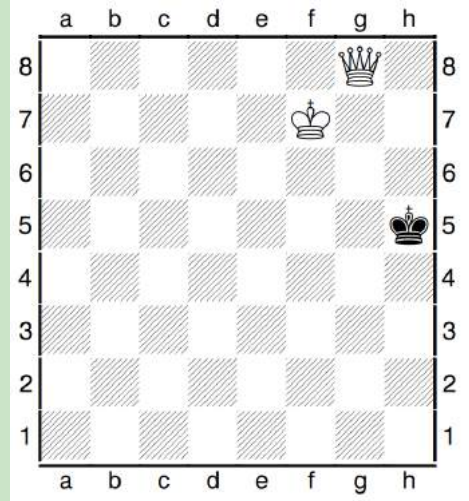
Q1. How can White force mate in 2 moves?



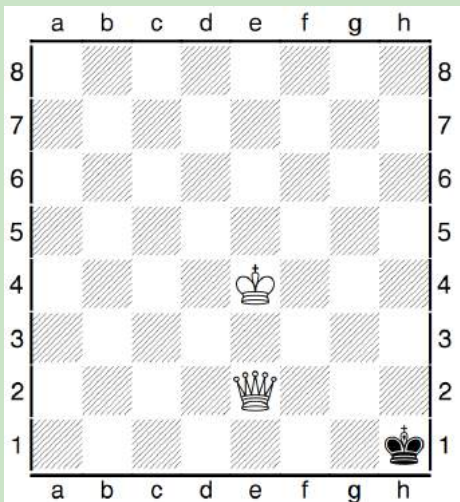
Q2. How can White force mate in 2 moves?



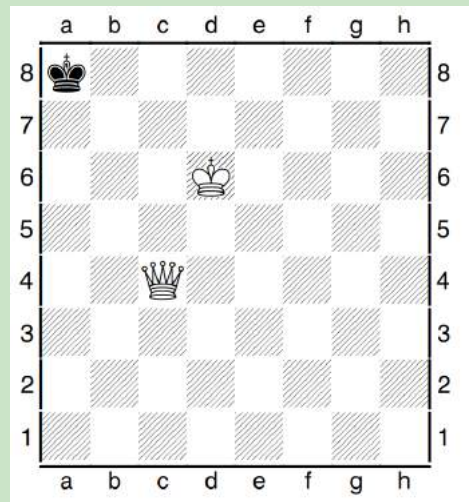
Q3. How can White force mate in 2 moves?



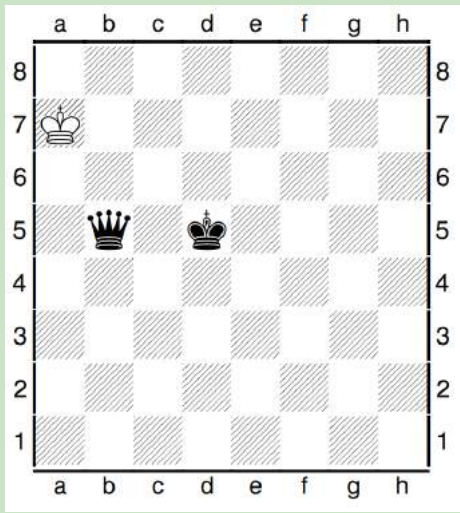
Q4. How can White force mate in 2 moves?



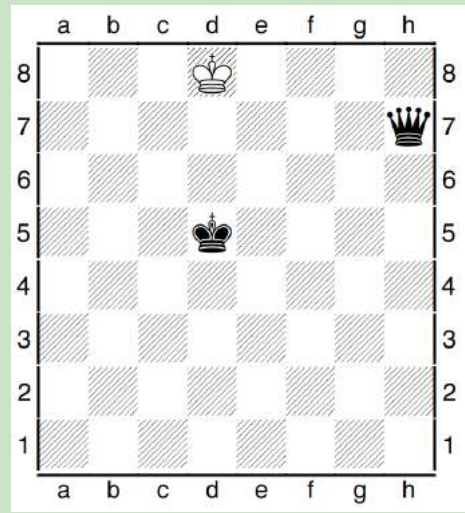
Q5. How can White force mate in 2 moves?



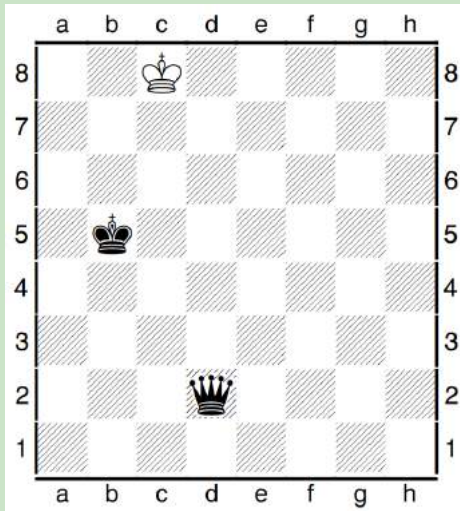
Q6. How can White force mate in 2 moves?



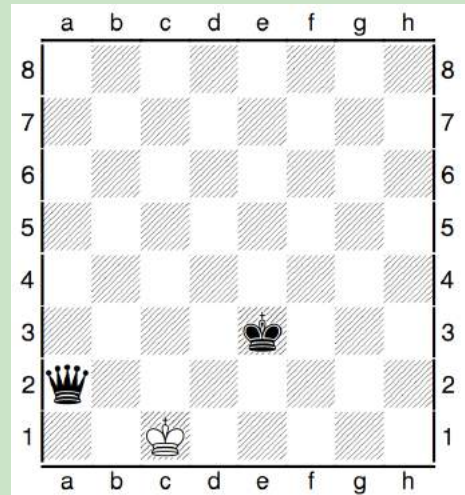
Q7. How can Black force mate in 2 moves?



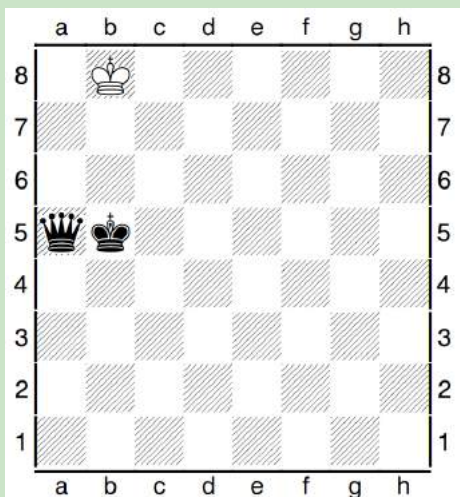
Q8. How can Black force mate in 2 moves?



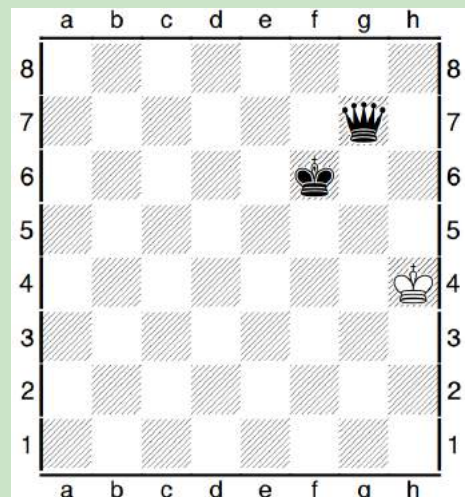
Q9. How can Black force mate in 2 moves?



Q10. How can Black force mate in 2 moves?



Q11. How can Black force mate in 2 moves?



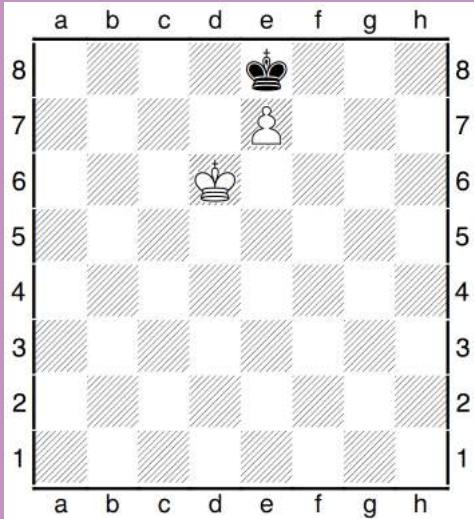
Q12. How can Black force mate in 2 moves?

## KING AND PAWN v KING

Now you're confident about checkmating with queen and king we can move on.

You'll usually end up with queen and king against king because you've just queened your last pawn.

So now you need to know about how and when you can promote your last pawn.

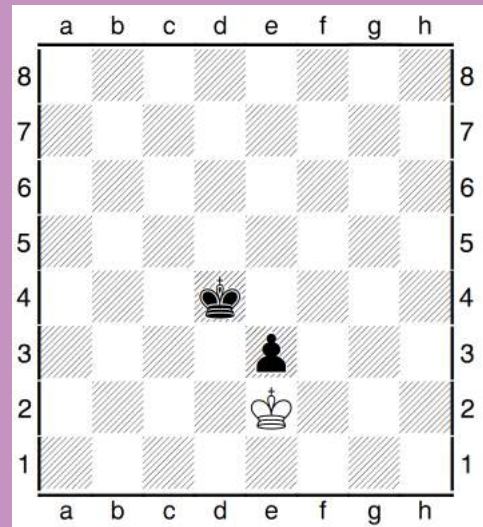


Let's start with this position.

Go away and look at it. Set it up on your board. Move the pieces around and see what happens. Can White promote the pawn safely or not? Does it matter whose move it is?

The answer is that if it's White's move it's a draw. Ke6 is STALEMATE and anything else will let Black capture the pawn. If it's Black's move, though, White wins. Black has to play Kf7. Then you play Kd7 and next move you'll promote your pawn safely.

Here's your next position. This time you're trying to stop the black pawn. It's your move. You have four choices. Which ones, if any, draw? Which ones, if any, lose?



Again, set the position up and try out each move for yourself before continuing.

This is the most important position in chess. Understand it and you're starting to understand what chess is all about.

You'll be tested on it later so make sure you get it right.

If you play 1. Kf3 you lose: 1... Kd3 2. Kg2 e2 3. Kf2 Kd2 and Black will promote next move.

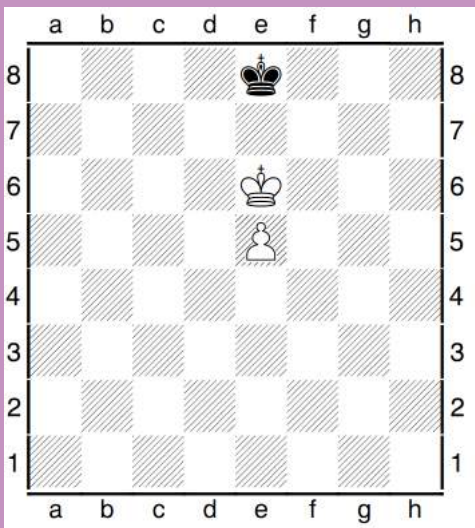
If you play 1. Kf1 you also lose: 1... Kd3 2. Ke1 e2 and we reach the previous diagram with White to move. Play continues 3. Kf2 Kd2 and again Black will promote next move.

If you play 1. Kd1 you lose in the same way: 1... Kd3 2. Ke1 and we're back in the previous line.

But if you play 1. Ke1 you draw: 1... Kd3 2. Kd1 (Not 2. Kf1 Kd2) 2... e2+ 3. Ke1 and Black has the choice of stalemating White with Ke3 or losing the pawn.

In this sort of position you must always go back to the queening square to draw the game.

Here's your next position. Can White win or will it be a draw? Does it depend whose move it is? Try it out with White to move and with Black to move and see what happens.



This time it doesn't matter. White can win no matter whose move it is, but the two methods are different. White moves first: 1. Kd6 Kd8 2. e6 Ke8 3. e7 and you'll remember that if it's Black's move in this position, White wins.

Black moves first: 1... Kd8 2. Kf7 (White wins by going round the side and controlling the e7 and e8 squares) 2... Kd7 3. e6+ and the white pawn will go through.

So you can see it's important to get your king in front of the pawn if you want to win.

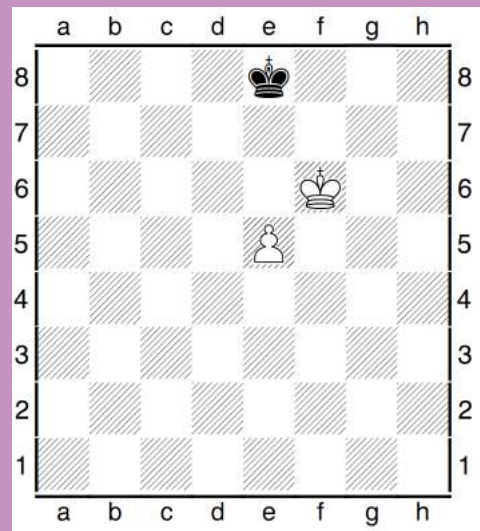
Here's your next position. White to move: what would you play?

As you're trying to get your pawn to the end it looks natural to push it, but this only draws:

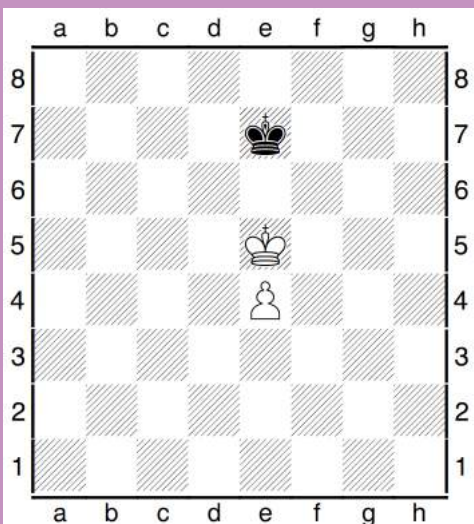
1. e6 Kf8 2. e7+ Ke8 3. Ke6 is stalemate.

But White can win by moving in front of the pawn:

1. Ke6 Kf8 2. Kd7. White goes round the side to help the pawn get through.



Another position for you. This time we move everything back one rank. Try it with White to play and with Black to play and see what happens. Can White win or is it a draw?



This time it makes a difference. It's another position where if it's White's move it's only a draw, but if it's Black's move White can win.



With White to play:

1. Kd5 Kd7 2. Ke5 Ke7 and so on. Black just follows White all the time and White can make no progress. If White goes back behind the pawn Black will draw by going back to the queening square at the key moment.

With Black to play, White will be able to get round the side. For example:

1... Kf7 2. Kd6 Kf6 3. e5+ Kf7 4. Kd7 and White will get a new queen in three moves time.

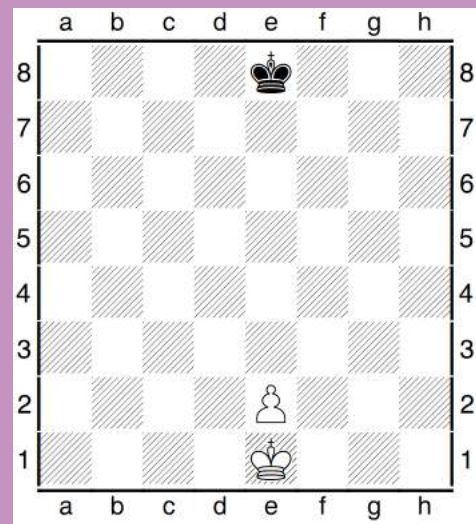
Look closely at the position of the two kings. They are facing each other with one empty square between them.

We say that the player NOT having the move has THE OPPOSITION. If it's Black's move you have to give way and let White through.

Practise this position yourself until you're really confident you can win with White if it's Black's move and draw with Black if it's White's move. When you understand this position you can move on.

Here's your next challenge.  
You're White and you have to win this position.

Try it out for yourself and see if you can work out how to do it before reading on.



Here's how play might go.

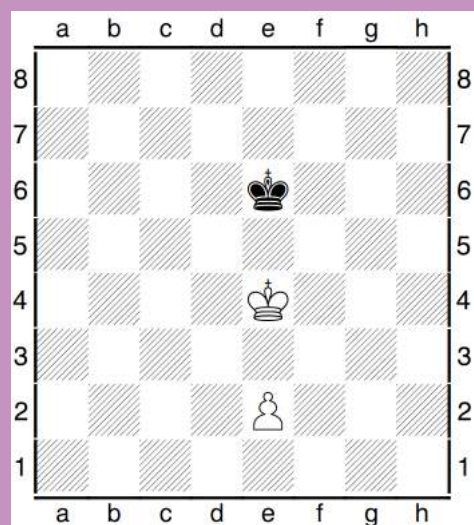
1. Kd2

You have to get your king in front of the pawn first. If you start by moving the pawn Black will be able to draw with best play, as you'll see in the next position.

1... Ke7

2. Kd3 Kd7

3. Ke4 Ke6



This is the key position. White can seize the opposition them self by playing the spare move.

4. e3

This is it! Now Black has to give way, allowing White to go round the side.

4... Kd6

5. Kf5 Ke7

6. Ke5

Taking the opposition again.

6... Kf7

7. Kd6 Ke8

Now the black king has reached the back rank the white pawn can advance.

8. e4 Kd8

9. e5 Ke8

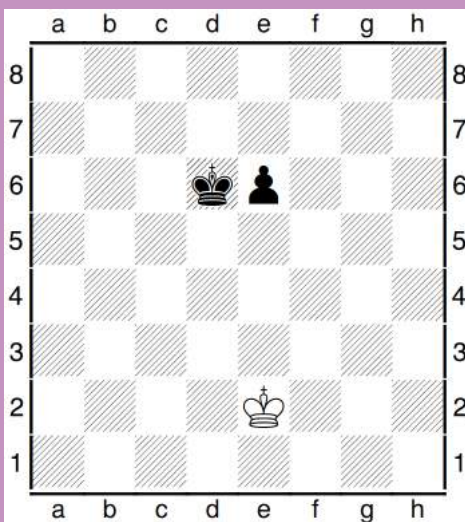
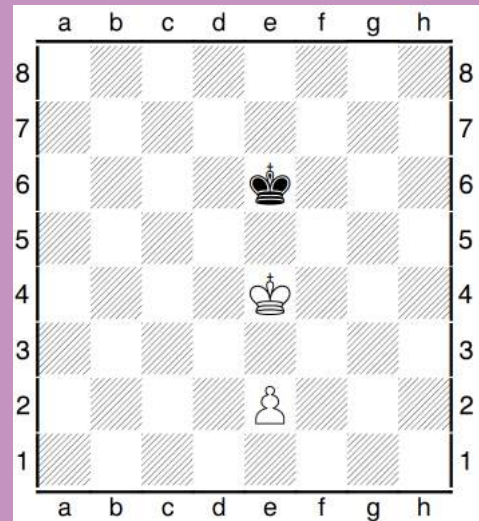
You've seen this position before. White must remember to move in front of the pawn. 10. e6 would only draw.

10. Ke6 Kf8

11. Kd7 Kf7

12. e6+

And the pawn will become a queen in two moves time.



Here's a question for you. What should you play for White if you want to draw this position? Go away and work out the answer for yourself before you read on.

This puzzle is all about the OPPOSITION.

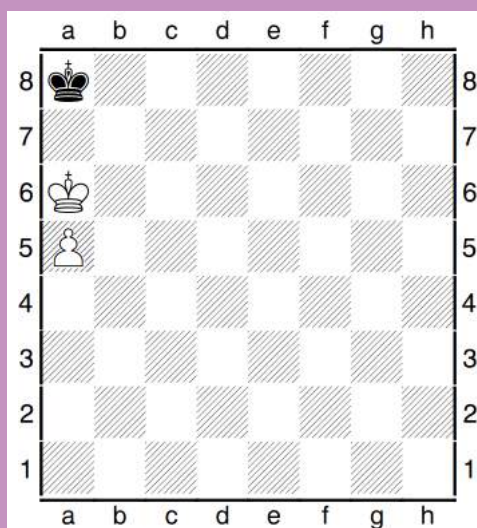
If you play Ke3 Black can win by playing Ke5 (but Kd5 would only be a draw).

If you play Kd3 Black can win by playing Kd5 (but Ke5 would only be a draw).

You have to be prepared to play your king to d3 after Black's king moves to d5, and to e3 after Black's king moves to e5. So you have to stay in contact with both those squares.

The only move to draw is to play Kd2, so that you can take the OPPOSITION if the Black king advances. You'll play ==Kd3 in reply to Kd5 and Ke3 in reply to Ke5. If Black plays Kc5 you can play either Ke3 or Kc3.

If you have a pawn on the a or h file instead, things are very different. Take this position, for example



With any other pawn except an h-pawn this would be a win for White with either player to move, but here it's just a draw.

If it's White's move play might go 1. Kb6 Kb8 2. a6 Ka8 3. a7 and it's stalemate.

Or if it's Black's move, 1... Kb8 and as White can't make progress by going round the side.

Sometimes the defending king is too far away to stop the pawn.

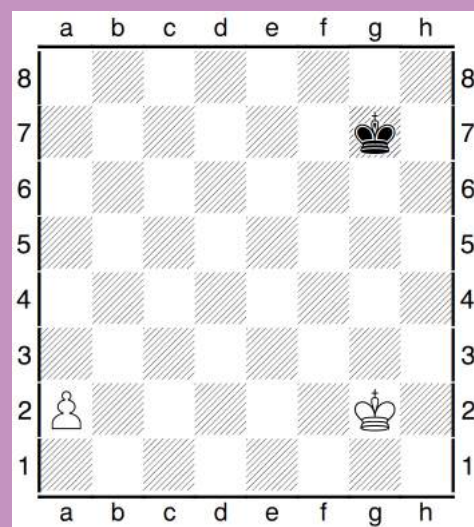
Look at this position.

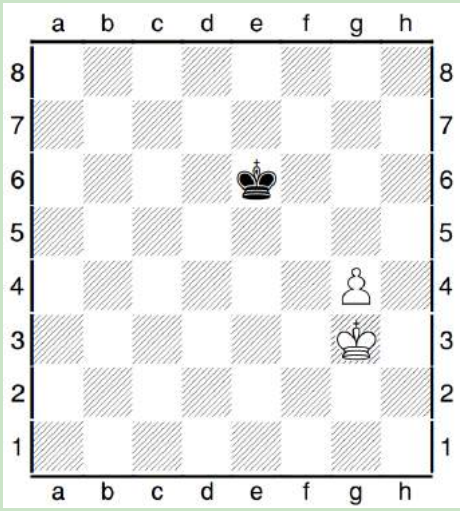
It's White's move. If you play a4 Black won't be able to stop the pawn.

But if instead you play a2-a3 Black will get back in time.

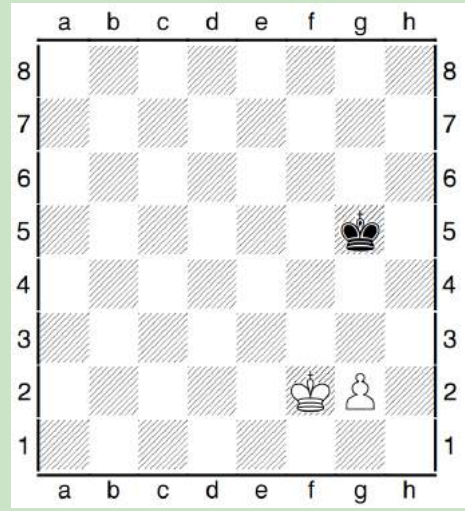
After you've played your pawn move, imagine a square with the pawn at one corner and the queening square at another corner. If the black king can move into the square they can draw.

To test what you've learnt about king and pawn against king, here's another quiz for you to solve before moving on

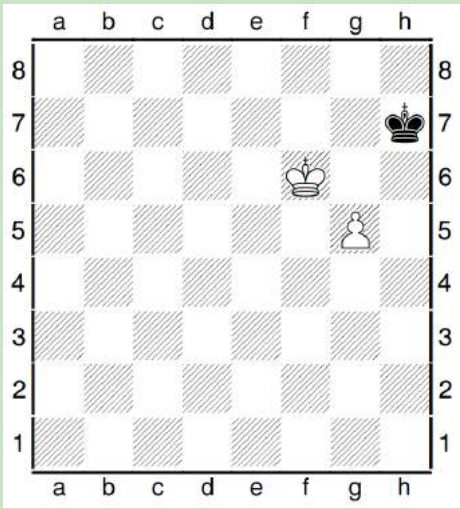




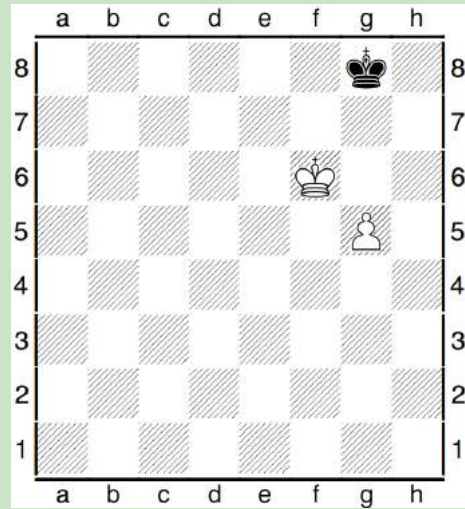
Q13. What is White's best move?



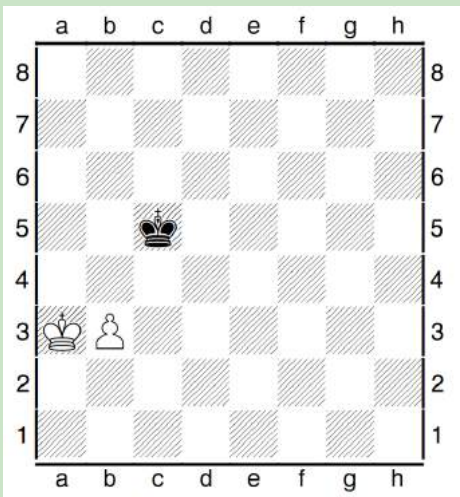
Q14. What is White's best move?



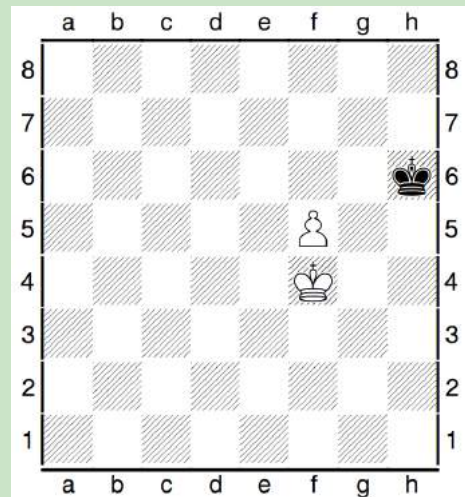
Q15. What is White's best move?



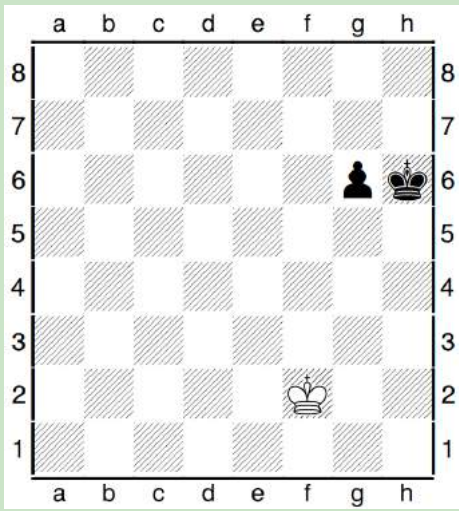
Q16. What is White's best move?



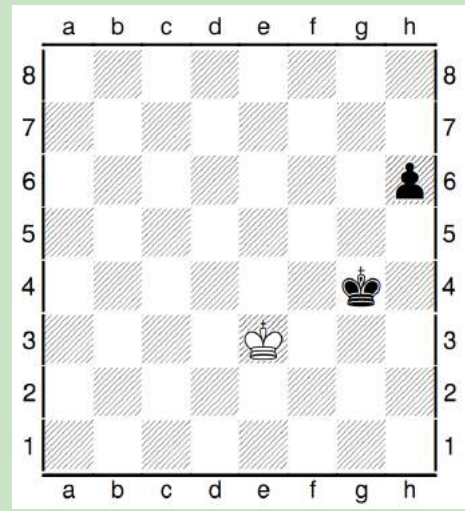
Q17. What is White's best move?



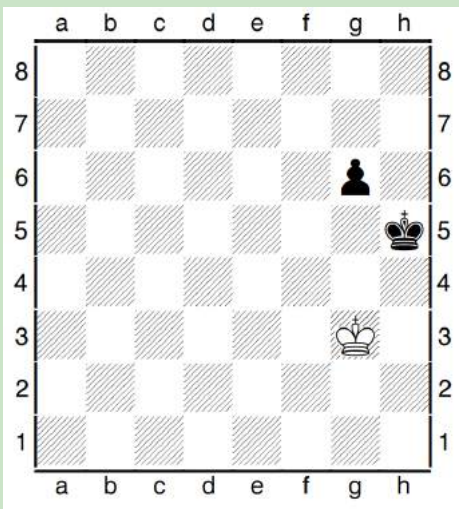
Q18. What is White's best move?



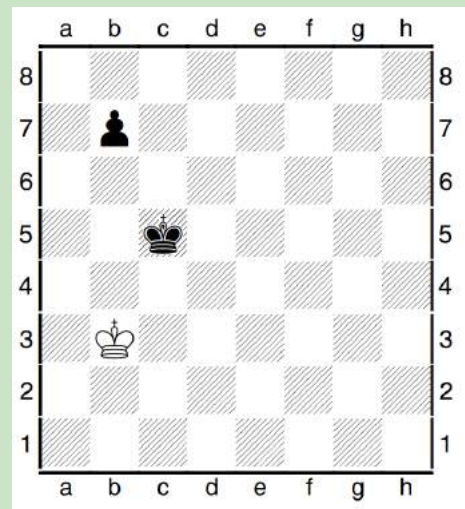
Q19. What is Black's best move?



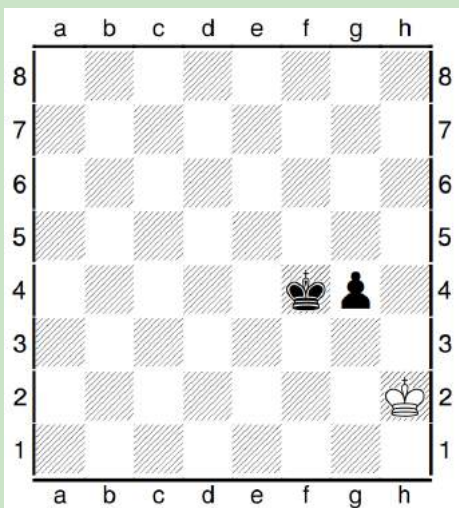
Q20. What is Black's best move?



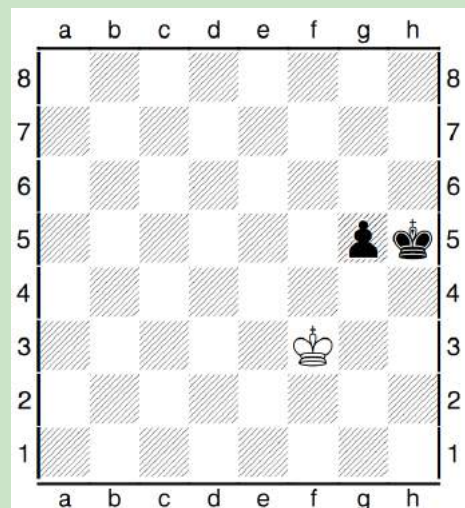
Q21. What is Black's best move?



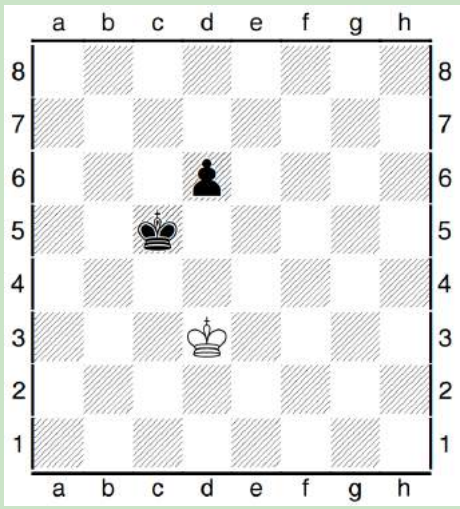
Q22. What is Black's best move?



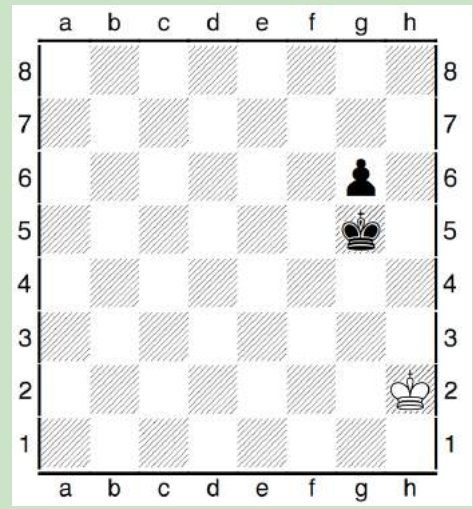
Q23. What is Black's best move?



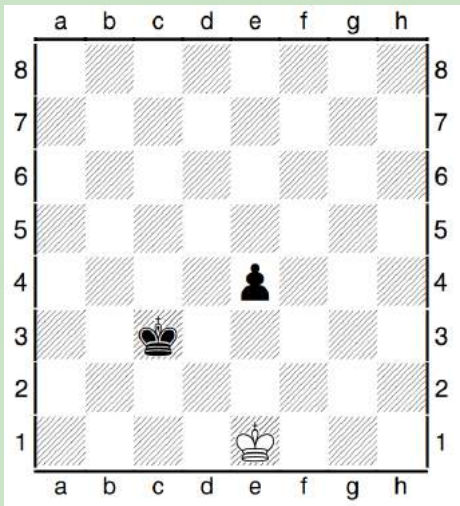
Q24. What is Black's best move?



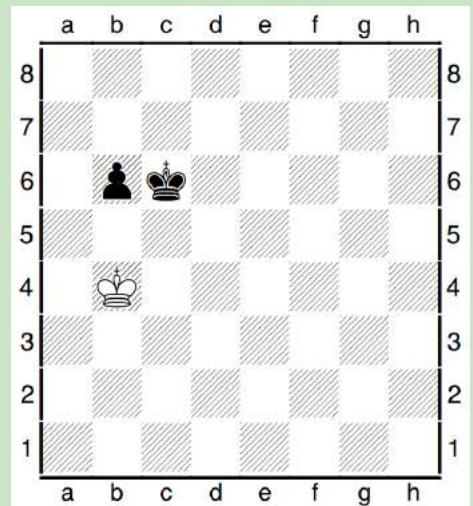
Q25. What is White's best move?



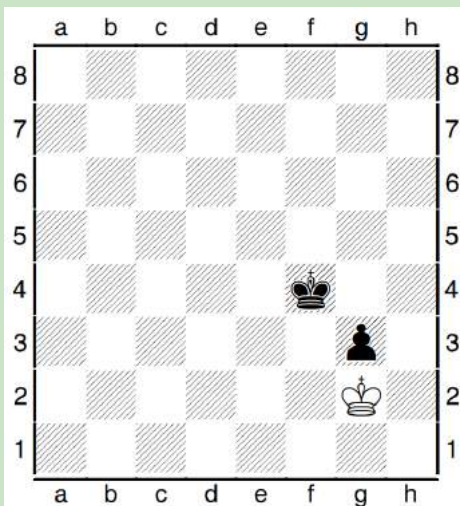
Q26. What is White's best move?



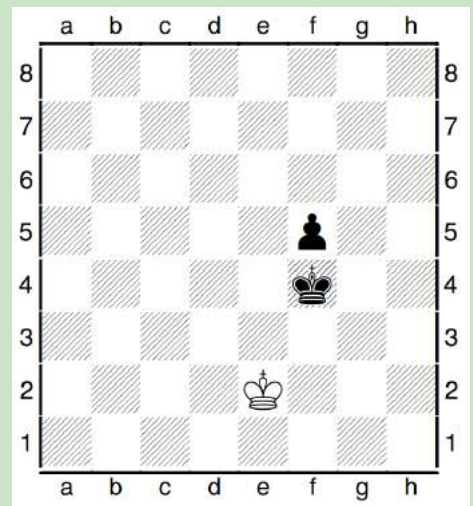
Q27. What is White's best move?



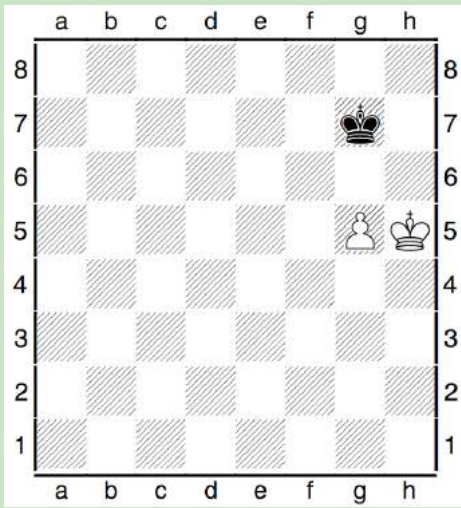
Q28. What is White's best move?



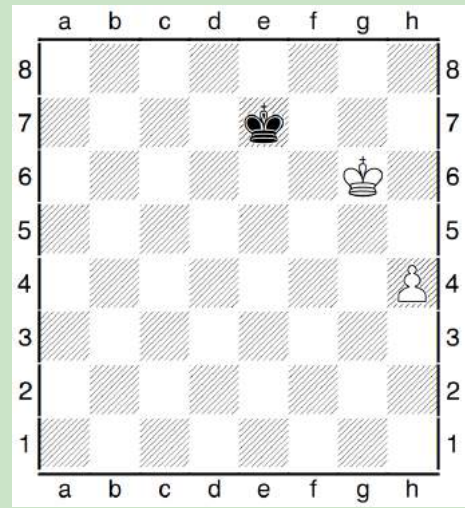
Q29. What is White's best move?



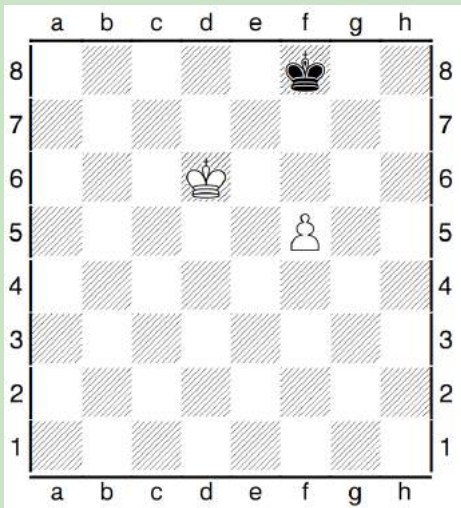
Q30. What is White's best move?



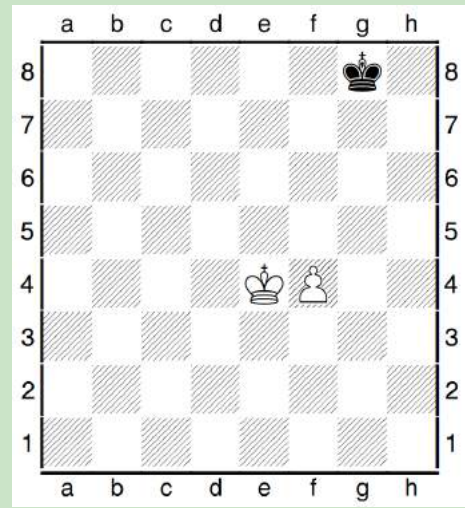
Q31. What is Black's best move?



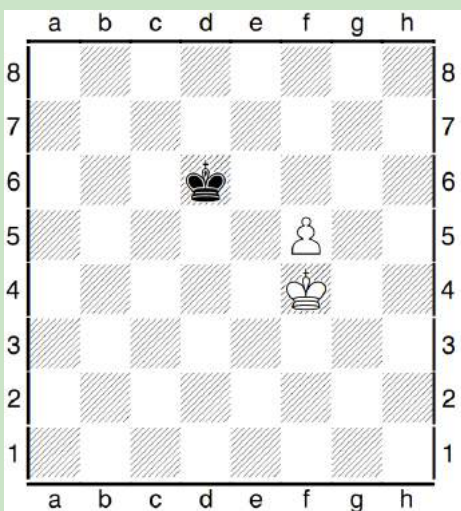
Q32. What is Black's best move?



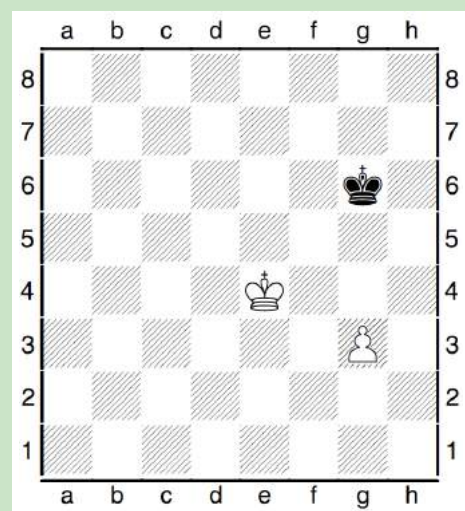
Q33. What is Black's best move?



Q34. What is Black's best move?



Q35. What is Black's best move?



Q36. What is Black's best move?

## WINNING WITH AN EXTRA PAWN (PART 1)

The positions in the last chapter with king and pawn against king are the cornerstone of all endings.

Now you're going to learn how to win with an extra pawn.

Before you look at a position, there are two things you need to understand.

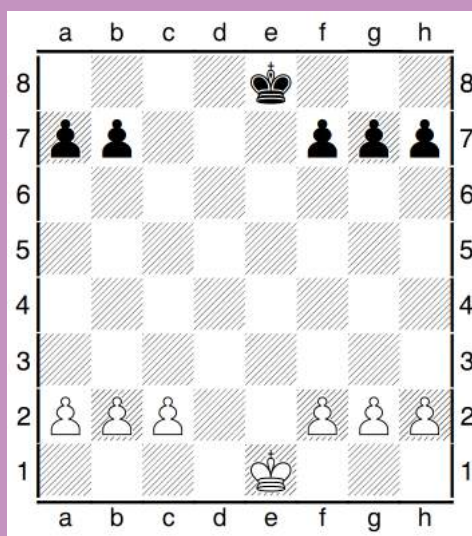
To get a pawn to the end of the board safely you first need to create a PASSED PAWN.

A PASSED PAWN is a pawn which could reach the end of the board without being blocked or captured by an enemy pawn.

Another very important thing you're going to do in all endings is USE YOUR KING. In the opening and the middle game you need to keep your king safe at home. But once most of the pieces have been traded off and you reach an ending the king probably won't be in danger of getting mated. So you can – and must – use your king as a fighting piece.

Here's a position for you to play out.

Try it out yourself before reading on. Take the white pieces and see if you can win.



Here's how the game might go.

1. Kd2

The first thing to do is to get your king to the centre from where it can easily get to either side of the board.

1... Kd7

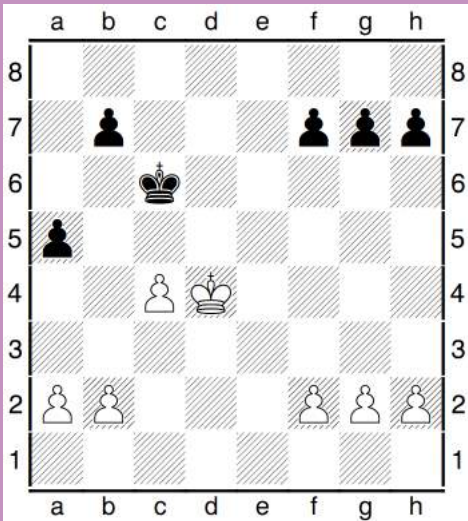
2. Kd3 Kd6

3. Kd4 Kc6

Now the king is in the centre your next job is to get a PASSED PAWN. To do this you advance on the side of the board where you have more pawns. It's best to start with the pawn that doesn't have an opposite number.

4. c4 a5





If you're playing an ending you always need a plan. In this position you have to decide how to create a PASSED PAWN. If you play a4 here it's going to make it harder to do this. You want to play a3 followed by b4, but if you play a3 at once Black can play a4. Now, if you play b4 Black will capture EN PASSANT (Don't forget the EN PASSANT rule!) and your split pawns will make it harder for you to get a PASSED PAWN. So the easiest plan is to play b3, followed by a3 and only then b4.

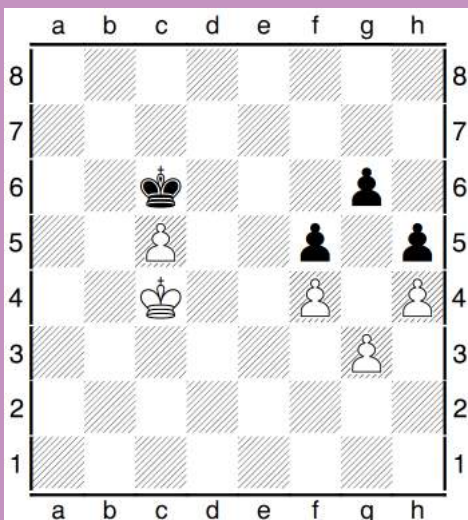
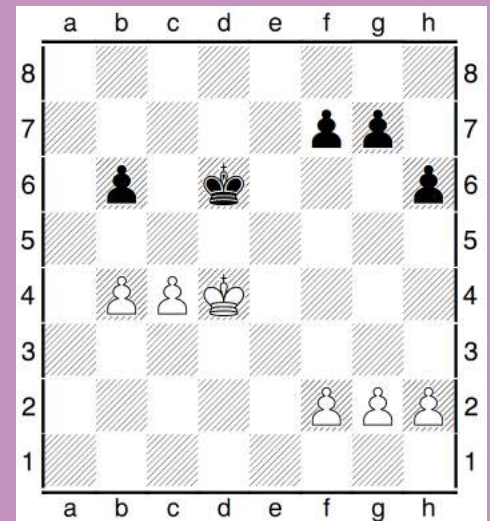
5. b3 b6
6. a3 h6
7. b4 axb4
8. axb4 Kd6

Now White has two pawns together so they can create a PASSED PAWN.

9. c5+ bxc5+
10. bxc5+ Kc6

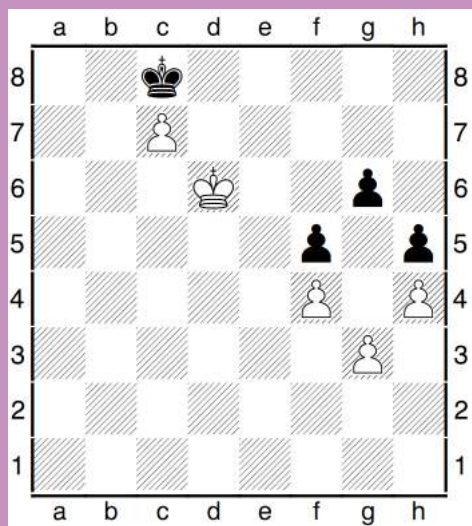
Mission accomplished! But Black is blocking the pawn so how can you make progress? You need a new plan. The idea is to run Black out of pawn moves on the other side of the board and force the enemy king to retreat.

11. Kc4 g6
12. h4 f6
13. g3 h5
14. f4 f5



Next move the black king will have to retreat so White will be able to advance.

15. Kd4 Kc7
16. Kd5 Kd7
17. c6+ Kc7
18. Kc5 Kc8
19. Kd6 Kd8
20. c7+ Kc8



In this position White has two ways to win. The easy way is to play K-e6 and rush over to capture some pawns on the other side. If you choose the quicker path to victory you have to be very careful.

21. Kc6

This would be STALEMATE without the king-side pawns. Black has only one move.

21... g5

22. hxg5 h4

This is where you have to look ahead. If you capture this pawn it will be STALEMATE. But if you work it out you'll see that you'll get to the end of the board in time.

23. g6 h3

24. g7 h2

White can choose between promoting to a queen or a rook.

25. g8R#

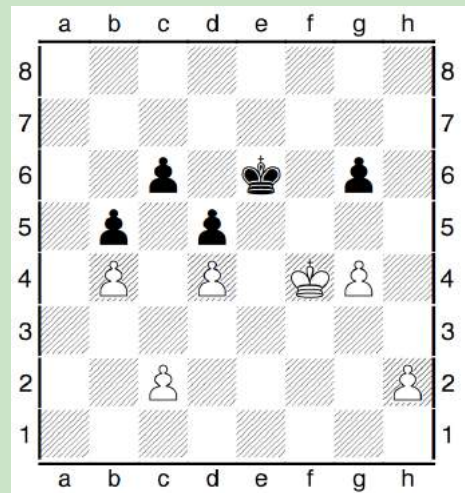
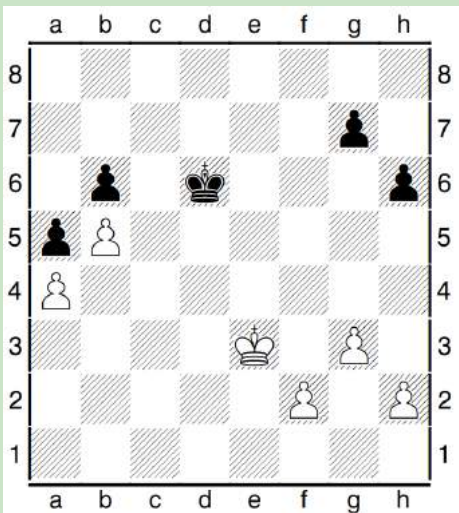
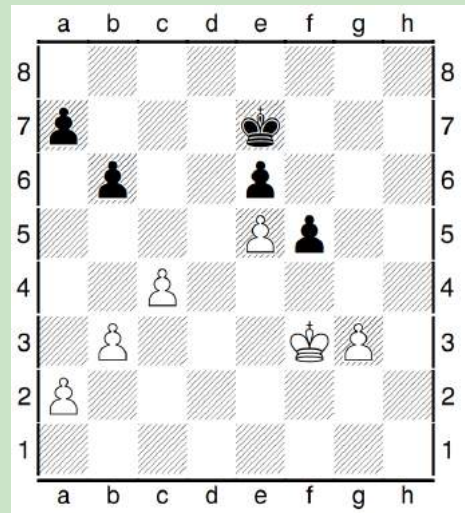
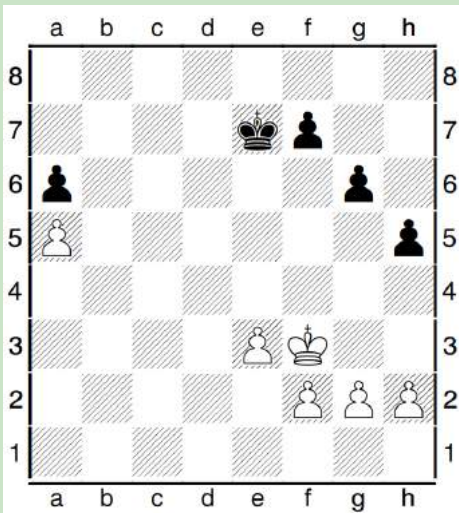
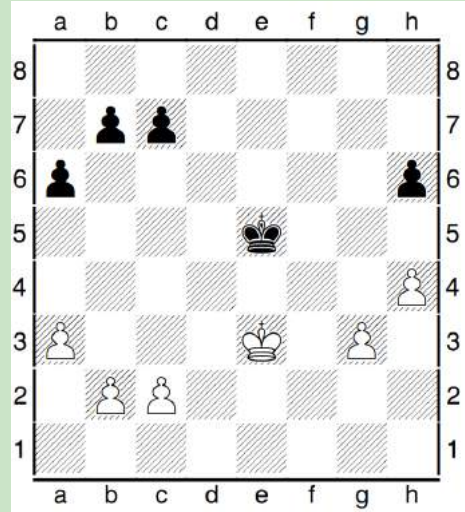
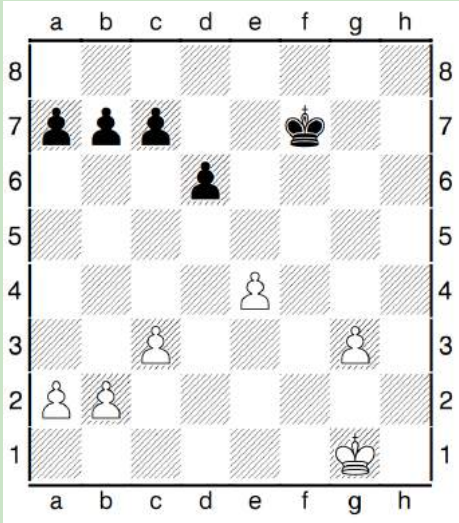
Here are some positions for you to try out for yourself.

Take the side with more pawns, play the game out and see if you can win.

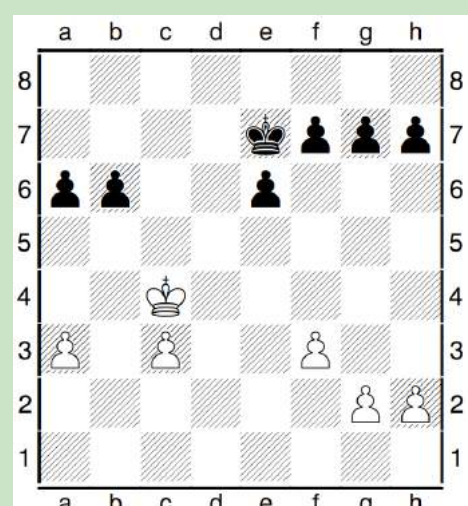
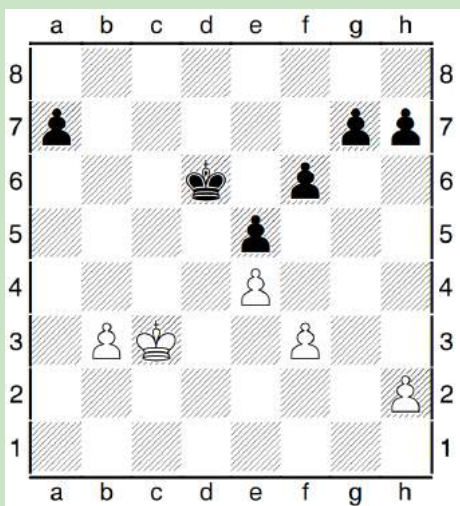
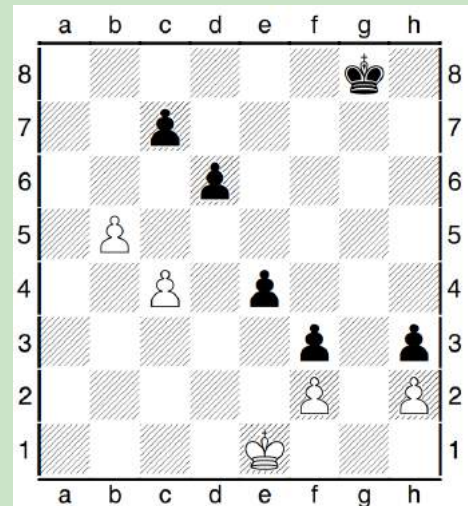
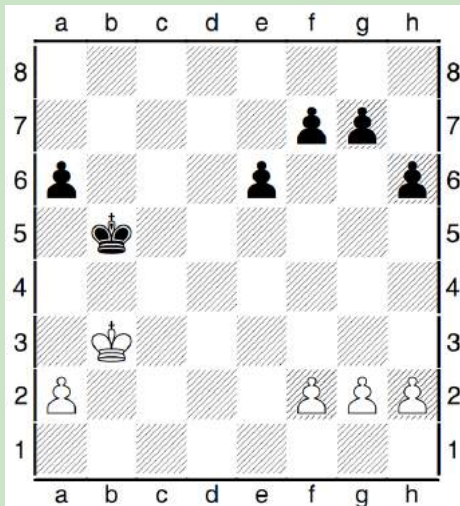
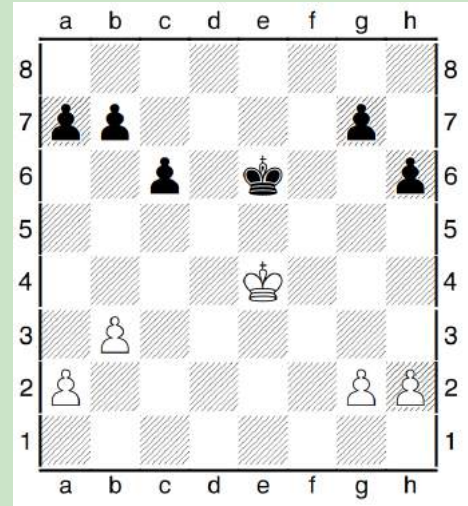
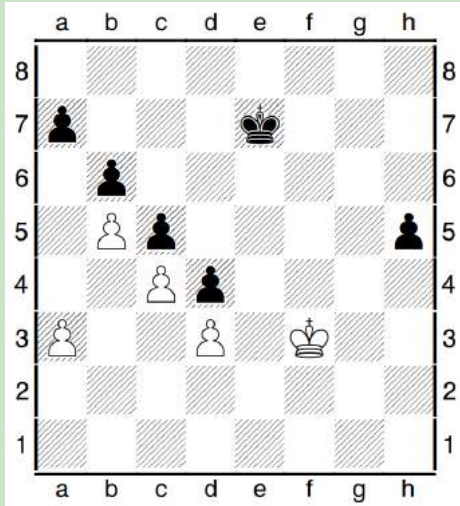
Remember your plan:

1. Advance your king up the board.
2. Create a PASSED PAWN if you haven't already got one.
3. Run your opponent out of pawn moves on the other side of the board.
4. Push your PASSED PAWN as far as you can.
5. If you can't work out a quick win (watch out for STALEMATE) send your king over to capture the enemy pawns on the other side of the board.
6. Get a queen or two and checkmate your opponent.

# White to play



# Black to play

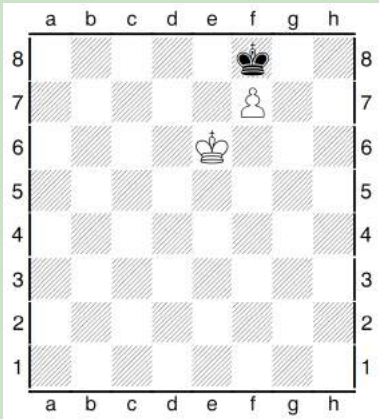


## WINNING WITH AN EXTRA PAWN PART 2

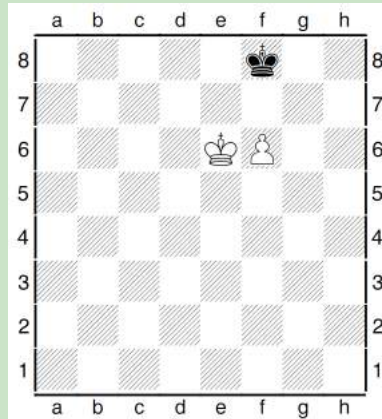
Winning with an extra pawn is usually a lot harder if all the pawns are on the same side of the board.

You can't use the same plan of creating a passed pawn and then running over to capture the pawns on the other side because there aren't any pawns on the other side to capture.

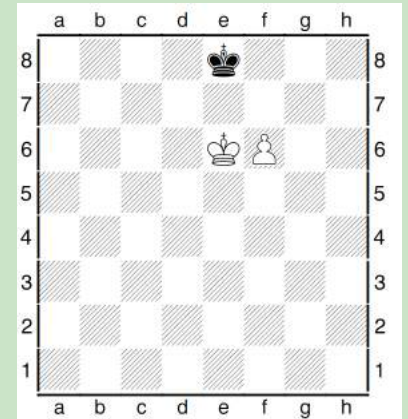
First of all remind yourself about the basic king and pawn positions so that you know what you're aiming for



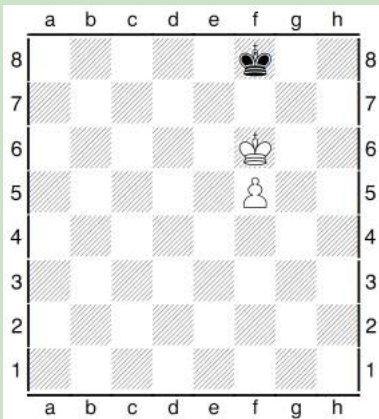
1. White to play: draw  
Black to play: white wins



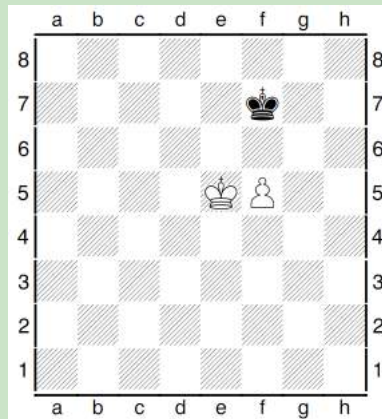
2. White to play: white wins  
Black to play: draw



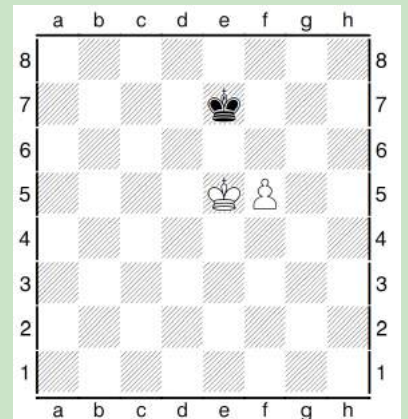
3. White to play: draw  
Black to play: white wins



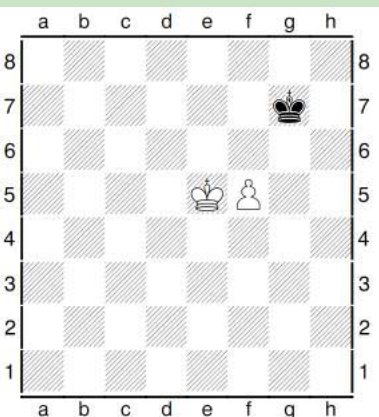
4. White to play: white wins  
Black to play: white wins



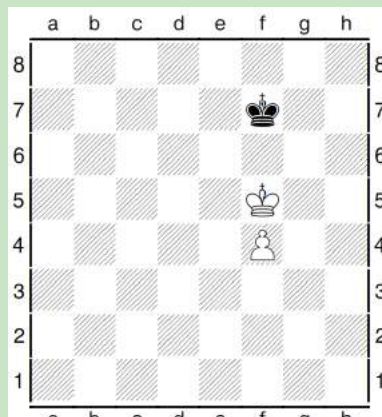
5. White to play: draw  
Black to play: draw



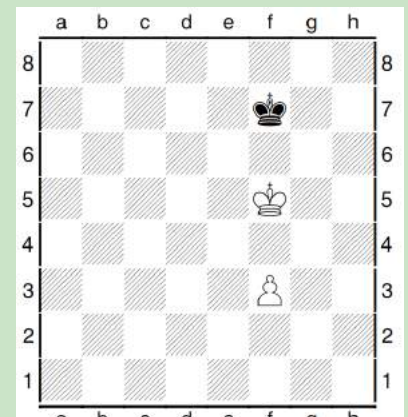
6. White to play: draw  
Black to play: draw



7. White to play: white wins  
Black to play: draw



8. White to play: draw  
Black to play: white wins



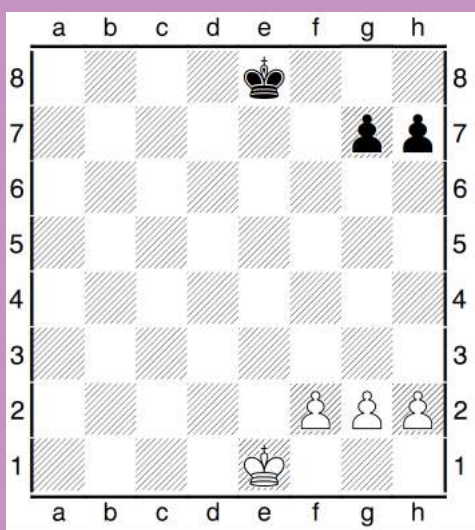
9. White to play: white wins  
Black to play: white wins

Note that in positions 5 to 9 above the result is the same if you move the position back down the board by one (or more, if you can) ranks.

So you win by moving your king in front of the board, reaching a position where the enemy king is opposite you and it is their move. They have to give way allowing you to move round the side, or to move forwards.

You have to UNDERSTAND these positions as well as REMEMBER them. So play each position through with both colours and make sure you really understand what is happening and why it is happening.

When you're happy that you understand these positions it's time to move on and play out this position.



It's White to move and win from this position. Play it out yourself a few times and see if you can win before reading on.

Here's how the play might go.

1. Ke2

As before, White starts by moving their king into the centre.

1... Ke7

2. Ke3 Ke6

3. Ke4 g6

4. f4

Just as when there were pawns on both sides of the board, White leads with the pawn which doesn't have an opposite number.

4... h5

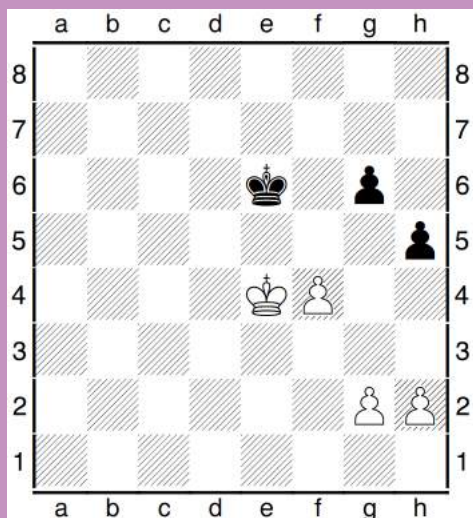
Now you have to be careful. You can win if you keep your pawns together but if you allow them to be split it's only a draw. 5. h3 would be a mistake: Black would reply with h4 and capture en passant when you played g4, after which you wouldn't be able to win. **DON'T FORGET THE EN PASSANT RULE!**

5. g3 Kf6

6. h3 Ke6

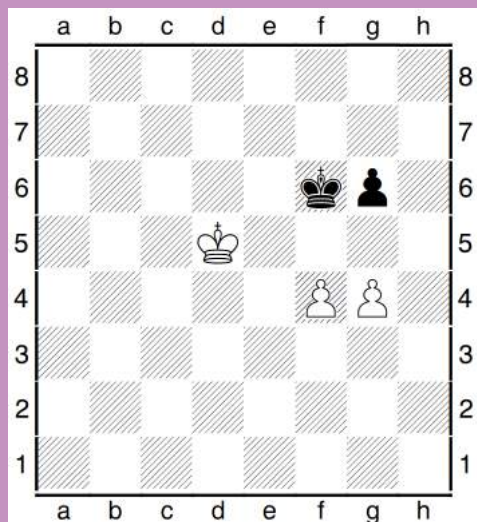
7. g4 hxg4

8. hxg4 Kf6



In this position White will only draw if they advance either pawn. 9. f5 gxf5 10. gxf5 is a draw as Black's king is behind the pawn. Or 9. g5+ Ke6 and Black has the OPPOSITION so White can make no progress. So White has to go round the side instead.

9. Kd5



### Variation 1

9... Kf7  
10. Ke5 Ke7  
11. g5!

Taking the OPPOSITION. Now Black has to give way and White comes round the side again. But instead f4-f5 would only draw.

11... Kf7  
12. Kd6 Kg7  
13. Ke6 Kg8  
14. Kf6 Kh7  
15. Kf7

White will capture the black pawn next move.

### Variation 2

9... Ke7  
10. Ke5 Kf7  
11. f5!

This time g4-g5 only draws because Black can take the OPPOSITION with Kf7-e7. But instead f4-f5 wins.

11... gxf5  
12. Kxf5

White will only draw if they play g4xf5 because

they won't be able to get in front of the pawn.  
12... Kg7  
13. Kg5

Now White takes the OPPOSITION, forcing Black to give way, when they can win by going round the side, for instance:

13... Kf7  
14. Kh6 Kg8  
15. g5 Kh8  
16. g6 Kg8  
17. g7 Kf7  
18. Kh7

### Variation 3

9... g5  
10. f5

Capturing the pawn with f5xg5 will only lead to a draw with correct defence.

10... Kf7  
11. Ke5 Kg7  
12. f6+ Kf7  
13. Kf5

White will capture the black pawn next move. It's not so easy, is it? You really need to think hard and look ahead to get this sort of position

Now we're going to look at some more ideas you can use to win PAWN ENDINGS.

### Pawn Ending Idea 1: The OUTSIDE PASSED PAWN

Look at this position

Both players have four pawns so you might think it looks like a draw. But if you play it out you'll find that White wins easily. The game might continue like this:

1. Kf4 Kh5

Or if Black plays 1... Kf6 you play 2. h5.

2. Kxf5 Kxh4

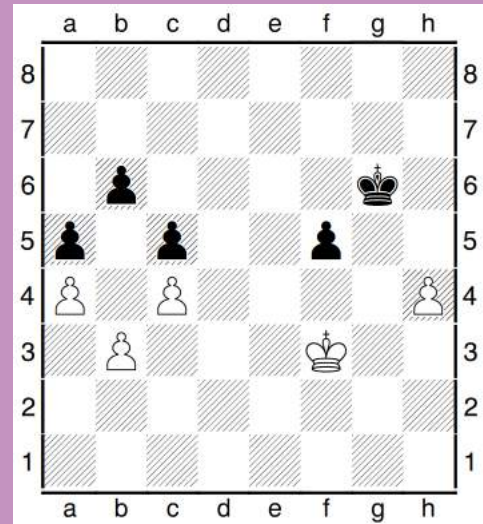
3. Ke6 Kg4

4. Kd6 Kf4

5. Kc6 Ke4

6. Kxb6 Kd4

7. Kxa5 and White will win easily.



So how did that happen?

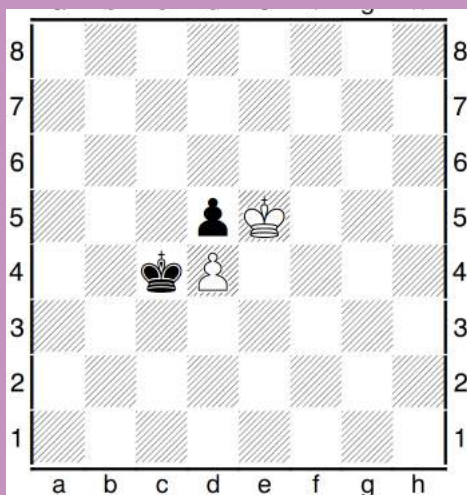
The answer is that in the diagram above White has an OUTSIDE PASSED PAWN (OPP). The white PASSED PAWN on h4 is further away from the pawns on the other side of the board than the black PASSED PAWN on f5.

White's plan is to trade the two king-side pawns. The white king will then be able to reach the other side of the board first and capture some black pawns. It's a race with both players heading for in the same direction, but White will win the race easily.

### Pawn Ending Idea 2: the TREBUCHET

A trebuchet is a machine like a very large catapult used for throwing rocks at your enemy. In chess it's something different.

Have a look at this:

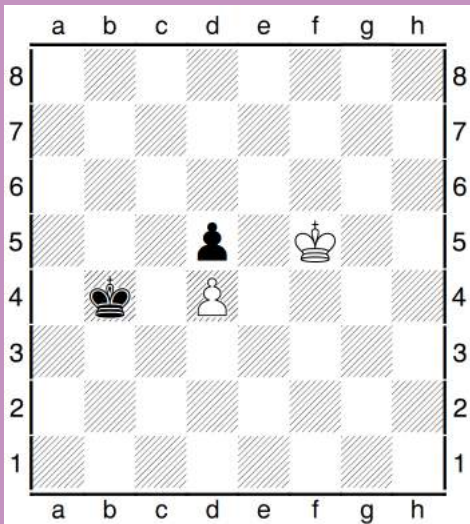


This is a ZUGZWANG position. If it's White's move Black will win, and if it's Black's move White will win.

The player to move has to move away from defending the pawn, and then, as you should know from your work on king and pawn against king, the other player can win with best play.



Now let's change the position slightly.



Can you work out what's happening here?

This time the opposite is true. Whoever moves first can win.

Let's suppose it's White's move. In this sort of position you can attack a pawn from two squares but you can only defend a pawn from one square. White has to choose wisely.

If you play Ke5 you'll lose: Black will play Kc4 and you're back to the first diagram where it's your move.

But if you play Ke6 instead you'll win: now if Black plays Kc4 to defend the pawn you can play Ke5, and now you've reached the first diagram again, but this time it's Black's move so you win.

We've now changed the position again. What's happening this time?

This time it doesn't matter whose move it is: it's a draw with best play. If White plays Ke5 Black can play Kc4 and win.

If White plays Kf5 Black can play Kc3 (not Kc4, which would lose) and win. So instead White plays Kf3. Black might reply with Kb3 and the kings will just move up and down between f3 and f4, b3 and b4, leading to a DRAW BY REPETITION.

In this position you can also draw by giving up your pawn at the right time:

1. Ke3 Kc3
2. Ke2

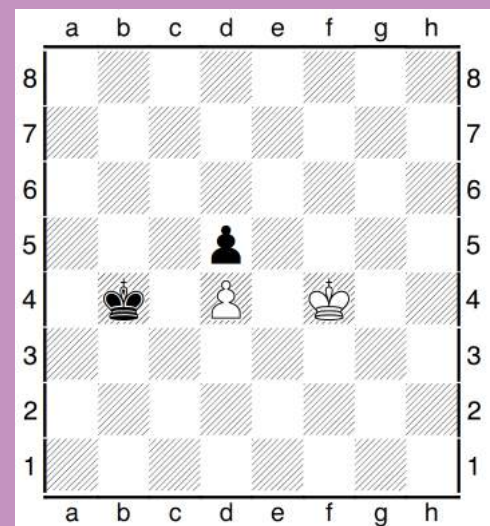
But not Kd2, which loses because Black will gain the OPPOSITION

- 2... Kxd4
3. Kd2

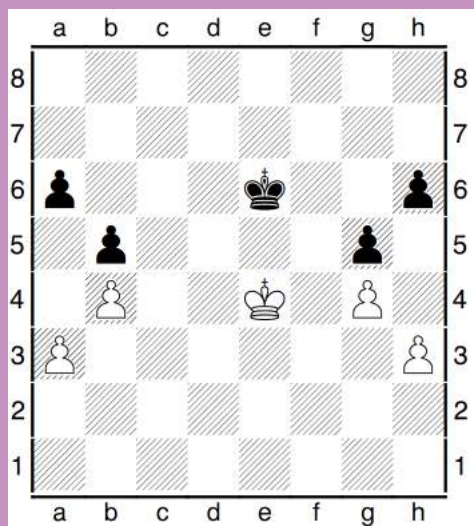
Now White takes the OPPOSITION and Black cannot make progress.

Pawn Ending Idea 3: the SPARE MOVE and the OPPOSITION

This sort of position happens over and over again in pawn endings.



Start by looking at this position:

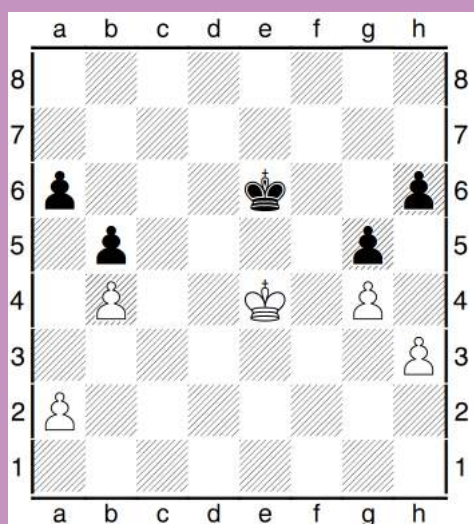


You'll see that the kings are in OPPOSITION – two squares apart.

If it's Black's move White can win. If Black plays Kd6 White plays Kf5 to capture the king-side pawns. If Black plays Kf6, White plays Kd5 to capture the queen-side pawns. And if Black plays Ke7, White plays Ke5 to take the OPPOSITION again.

If it's White's move it's only a draw. White has to play Kd4 and Black has to take the OPPOSITION again by playing Kd6. White goes back to e4 and Black goes back to e6 with a DRAW BY REPETITION.

If the kings were on e3 and e5, though. White, to move, would lose, while Black, to move, would draw. IMPORTANT LESSON – it's often good to have your king further up the board.



Now let's make a slight change to the position:

This time White wins no matter whose move it is. Why? Because White has a SPARE MOVE. If it's White's move you can play 1. a3, taking the OPPOSITION and forcing Black to give way.

IMPORTANT LESSON – be very careful to play your pawns so that you have as many SPARE MOVES as possible and your opponent has as few SPARE MOVES as possible.

In this position it's White to play. If you play b4 you'll win by TAKING THE OPPOSITION. But if you play b3 you'll only draw as long as Black is careful. Play might go 1. b3 a5 2. b4 when Black has a choice. Now 2... a4 will draw by TAKING THE OPPOSITION but 3... axb4 will lose because after 4. axb4 White will TAKE THE OPPOSITION.

If you've ever played CAPTURE THE FLAG with 8 pawns each (also called PAWN WARS) you'll be used to having to make this sort of decision.

#### Pawn Ending Idea 4: The Breakthrough

It's usually true in pawn endings, even more than in any other positions, that you're more likely to win if you have more pieces than your opponent.

Sometimes, though, you can SACRIFICE a pawn or two to force a PROMOTION.

Here's a simple example.

White can win here by playing a PAWN SACRIFICE. 1. c5 bxc5 2. b6 and White will win the RACE and promote first. Black might try playing 1... Ke5 instead. We'll play this line out as it will give you the chance to learn another important idea.

1. c5 Ke5

Now White has to make an important choice: cxb6 or c6. Let's take a look. It seems natural to play the capture, when you'll have two extra pawns.

2. cxb6 Kd6

3. Kg4 Kd7

4. Kf5 Kc8

5. Ke6 Kb7

6. Kd5 Kxb6

7. Kc4

And you already know that Black can draw this position with best play.

So let's try 2. c6 instead. Now White has a PROTECTED PASSED PAWN (PPP). PROTECTED PASSED PAWNS can be very useful in pawn endings because your opponent can never capture the supporting pawn without allowing promotion.

2. c6 Kd6

3. Kg5 Kc7

4. Kf6 Kd6

White can win this position by SACRIFICING their c-pawn to get ROUND THE SIDE and set up a TREBUCHET. It goes like this.

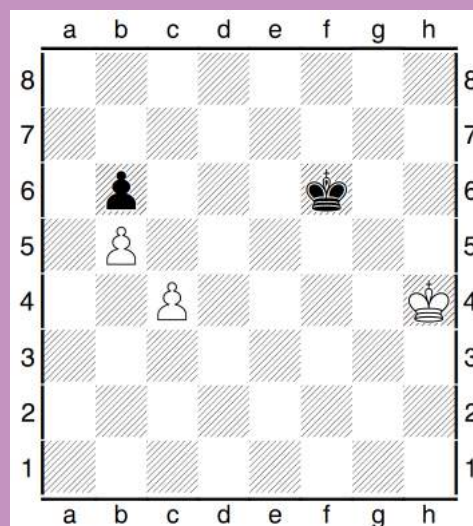
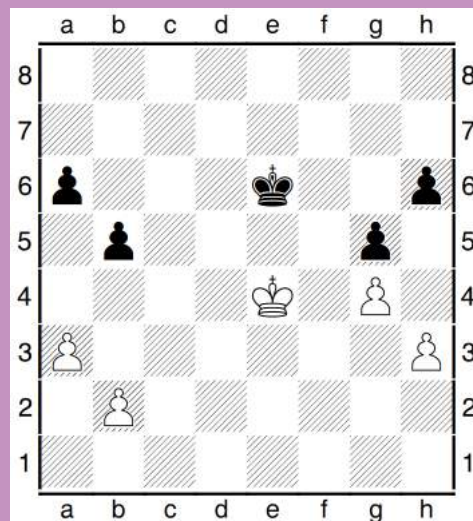
5. c7 Kxc7

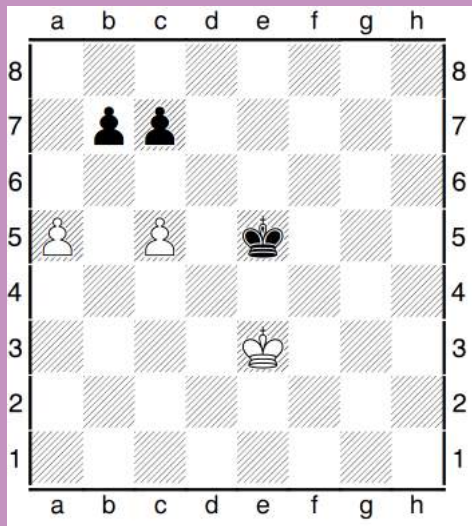
6. Ke7 Kb7

7. Kd7 Ka7

8. Kc7

And you already know that White can win this position: you can attack the black pawn from two squares but Black can only defend it from one square.





Here's another example:

It looks like White's in trouble but in fact you can win by playing a SACRIFICE. You play 1. c6 and if 1... bxc6 then 2. a6 and the pawn will promote. Finally, there's this position:

Again it looks like White's in trouble, but this time you can SACRIFICE two pawns to promote the third pawn.

You start by playing:

1. g6

Now if:

1... fxg6

2. h6 gxh6

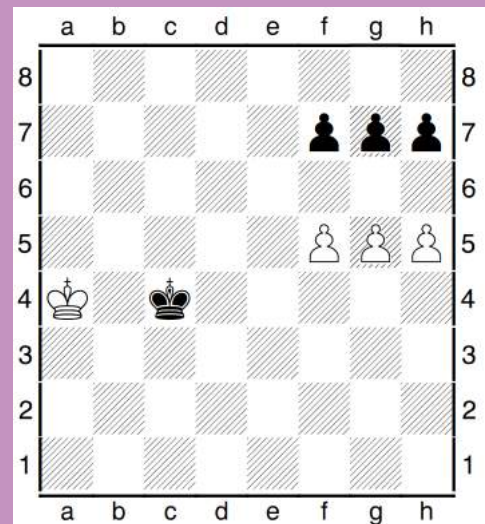
3. f6 and you promote

Likewise:

1... hxg6

2. f6 gxf6

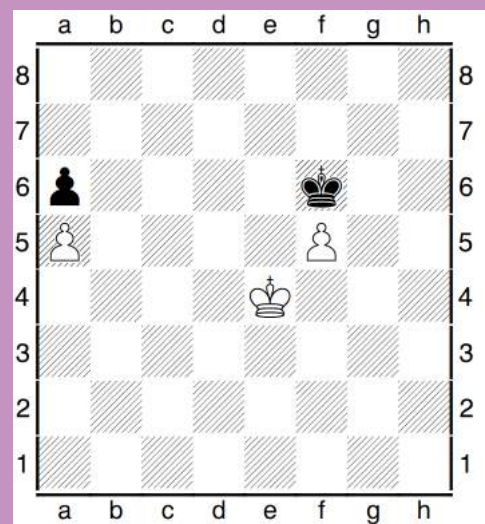
3. h6 and again you promote



Pawn Ending Idea 5: Understanding the a- and h-pawns

Rook's Pawns (a- and h-pawns) are very different from other pawns. They're much harder to promote because you can't get round the other side with your king. You'll quite often see a position like this where one player is RACING to promote an a- or h-pawn

With White to move, play might continue like this. White wants to get as far up the board as possible and make sure the black king is as far away from the f-pawn as possible before running over to win the a-pawn.



1. Kf4 Kf7
2. Ke5 Ke7
3. f6+ Kf7
4. Kf5 Kf8
5. Ke6 Ke8
6. Kd6

White makes a dash for the queen-side

- 6... Kf7
7. Kc6 Kxf6
8. Kb6 Ke6
9. Kxa5 Kd7

The only move to draw. In this sort of position White can win by getting the king to b7, while Black can draw by getting the king to c8. Kd6 would lose: White would play Kb6 followed by Kb7.

10. Kb6 Kc8 and Black just gets back in time to draw.

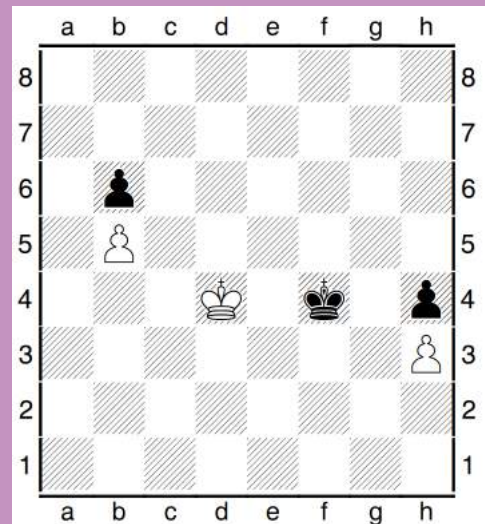
Now we'll make a slight change to the position.  
The a-pawns are one square further up the board.  
Let's play the same moves again.

1. Kf4 Kf7
2. Ke5 Ke7
3. f6+ Kf7
4. Kf5 Kf8
5. Ke6 Ke8
6. Kd6 Kf7
7. Kc6 Kxf6
8. Kb6 Ke6
9. Kxa6 Kd7

Because you're one square further up the board you can now play

10. Kb7

And you'll get a new queen in three moves time.



These endings are not so easy to calculate. You have to see a long way ahead (in this case ten moves by each side) in order to work out whether the position is a win or a draw.

## Pawn Ending Idea 6: The RACE

You've already seen some positions in which each king rushes to the other side of the board to capture an enemy pawn and then promote its own pawn.

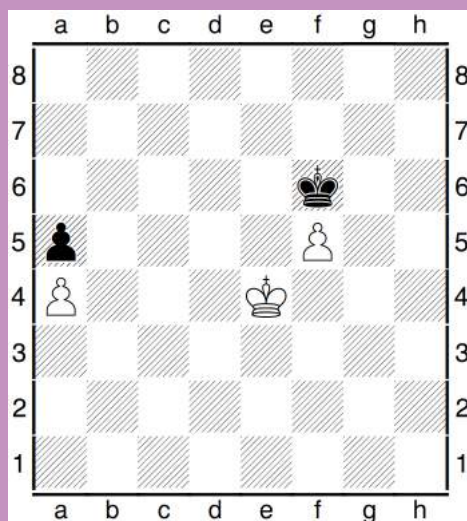
You have to calculate these very accurately to see who promotes first.

If you promote and the enemy pawn then reaches the sixth rank you will almost always win.

If you promote and the enemy pawn then reaches the seventh rank it all depends. If you have queen against pawn on the seventh rank supported by its king you will usually win if the pawn is on the b, d, e or g file and draw if the pawn is on the a, c, f or h file. You'll learn much more about this in the next chapter.

If both players promote, again it all depends. You have to learn more about queen endings, which can be very hard.

After you've captured the enemy pawn you have to be very careful where you place your king. You'll probably need to make sure that your opponent can't check you and certainly need to make sure that your opponent can't SKEWER your king and queen.



Here's an example.

It's White's move. First of all you have a choice. You can make it a RACE by playing Kd5 or try to defend by playing

Kd3. Black will win your h-pawn and then rush over to your b-pawn. Will you get back in time? As it happens, the answer is 'not quite' but you might like to play it out yourself to make sure.

The way to draw is to go for the immediate RACE.

1. Kd5 Kg3
2. Kc6 Kxh3
3. Kxb6 Kg3

This is where you have to be careful. If you choose the wrong square for your king you'll lose.

If you play Kb7 you're blocking your own pawn and losing a vital move.

The other bad move is Kc6, when Black will promote with CHECK.

Any of the other five king moves will draw because both players will promote their pawns.

Now it's time for you to solve some more puzzles.

You'll need to look ahead and calculate accurately in order to find the right answers.

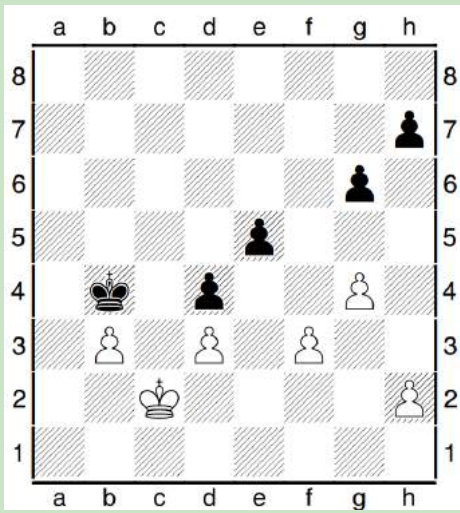
The questions are multiple choice. You'll have three moves to choose from: look at each in turn and decide which is the winning or drawing move. Circle the move you choose.

It will help you if you set up the positions on your chessboard and try all the moves before reaching your decision.

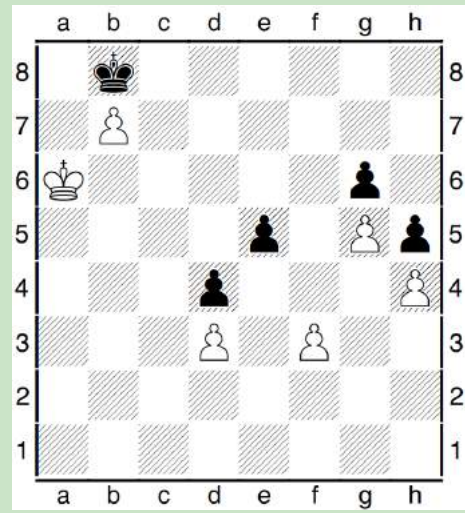
Remember, it's not a guessing game. You have to work out the best move by looking ahead.

The ideas you've just read about will help you with many of the questions.

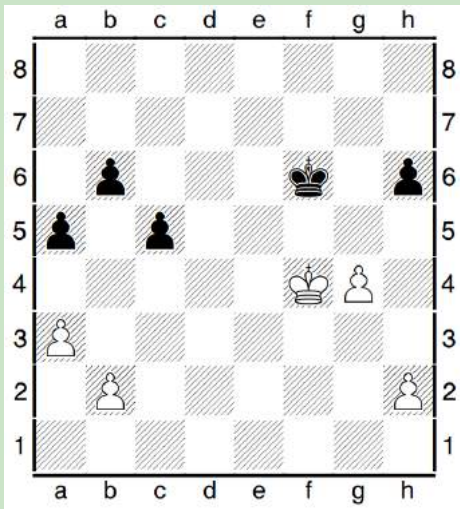
(There may be other winning/drawing moves but only one of the three options will give you the result you want.)



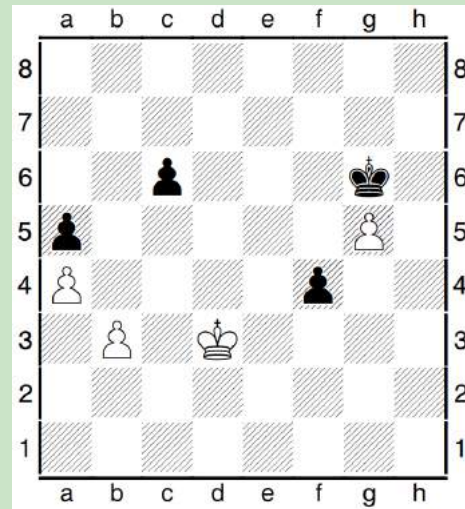
Q37. Find White's winning move  
 a) Kb2 b) g5 c) h3



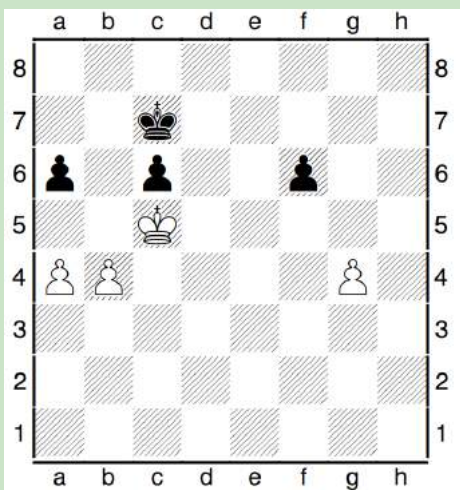
Q38. Find White's winning move  
 a) Kb5 b) Kb6 c) f4



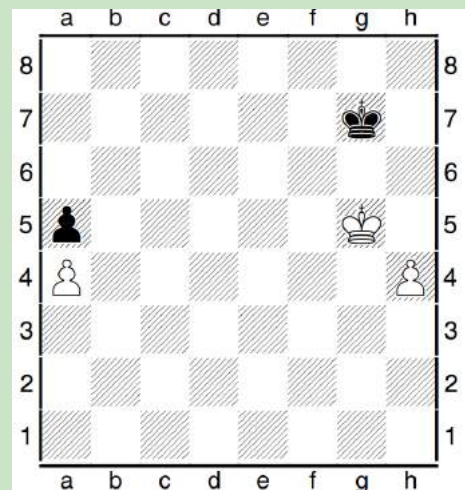
Q39. Find White's winning move  
 a) a4 b) Ke4 c) h4



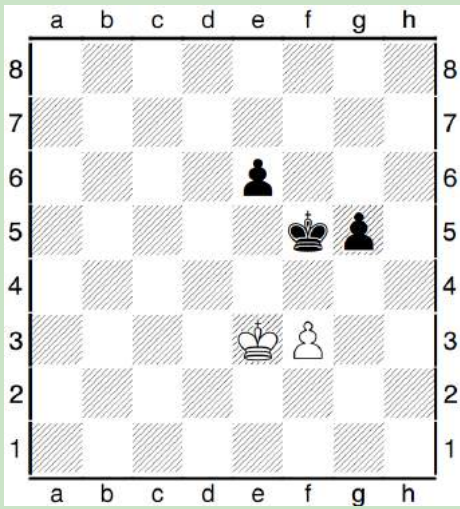
Q40. Find White's winning move  
 a) b4 b) Kc4 c) Ke4



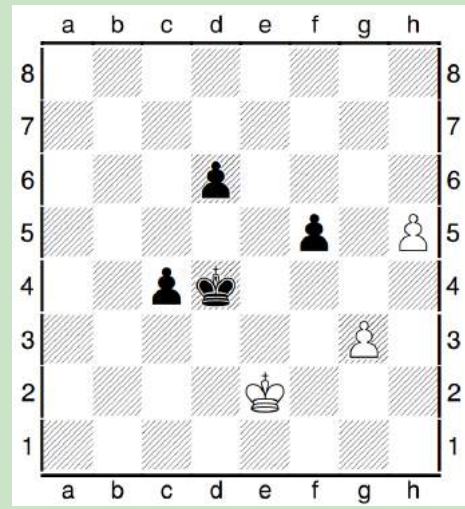
Q41. Find White's winning move  
 a) a5 b) b5 c) Kd4



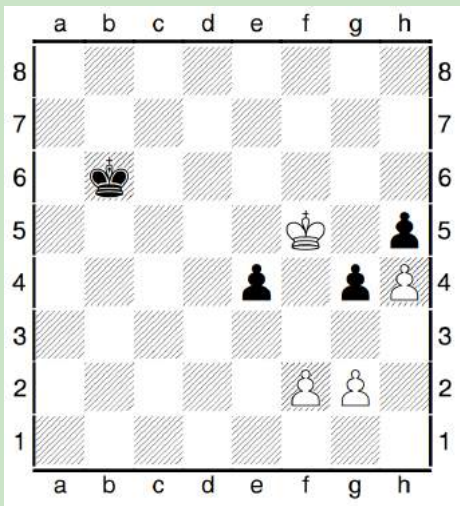
Q42. Find White's winning move  
 a) Kf5 b) Kh5 c) h5



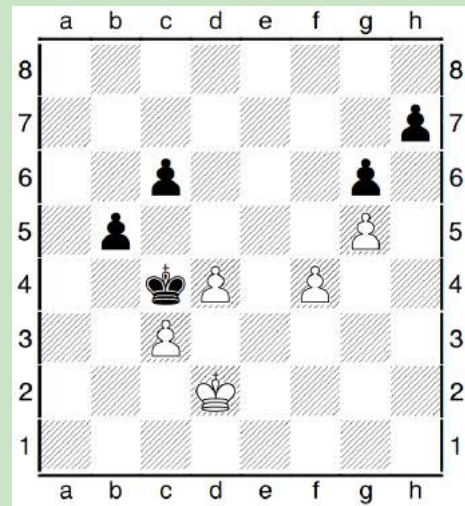
Q43. Find Black's winning move  
 a) e5 b) Ke5 c) g4



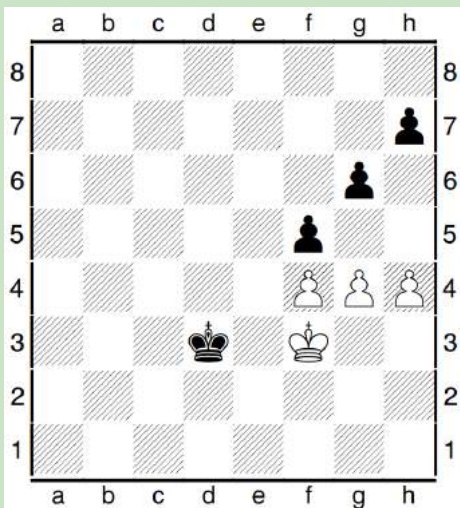
Q44. Find Black's winning move  
 a) c3 b) d4 c) Ke5



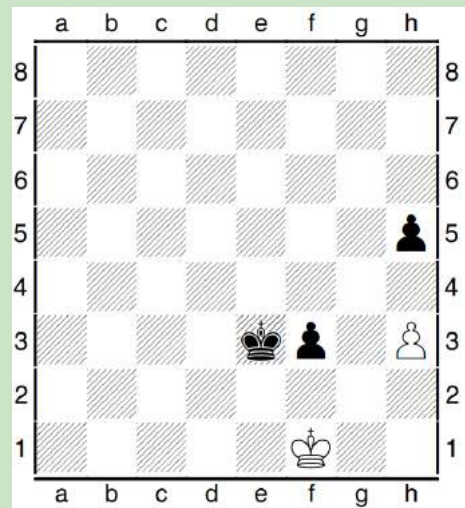
Q45. Find Black's winning move  
 a) Kc5 b) e3 c) g3



Q46. Find Black's winning move  
 a) b4 b) c5 c) h5

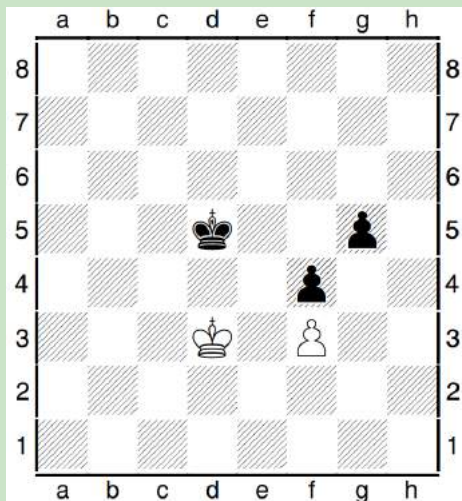


Q47. Find Black's winning move  
 a) fxg4 b) h5 c) h6

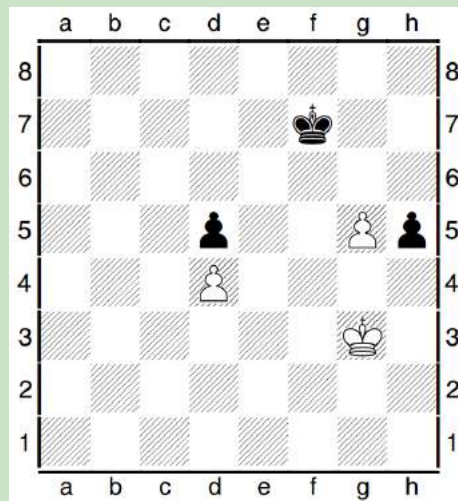


Q48. Find Black's winning move  
 a) Kd2 b) f2 c) Kf4

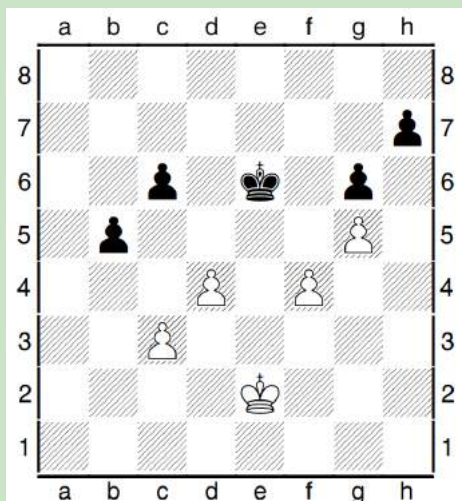




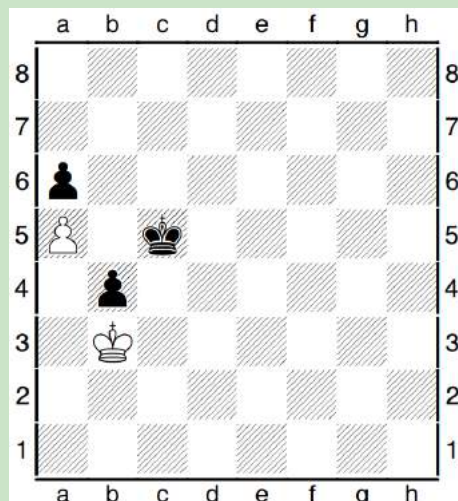
Q49. Find White's only way to draw  
 a) Kc3 b) Kd2 c) Ke2



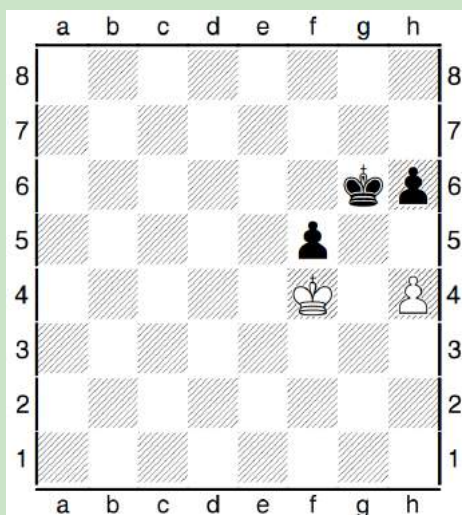
Q50. Find White's only way to draw  
 a) g6+ b) Kh3 c) Kh4



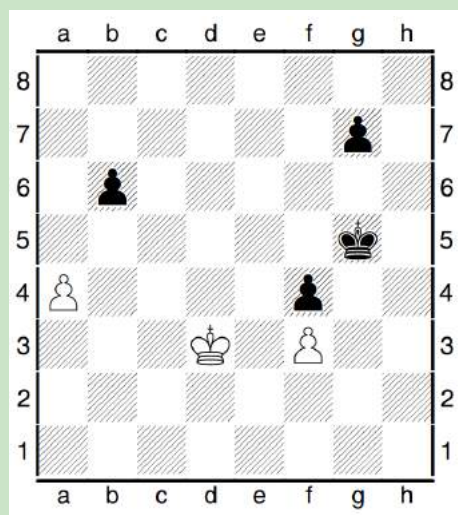
Q51. Find White's only way to draw  
 a) Kd3 b) Ke3 c) Kc3



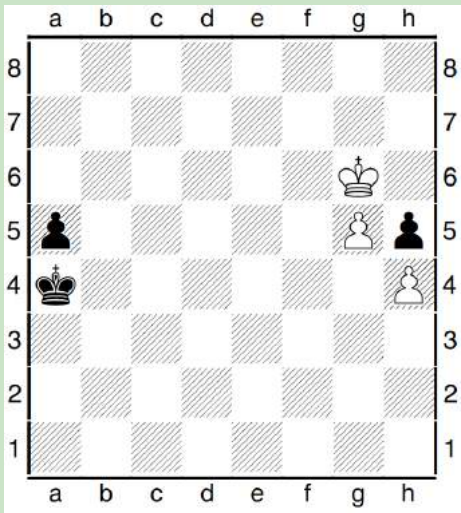
Q52. Find White's only way to draw  
 a) Ka4 b) Kb2 c) Kc2



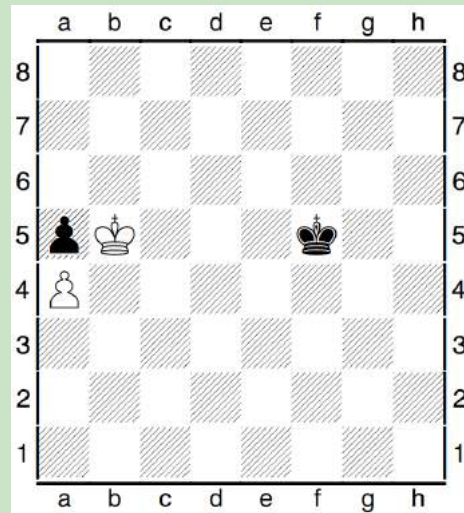
Q53. Find White's only way to draw  
 a) Ke5 b) Kg3 c) h5+



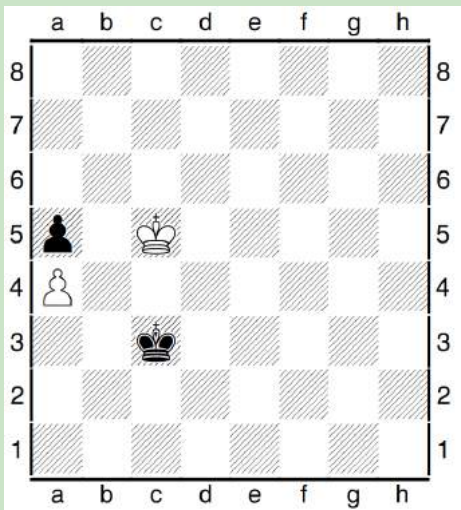
Q54. Find White's only way to draw  
 a) Kc4 b) Kd4 c) Ke4



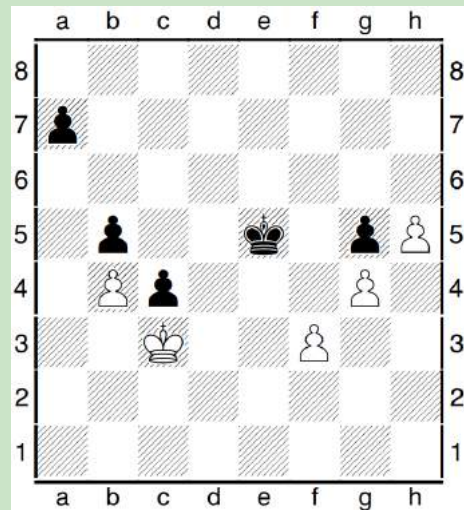
Q55. Find Black's only way to draw  
 a) Ka3 b) Kb3 c) Kb4



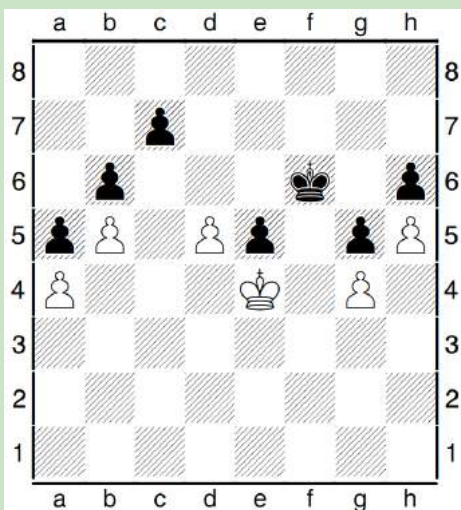
Q56. Find Black's only way to draw  
 a) Ke4 b) Ke5 c) Ke6



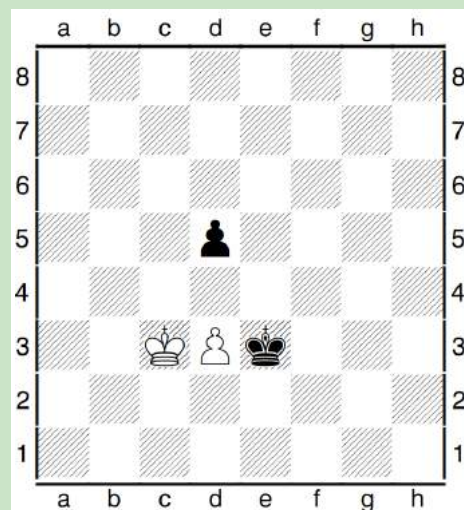
Q57. Find Black's only way to draw  
 a) Kb2 b) Kb3 c) Kd3



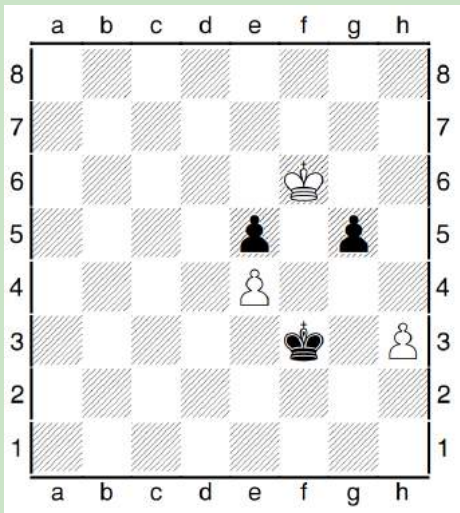
Q58. Find Black's only way to draw  
 a) Kd5 b) Kf4 c) Kf6



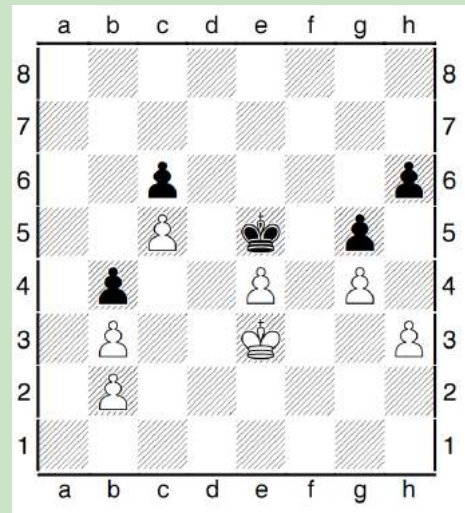
Q59. Find Black's only way to draw  
 a) c5 b) Ke7 c) Kf7



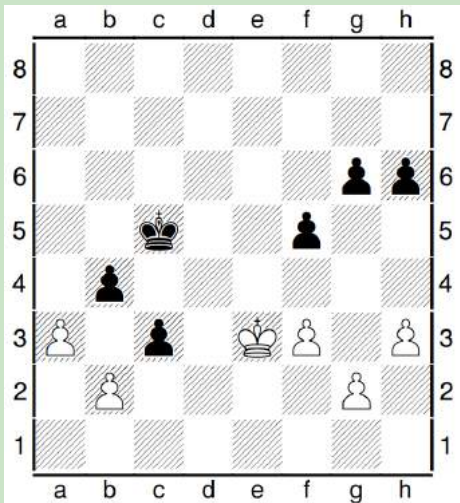
Q60. Find Black's only way to draw  
 a) d4+ b) Ke2 c) Kf4



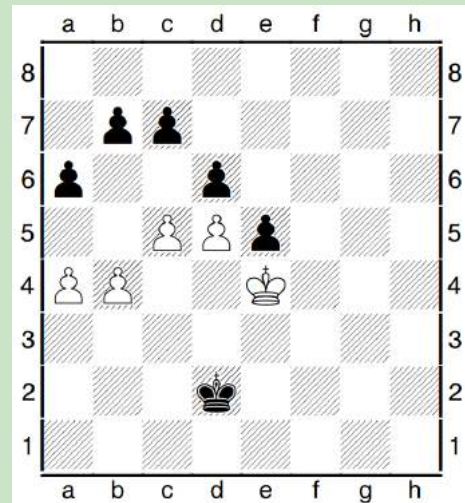
Q61. Find White's winning move  
 a) Kxe5 b) Kxg5 c) h4



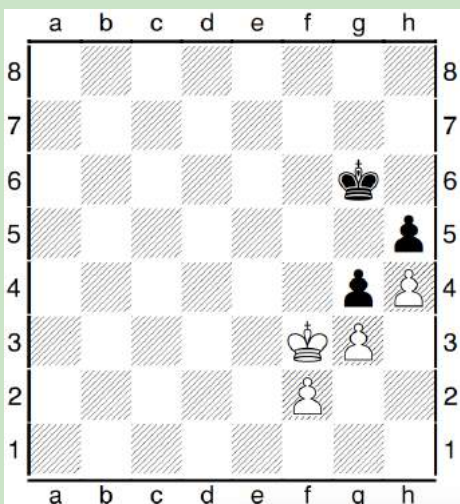
Q62. Find White's winning move  
 a) Kd3 b) Kf3 c) h4



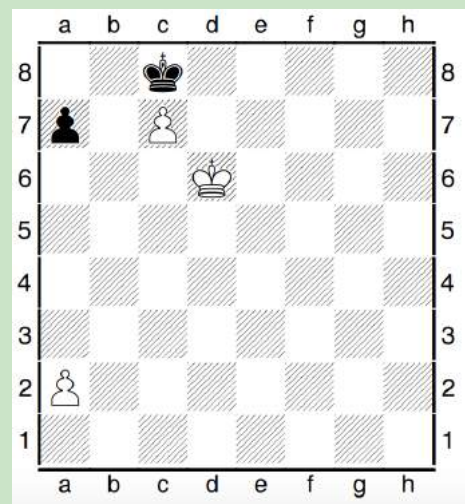
Q63. Find White's winning move  
 a) axb4+ b) b3 c) bxc3



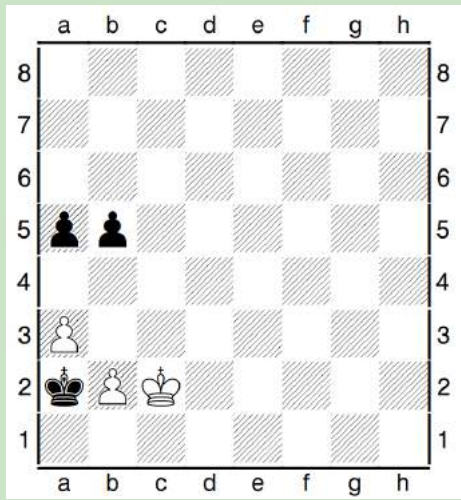
Q64. Find White's winning move  
 a) a5 b) c6 c) cxd6



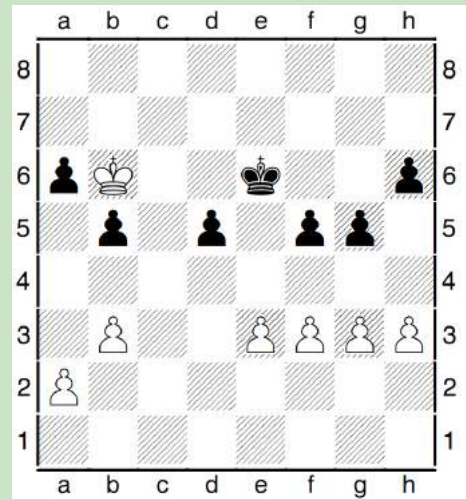
Q65. Find White's winning move  
 a) Ke3 b) Ke4 c) Kf4



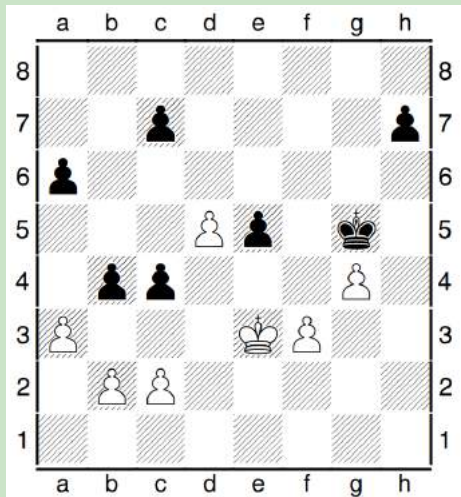
Q66. Find White's winning move  
 a) a3 b) a4 c) Kc



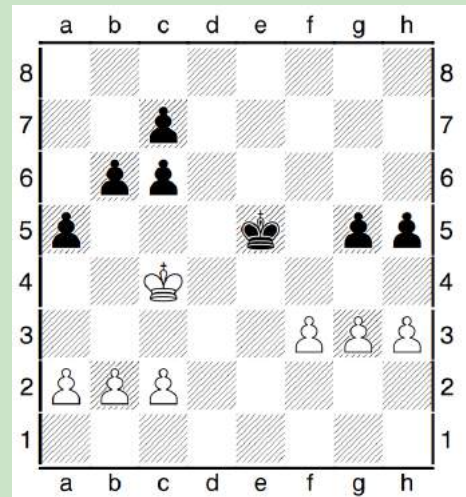
Q67. Find Black's winning move  
 a) Ka1 b) a4 c) b4



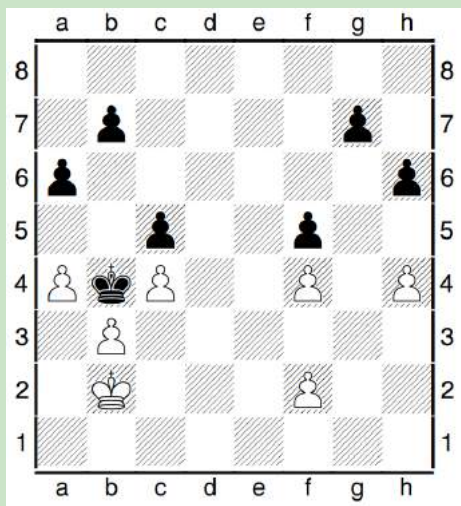
Q68. Find Black's winning move  
 a) Ke5 b) f4 c) g4



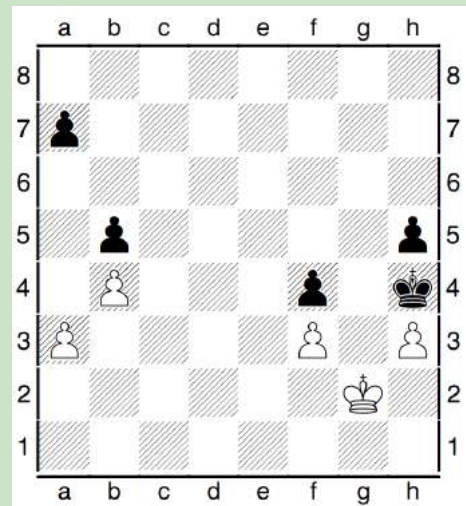
Q69. Find Black's winning move  
 a) a5 b) c3 c) c5



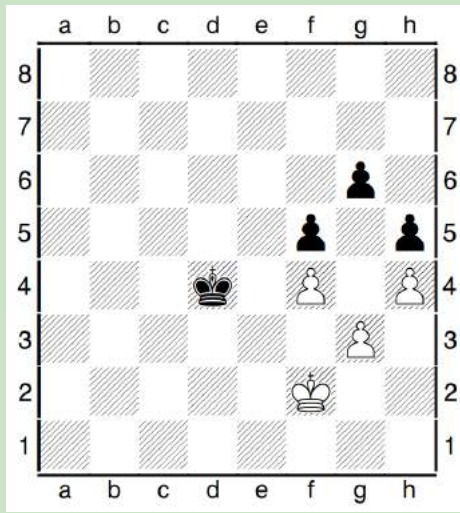
Q70. Find Black's winning move  
 a) c5 b) Kd6 c) h4



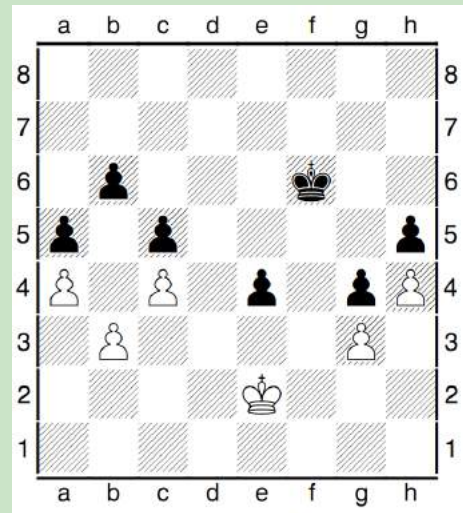
Q71. Find Black's winning move  
 a) a5 b) b5 c) h5



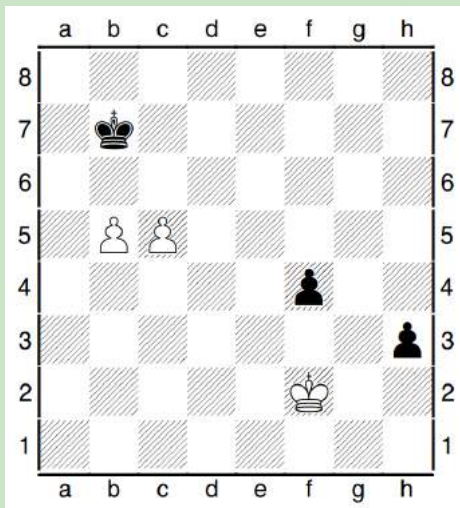
Q72. Find Black's winning move  
 a) a5 b) a6 c) Kg5



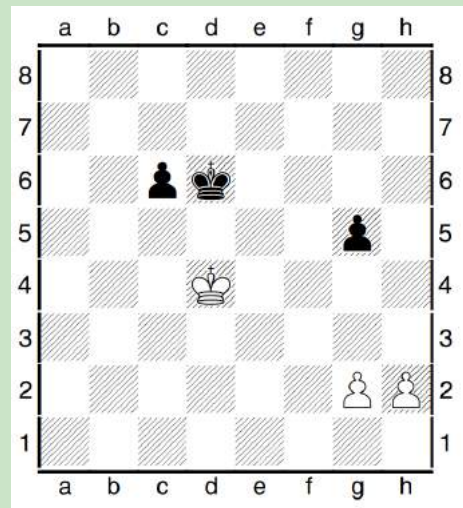
Q73. Find White's only way to draw  
 a) Ke2 b) Kf1 c) Kf3



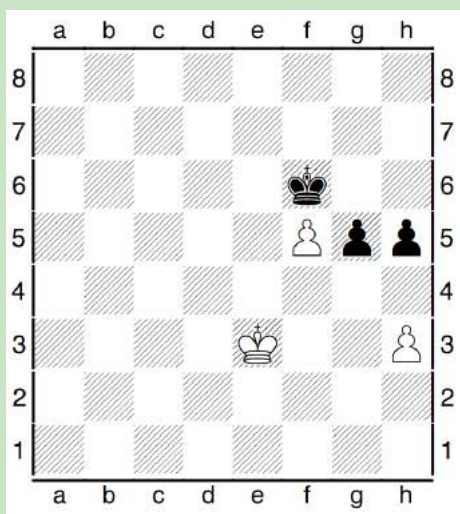
Q74. Find White's only way to draw  
 a) Ke1 b) Ke3 c) Kf2



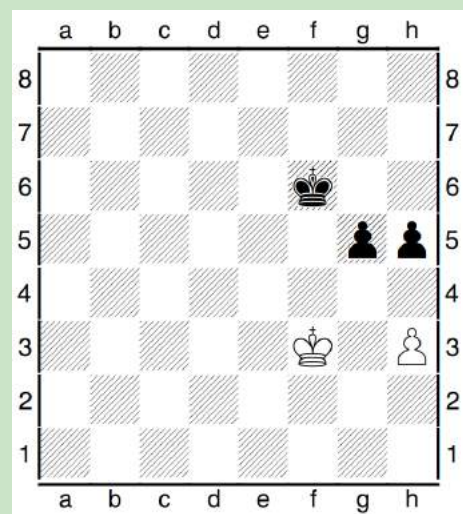
Q75. Find White's only way to draw  
 a) Kf1 b) Kf3 c) Kg1



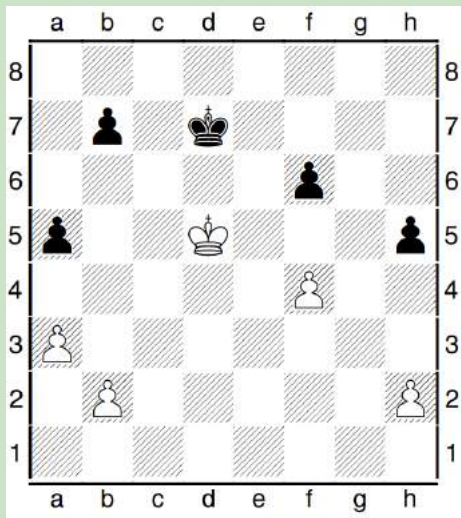
Q76. Find White's only way to draw  
 a) g3 b) g4 c) h3



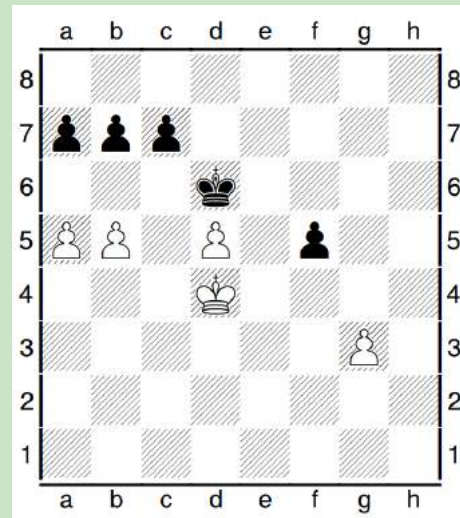
Q77. Find White's only way to draw  
 a) Kd3 b) Ke3 c) f3



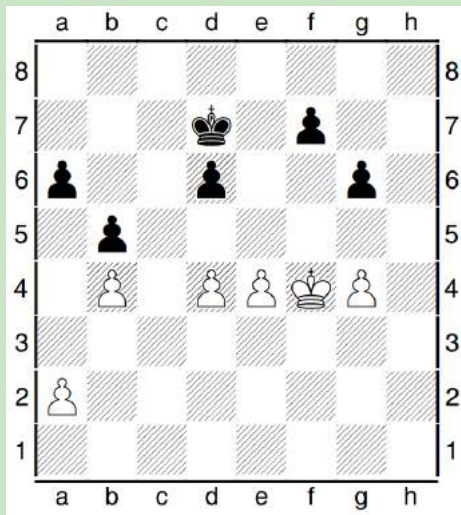
Q78. Find White's only way to draw  
 a) Kf2 b) Kg3 c) h4



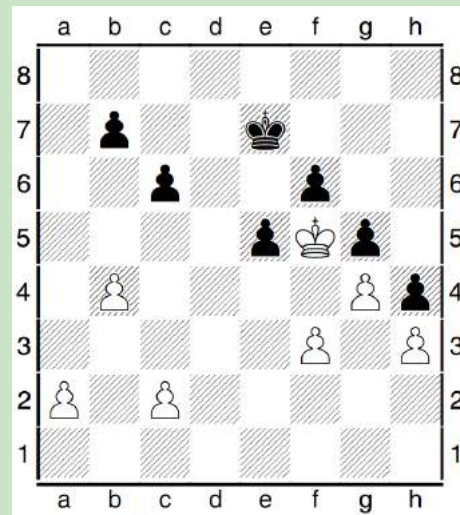
Q79. Find Black's only way to draw  
 a) a4 b) b5 c) b6



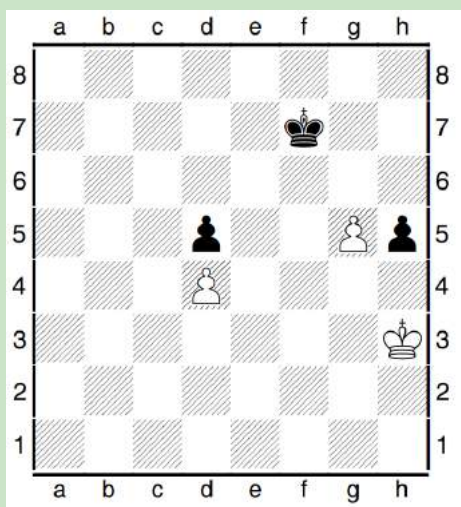
Q80. Find Black's only way to draw  
 a) a6 b) b6 c) c6



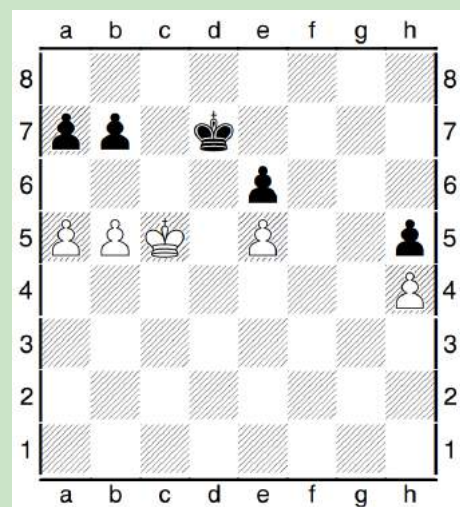
Q81. Find Black's only way to draw  
 a) d5 b) Ke6 c) f6



Q82. Find Black's only way to draw  
 a) b5 b) b6 c) Kf7



Q83. Find Black's only way to draw  
 a) Ke6 b) Kg6 c) Kg7

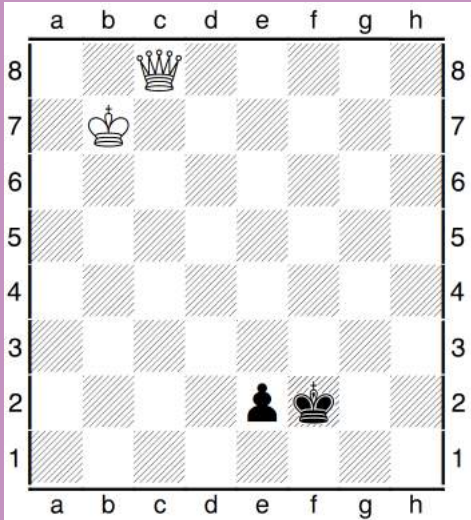


Q84. Find Black's only way to draw  
 a) a6 b) Kc7 c) Ke7

## QUEEN AGAINST PAWN

If both players have a passed pawn you may well reach a position where you promote to a queen while your opponent's pawn reaches the seventh rank.

Can you win this sort of position? Let's take a look.



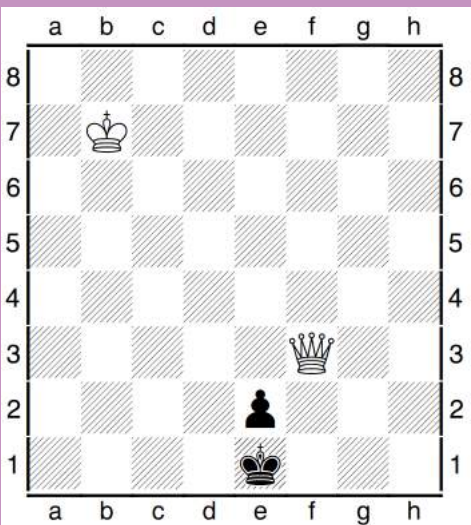
Let's start from this position, with White to move. This is how the plan works.

Bring your queen as near as possible to the black king by a series of checks, pins and attacks on the pawn.

When the black king is in front of the pawn advance your king.

When the black king moves back out go back to stage 1 and start again.

When your king is close enough you can win the pawn and deliver checkmate.

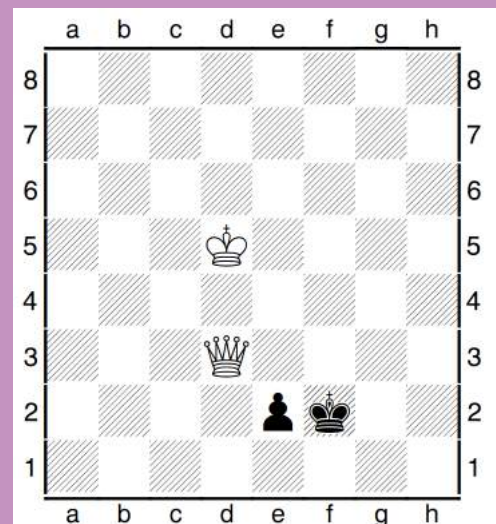


Play through the moves and see how it works.

1. Qf5+ Kg2
2. Qe4+ Kf2
3. Qf4+ Kg2
4. Qe3 Kf1
5. Qf3+ Ke1

End of Stage 1. Note the white queen's zigzag manoeuvre. Now the black king is in front of the pawn your king can approach.

6. Kc6 Kd2
7. Qf2 (PIN) Kd1
8. Qd4+ Kc2
9. Qe3 Kd1
10. Qd3+ Ke1
11. Kd5 Kf2



Now we repeat moves 7 to 11 again on the other side of the board.

12. Qd2 (PIN) Kf1
13. Qf4+ Kg2
14. Qe3 Kf1
15. Qf3+ Ke1
16. Ke4 Kd2

Now the white pieces are close enough we can move in and force CHECKMATE.

17. Qd3+ Ke1
18. Kf3 Kf1
19. Qxe2+ Kg1
20. Qg2#

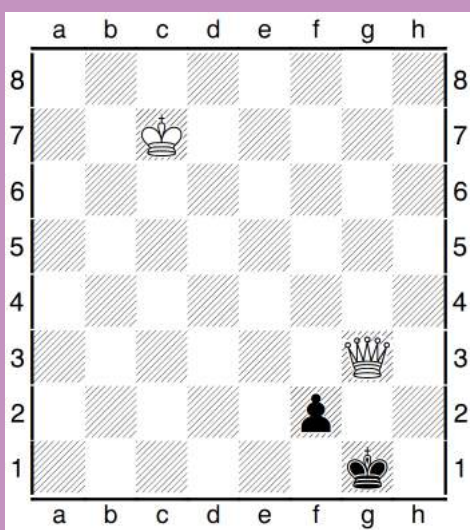
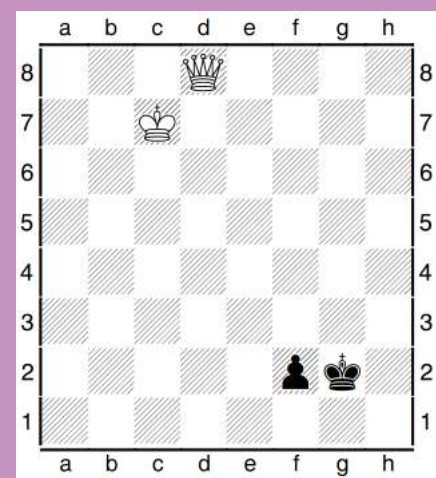
It takes a long time to win this position but it's not too hard once you get the idea.

Next, we're going to move everything one square to the right so that you now have a bishop's pawn rather than a centre pawn.

This time play the position out for yourself before reading on and see what happens.

1. Qg5+ Kh2
2. Qf4+ Kg2
3. Qg4+ Kh2
4. Qf3 Kg1
5. Qg3+

So far it's the same as in the previous example but now something interesting happens. What do you think Black should play here? You only have two choices.



If Black moves to f1 the white king can approach, but look at what happens if Black goes to h1 instead.

Now if White takes the pawn it's STALEMATE. As Black is threatening to promote White has no way of making any progress. If you don't believe me try it out for yourself.

If you find yourself with a queen against a knight's pawn you can win the same way as against a centre pawn. But if your opponent has a rook's pawn again it's a draw because of STALEMATE.

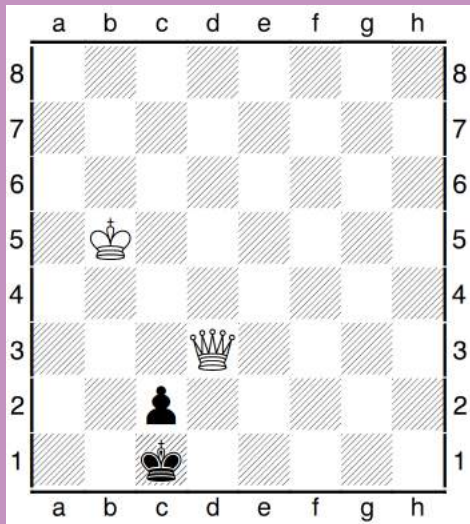
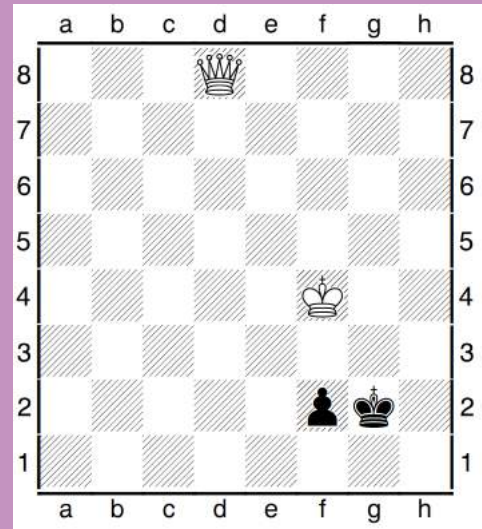


But sometimes you can win against a bishop's pawn or a rook's pawn if your king is close enough by mating the enemy king when the pawn promotes.

Here's an example.

1. Qg5+ Kh2
2. Qh5+ Kg1
3. Qg4+ Kh2
4. Qg3+ Kh1
5. Qh3+ Kg1
6. Kg3 f1Q
7. Qh2#

Black could promote to a knight on move 6 which would prevent an immediate mate but White would still win quickly.



Endings with a queen against a bishop's pawn can be tricky and require accurate calculation. Let's look at a few practical examples.

It's Black to move in this position. You might want to play it out yourself first.

Black can draw by playing 1... Kb2 when White's king is not quite near enough for them to win.

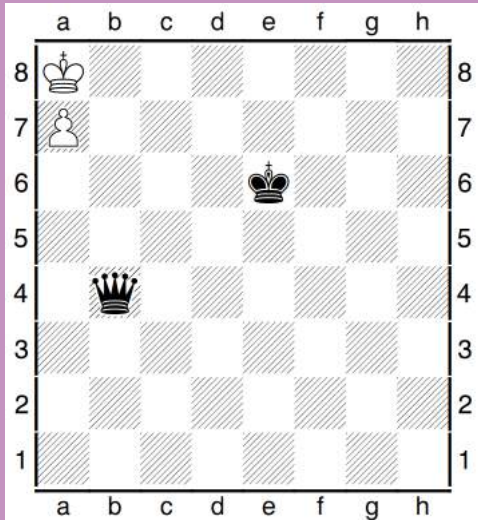
But instead they played 1... Kb1, leaving their pawn pinned and giving White an extra move. Now White can win by advancing their king to the fourth rank. Can you work out the winning sequence?

It goes:

2. Kb4 Ka1
3. Qc3+ Kb1
4. Kb3! c1Q
- (Queen against queen is usually a draw, but not here!)
5. Qd3+ Ka1
6. Qa6+ Kb1
7. Qa2#

White didn't find this and after 2. Qb3+ Ka1! Their king was one square too far away and the game was soon drawn.

Here's an example with a rook's pawn.

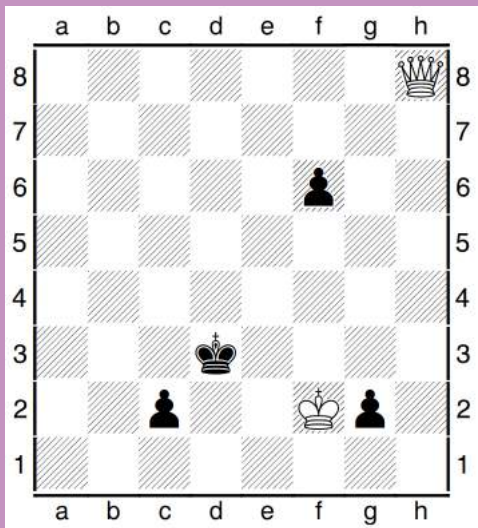


In this position the black king is within reach. But an immediate king move would be STALEMATE.

The quickest way to win is:

- 1... Qe7
2. Kb8 Kd6
3. a8Q Qc7#

Again promoting to a knight would lose more slowly.



Finally, consider this position with White to play. The white queen has to contend against three black pawns, two of which are on the 7th rank. You might want to play it out a few times first to see what happens. Can White win or should it be a draw, or even a win for Black. What do you think?

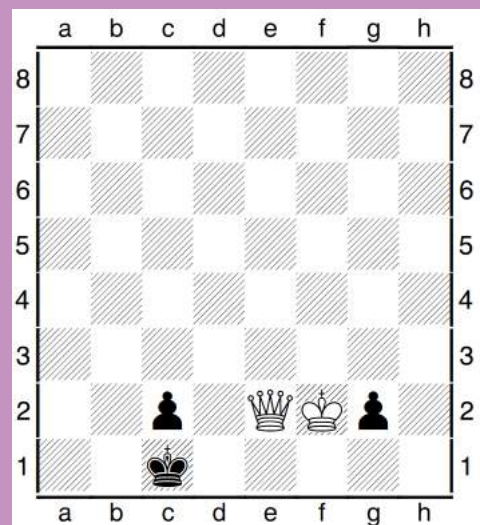
In fact White has several ways to win this position.

A trick well worth knowing is to get your queen onto the queening square, when you'll win easily. White can do this by playing 1. Qh6 followed by Qc1. Try this out for yourself.

Another way to win is to play 1. Qh3+. Now if Black plays 1... Kd2 you play 2. Qe3+ Kd1 3. Qe1#. Or if 1... Kc4 you can, if you want to be clever, play 2. Kxg2 c1Q 3. Qc8+ with a SKEWER. Finally, if 1... Kd4 2. Qe3+ wins easily.

In the game White chose a different plan which was a lot harder to win with.

1. Qd8+ Kc3
2. Qxf6+ Kd3
3. Qf3+ Kd2
4. Qe2+ Kc1



5. Kxg2?

This move only draws as Black has time to set up the stalemate defence. There's a win here for White but it's tricky to find. They have to get their queen on the b-file first to force the black king in the wrong direction.

Here's how it goes: 5. Qb5 Kd1 6. Qb3 Kc1 7. Kxg2 Kd2 8. Qb2 Kd1 9. Kf2 Kd2 10. Qd4+ Kc1 11. Qb4 Kd1 12. Qe1#

5... Kb1

6. Qd3 Kc1

Now Black's losing again. They could draw either by playing Kb2 or by using the stalemate defence straight away with Ka1.

7. Kf2

Again it's not so easy for White to find the right plan here. As in the line above they should first put their queen on the bfile to prevent the stalemate defence before approaching with their king: 7. Qb3 Kd2 8. Qb2 Kd1 9. Kf2 c1Q 10. Qe2#

7... Kb2

8. Qd2 Kb1

9. Qb4+ Kc1

The final mistake, giving White's king the move they need to approach. They could have drawn by playing either Ka1 or Ka2.

10. Ke3

White finds a mate in two. There was another one as well: 10. Kf1 Kd1 11. Qe1#. But you have to be careful: Ke1 or Ke2 would have been STALEMATE.

10...Kd1

11.Qd2#

In later chapters we'll look at positions where there are only pawns on one side of the board (this is harder) and positions where you have another piece on the board as well (this is often harder still).

Many chess games are decided in this way. You win a pawn, trade everything off and win the ending.

So if you're a pawn (or more) ahead, the easiest way to win is usually to trade off pieces to reach a pawn ending. You should also try to keep pawns on both sides of the board. The more pawns you have the more chances you have to get one to the end and promote to a queen. Likewise, if you find yourself a pawn (or more) behind you need to try to avoid exchanging pieces. In particular, try to make sure you don't trade off your last piece into a lost king and pawn ending.

You'll find as you get stronger that most of chess is not about playing sacrifices and getting a quick checkmate. In many more games you'll just win material, trade off and win the ending.

Now it's time to look at how to checkmate with a king and rook against a king.

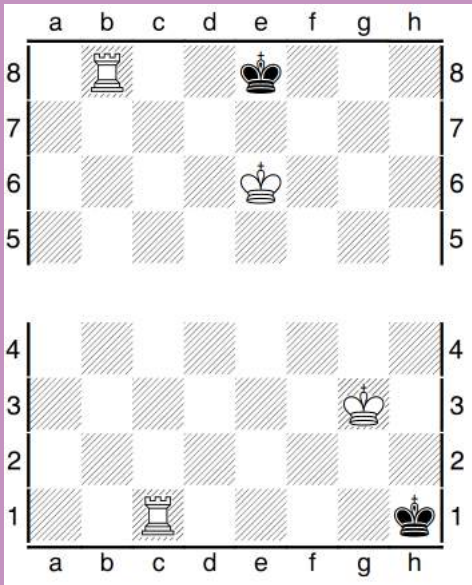
## KING & ROOK CHECKMATE

You already know how to get checkmate with a king and queen.

The most common endings are rook endings, so you'll also find yourself quite often having to get checkmate with a king and a rook against an enemy king.

Here's how to do it.

First of all, look at the checkmate positions



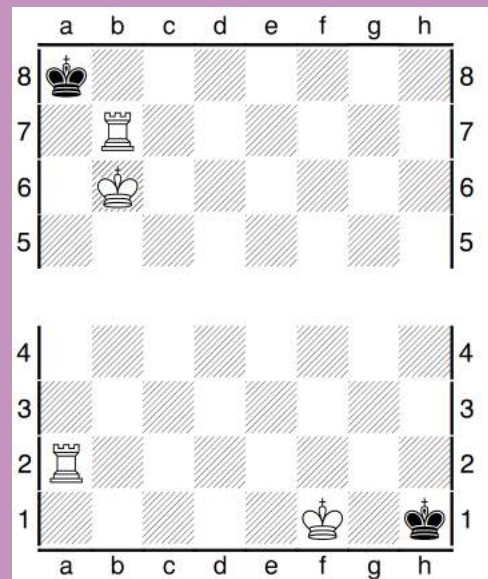
Here's what a rook checkmate looks like. You've already seen a very similar checkmate with the queen.

At the top of the diagram the black king is on the side of the board and the white king is two squares away towards the centre.

If the enemy king is in the corner your king can also be a knight's move away (but two rows away from your rook) as in the checkmate at the bottom of the diagram.

There are not so many stalemate positions to worry about. Stalemate will only happen if the enemy king is in the corner as in this diagram.

You're going to look at two methods of getting checkmate.

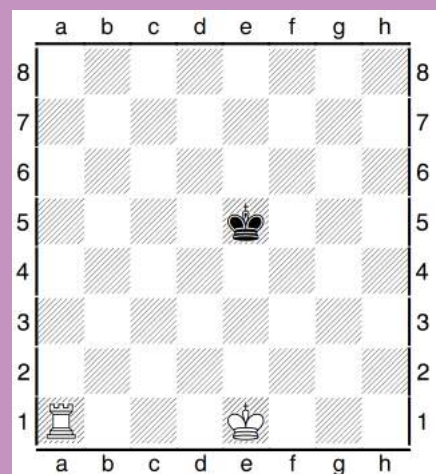


The first method involves boxing the king in and gradually forcing them into the corner.

Here's your plan.

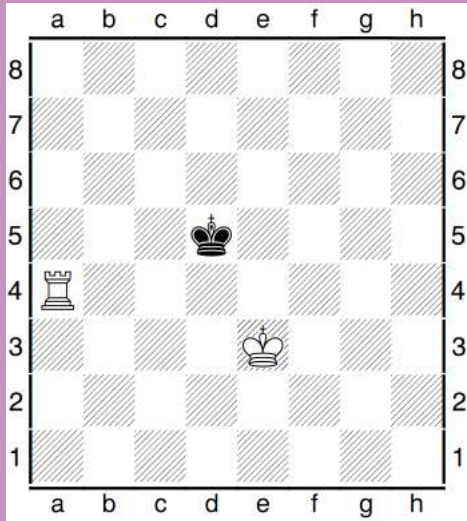
1. Set up a barrier with your rook.
2. Move your king up the board.
3. Use your king and rook together to form a box.
4. If you can play a rook move to make the box smaller, then do so.
5. If you can't make the box smaller move your king towards the enemy king instead
6. When the king's in the corner use your rook to get checkmate.

Play through the moves on your board.



1. Ra4

White moves the rook to set up an electric fence and stop the king escaping.



- 1... Kd5
- 2. Ke2 Ke5
- 3. Ke3 Kd5
- 4. Re4

White uses the rook to form a box. Now the king is trapped in the north west corner of the board.

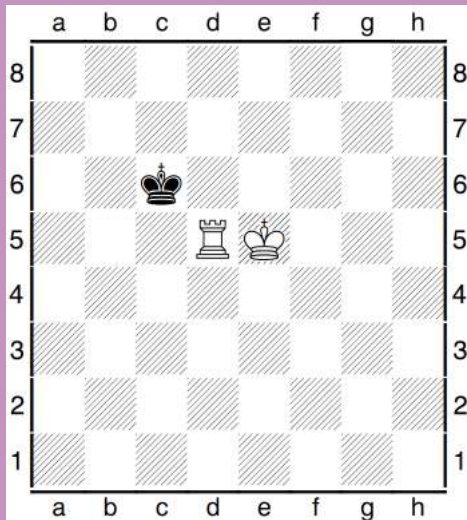
- 4... Kc5
- 5. Rd4

Making the box smaller.

- 5... Kc6
- 6. Ke4

Now you can't make the box smaller so you moves your king up instead.

- 6... Kc5
- 7. Ke5 Kc6
- 8. Rd5



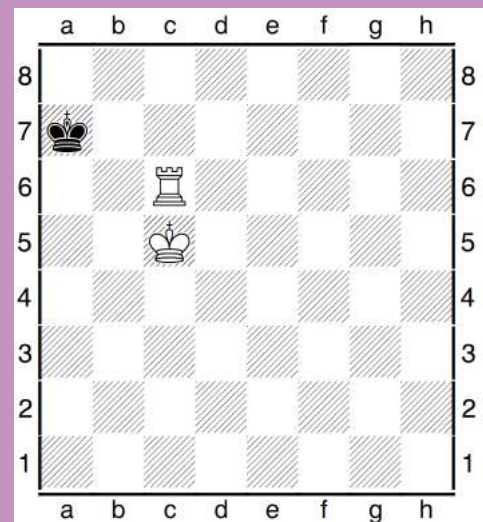
White keeps on repeating the same plan, gradually driving the black king into the corner. See how Black's king is now in a box of nine squares.

- 8... Kc7
- 9. Rd6 Kb7
- 10. Kd5 Kc7
- 11. Kc5 Kb7
- 12. Rc6 Ka7

Now the black king is on the side of the board so White makes sure they can't escape, then moves their king into place for the checkmate.

- 13. Rb6 Ka8
- 14. Kc6 Ka7
- 15. Kc7 Ka8
- 16. Ra6#

Go away and practise this method yourself before moving on.



The second method is slightly different. The plan now is to force the king back to the side one row at a time.

It works in this way:

1. Set up a barrier with your rook
2. Move your king up the board to where it's a knight's move away from the enemy king
3. When their king moves opposite you play a check with your rook to force the king back
4. If they head for the side instead it's quicker to go back to the first method and box them in
5. When they get to the side of the board again move your king a knight's move away from them
6. If they move away from your king play a waiting move with your rook
7. When their king's opposite you, use your rook to get checkmate

Again, play through the moves to make sure you understand the plan.

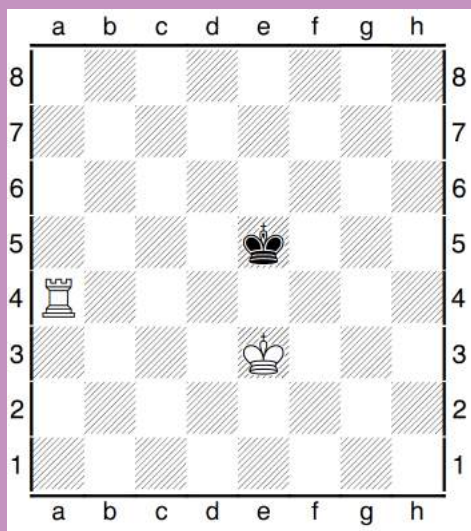
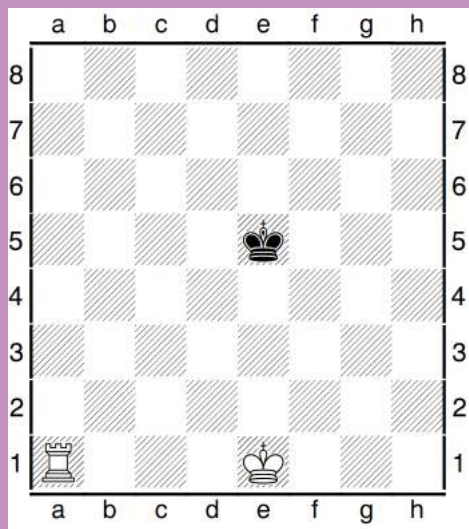
1. Ra4 Kd5
2. Ke2 Ke5
3. Kd3

This time we move the king a knight's move away from their opposite number.

3... Kf5

Black tries to run away.

4. Ke3 Ke5



Black wants to stay in the centre, but now the kings stand opposite each other a check will force them back.

5. Ra5+ Ke6

Now White does the same thing again. Their king moves a knight's move away from the black king.

6. Kd4 Kf6

7. Ke4 Ke6

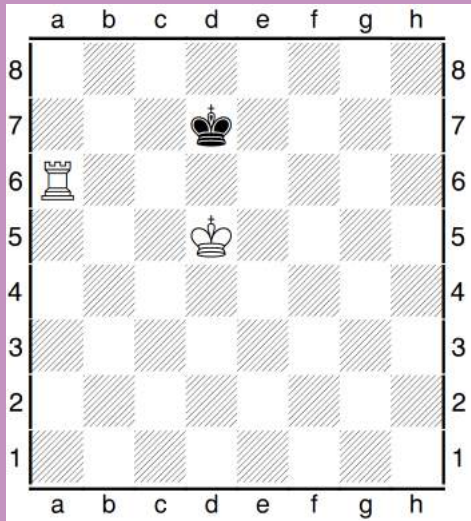
8. Ra6+

Another check to force the black king back towards the edge.

8... Kd7

9. Ke5 Kc7

10. Kd5 Kd7



This time a check will give Black no choice but to go to the edge of the board.

- 11. Ra7+ Kd8
- 12. Ke6 Kc8
- 13. Kd6 Kb8

Now White's quickest way to win is Ra7-c7 (try it out for yourself) but watch how White can also win by playing two WAITING MOVES.

- 14. Rh7 Kc8
- 15. Rg7 Kb8

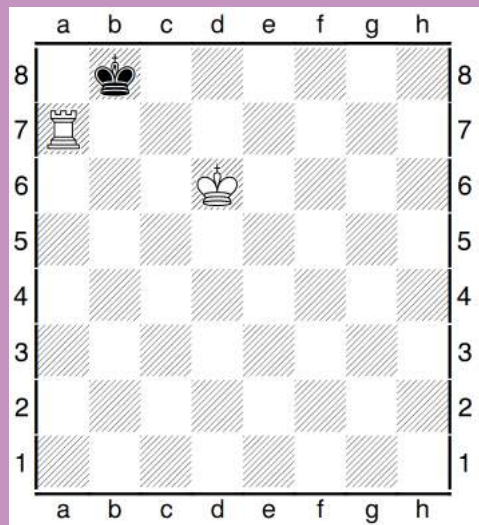
Now the rook is safe the white king can approach.

- 16. Kc6 Ka8
- 17. Kb6

Black's king has reached the corner so they can't run away but has to move back opposite the white king.

- 17... Kb8
- 18. Rg8#

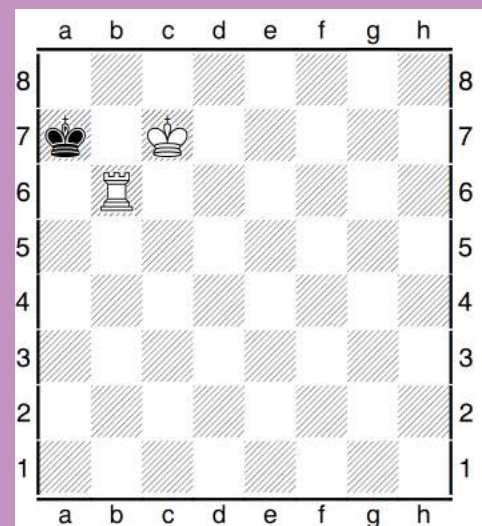
Set up some different starting positions with king and rook against king and see how quickly you can get checkmate using these methods.



Now look at this position.

In the first checkmate example it was Black's move. The only move was Ka8, when White could play Ra6#.

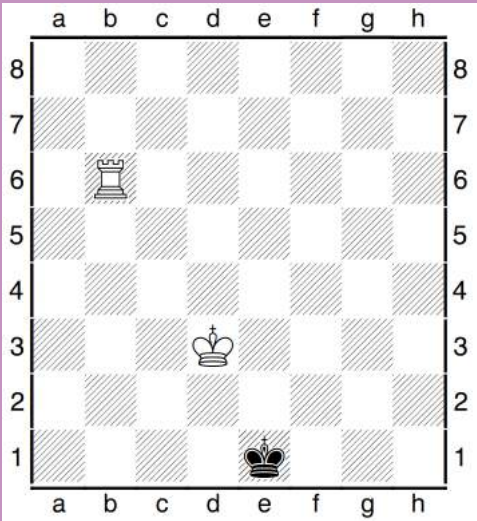
Suppose it's White's move instead. You can force checkmate in two moves (You play a move and, whatever Black does, you can get checkmate next move). Can you work out how? Stop and see if you can find out the answer before moving on.



You could try moving your king to c6 but after Ka8, Ra6 is no longer mate.

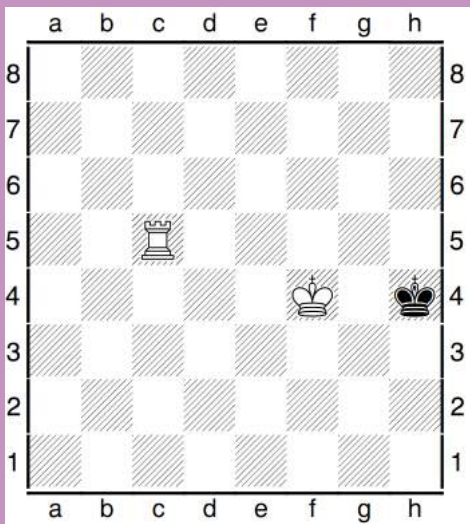
You could try moving your rook back along the b-file, for instance Rb1. Now if Black plays Ka8 you can get checkmate, but there's no mate if Black plays Ka6 instead.

So you have to play a rook move which forces them to move to a8. There are six ways of doing this. Moving your rook to c6, d6, e6, f6, g6 or h6 will all work. Black will have to go into the corner and your rook bounces back to a6 with checkmate. Well done if you worked out the right answer!



Here's something similar. How can White force checkmate in two moves here? Again, try to work it out for yourself first.

You want to make sure the black king moves to d1, not to either f1 or f2, so the answer is Rf6. Now Black's only move is Kd1 when your rook can rush down to f1 saying "checkmate".

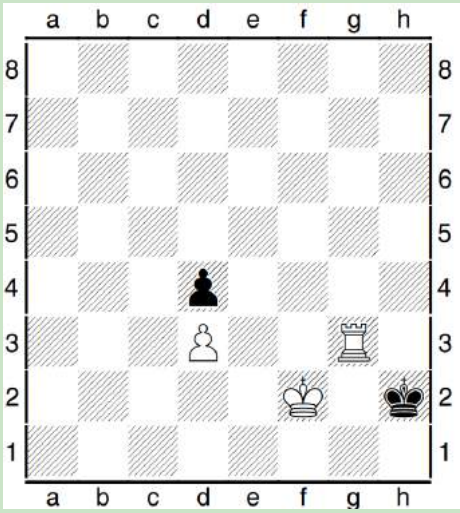


Using the same idea again, can you find the mate in 2 for White here?

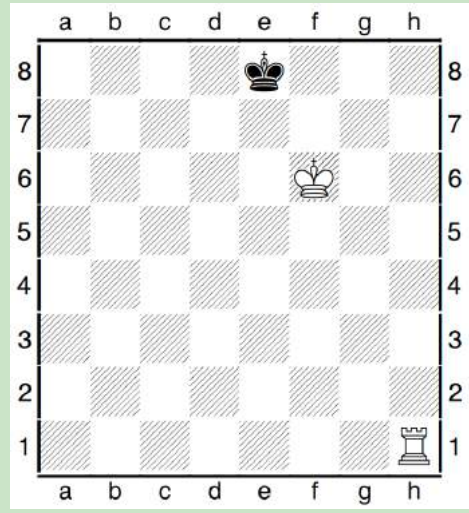
Again, you want the kings to be facing each other, so this time you have to start with a king move. You play Kf3, when Black has to play Kh3, leaving the kings in the right position for you to play Rh5#.

Now try to solve these positions in which you have to use the same idea to force checkmate in two moves.

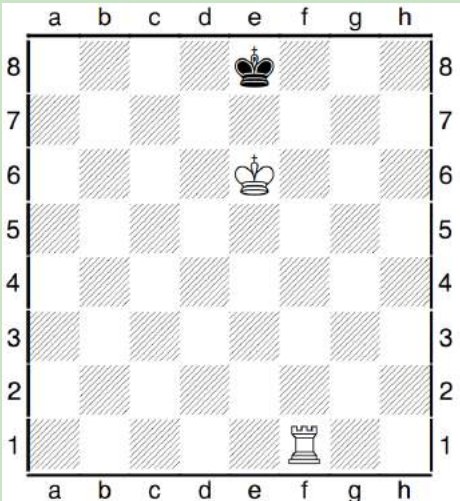




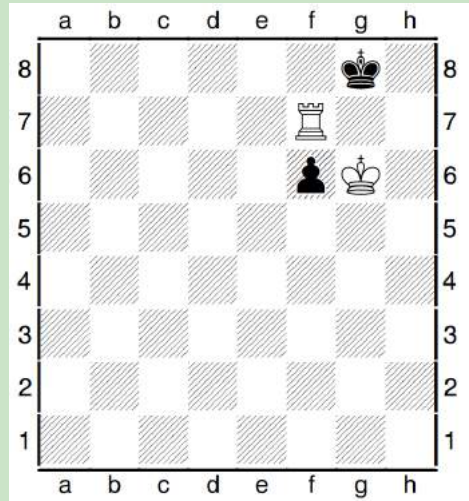
Q37. How can White force mate in 2 moves?



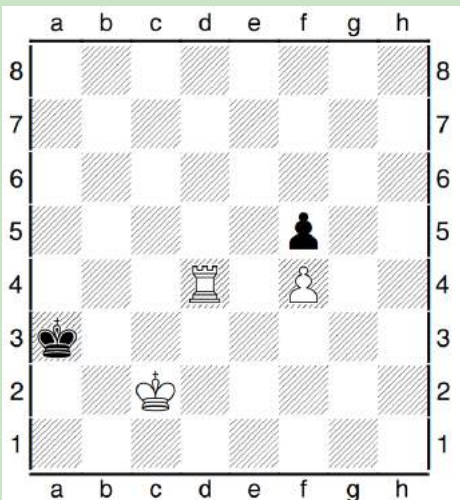
Q38. How can White force mate in 2 moves?



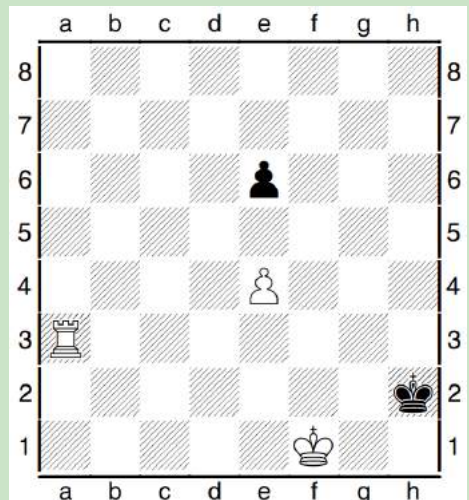
Q39. How can White force mate in 2 moves?



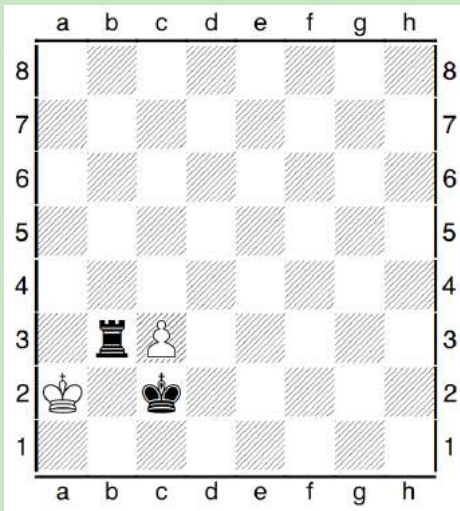
Q40. How can White force mate in 2 moves?



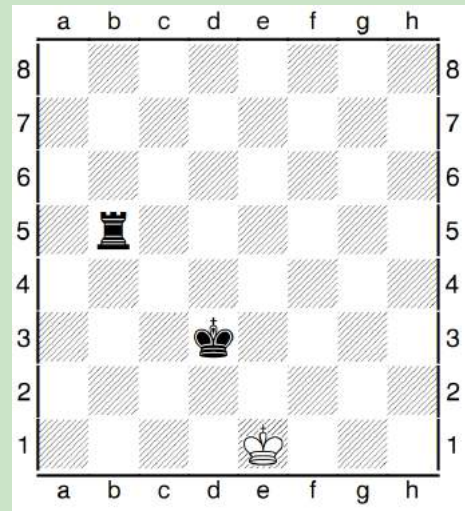
Q41. How can White force mate in 2 moves?



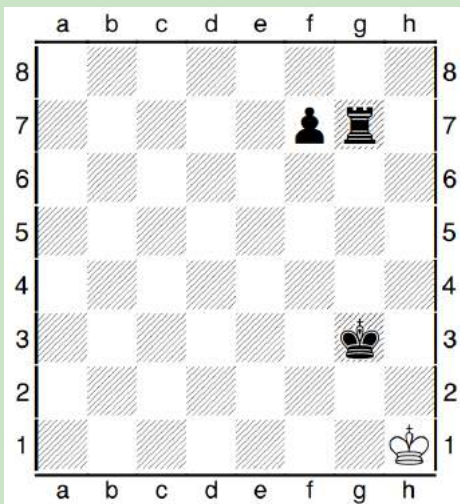
Q42. How can White force mate in 2 moves?



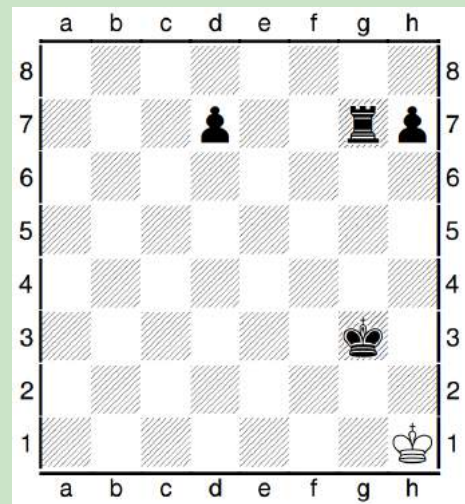
Q43. How can Black force mate in 2 moves?



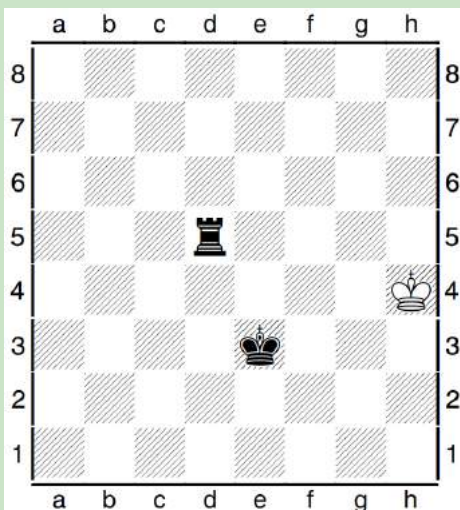
Q44. How can Black force mate in 2 moves?



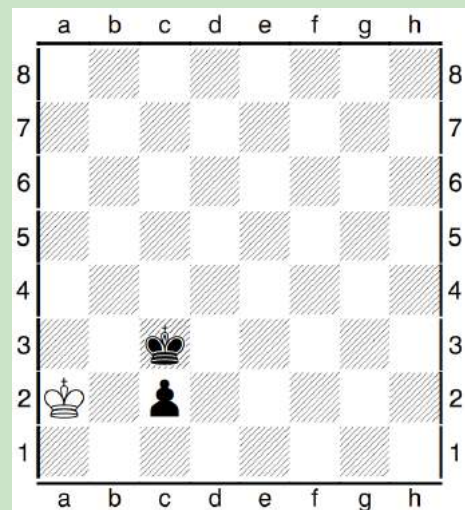
Q45. How can Black force mate in 2 moves?



Q46. How can Black force mate in 2 moves?



Q47. How can Black force mate in 2 moves?



Q48. How can Black force mate in 2 moves?

## WINNING WITH AN EXTRA PIECE

If you end up with just a king and pawn against a king you might be able to win. As you've seen it depends where the pieces are.

But if you end up with just a king and bishop or king and knight against a king the position is a draw. There's no way you can get checkmate.

So if you have an extra MINOR PIECE (bishop or knight) you're going to need to promote a pawn if you want to win.

If you've got more pawns than your opponent this is usually easy (although there's one important exception which you'll see later). If you've got a PASSED PAWN it's also usually easy. Otherwise, you'll have to win some enemy pawns first. How do you do this?

As in all endings you need a PLAN. It's no good just playing the first move you think of. You need to think ahead to work out where you want your pieces and how you're going to get them there.

Firstly, just like in all endings, your king has to be active. Always remember to use your king as a fighting piece in the ending.

Then you need to find a target. Your target will be an enemy pawn which is not defended by another pawn.

Sometimes you'll just be able to win the pawn because your opponent's king is too far away to defend it.

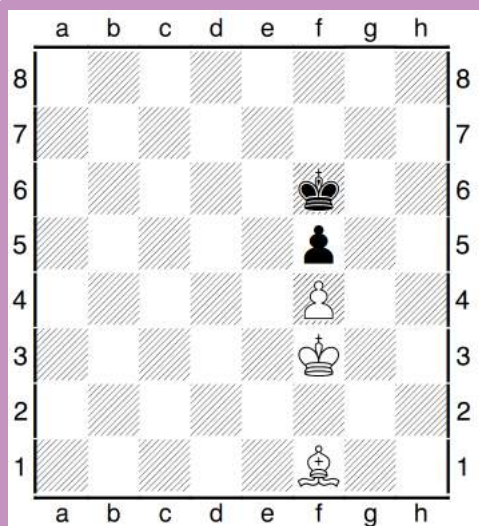
Sometimes you'll need to use a TEAM ATTACK. A TEAM ATTACK is where you attack a target with more than one piece.

So you might attack a pawn with a king and a bishop. Because your opponent only has a king they won't be able to defend the target.

If that isn't possible you'll need to use your pieces to control the squares round the enemy king and force them to move away.

Sometimes you'll be able to SACRIFICE your piece for a couple of pawns to reach a winning king and pawn ending.

You'll always need to make sure you don't run out of pawns.

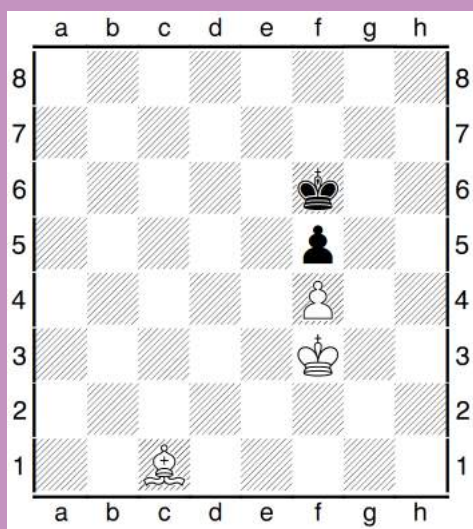


Start by looking at this position. It looks at first as if Black can just sit there defending their pawn, but in fact it's very easy for White to win. Have a go yourself before reading on.

One way to win is to try to get your king round to attack the black pawn. See how it works.

1. Ke3 Ke6
2. Kd4 Kd6
3. Bc4 Ke7
4. Ke5 winning the pawn.

Or if Black tries Kf6 on move 2 the white king will go to d5 and then e5.



Now have a go at winning this position. Again, try it yourself before reading on.

Here's how play might go:

1. Ke3 Ke6
2. Kd4 Kd6
3. Ba3+

White plays a check to force the black king away.

- 3... Ke6
4. Bb4

White plays a WAITING MOVE so that the king will be able to advance.

- 4... Kf6
5. Kd5 Kg7
6. Ke5 Kg6
7. Bc5

White plays another WAITING MOVE. Black has to move away from the pawn and White will win easily.

Here, Black has an extra pawn, but it's still easy to win. First you must stop Black trading off your last pawn. Play it through yourself first before seeing how it's done.

1. Bd4+

Ke3 would be a bad mistake: Black would be able to play e6-e5 and exchange off your pawn.

1... Kf7

2. Ke3 Ke7

3. Be5

Making sure Black will never play e5. Your target is the pawn on e6. You have to travel round to the queen side in order to approach it.

3... Kf7

4. Kd4 Ke7

5. Kc5 Kd7

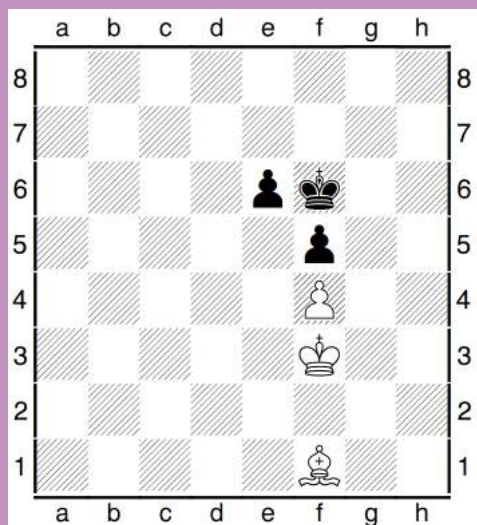
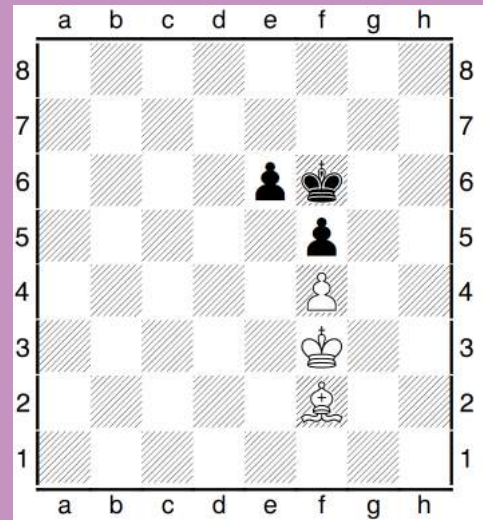
6. Kb6 Ke7

7. Kc7 Kf8

8. Kd7 Kf7

9. Kd6

Now Black has to move away, leaving the pawn on f6 to be captured.



This position, though, is a draw. White cannot prevent Black from playing e6-e5 next move.

If you start with the white king on e3 instead of f3 it's an easy win.

1. Kd4

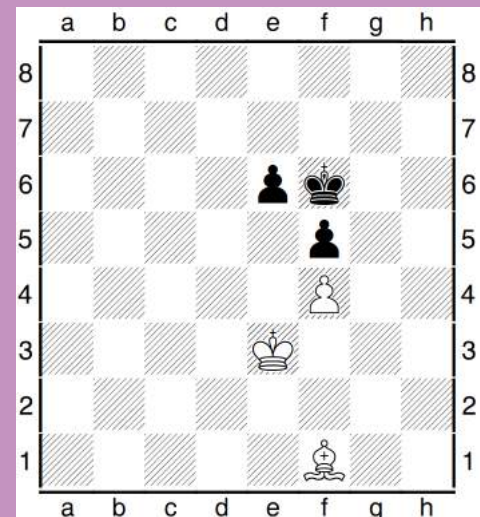
The only winning move. If the black king retreats White plays Ke5 followed by Bc4 winning the e6 pawn followed by the f5 pawn.

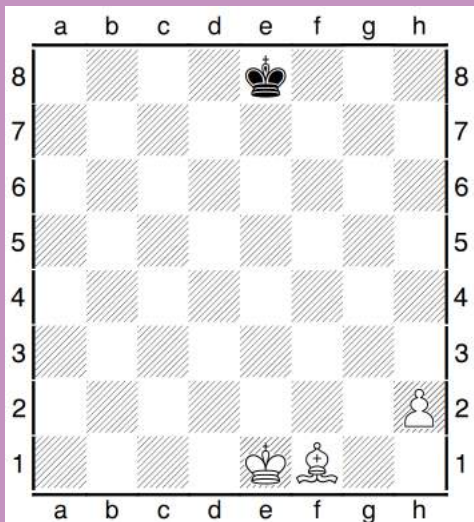
1... e5+

2. fxe5+ Ke6

3. Bh3

PINNING the black pawn. Black has to move back and let White capture their pawn.

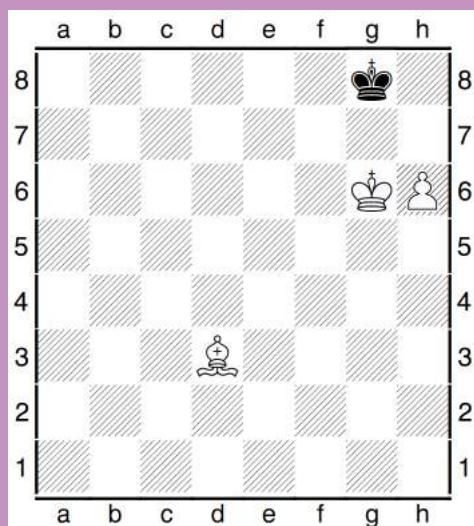




You'd usually expect to win easily with a bishop and a pawn against a king but there's one exception.

If you have a bishop and a rook's pawn, and the bishop is on the opposite colour to the queening square it's only a draw if the defending king can reach the corner.

Try it out for yourself and see what happens.

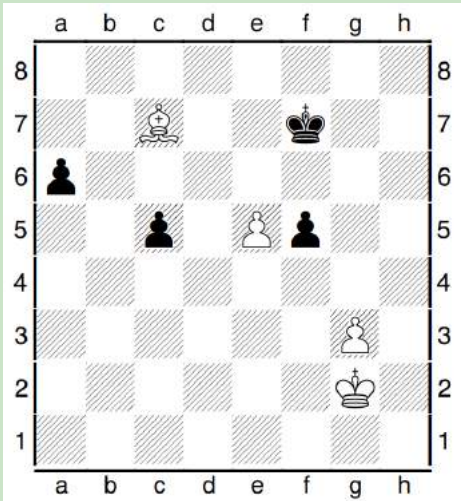


You can get as far as this but once you advance your pawn to the seventh rank the black king will be stalemated in the corner.

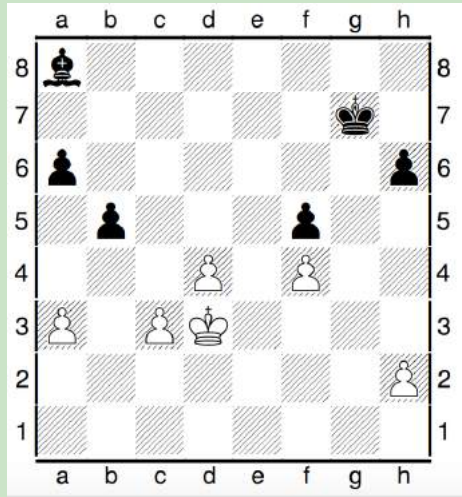
If you have a bishop on a black square, though, it's an easy win. In the above diagram you just play h6-h7+ and if the black king tries to hide in the corner the bishop will be able to deliver checkmate along the long diagonal.

On the next page you'll find some positions to play through. Take the side with the extra bishop and see if you can win.

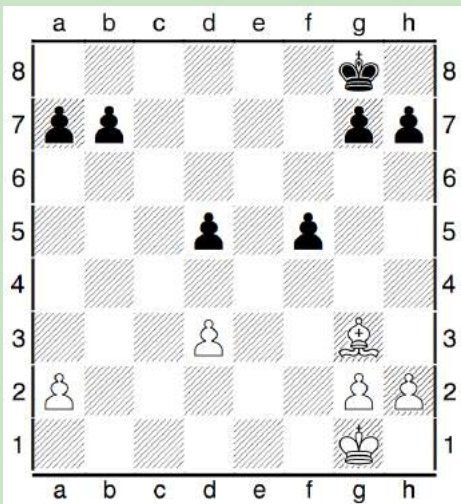
White to play



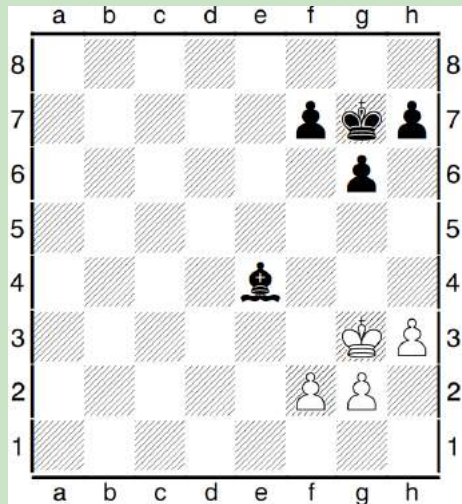
Black to play



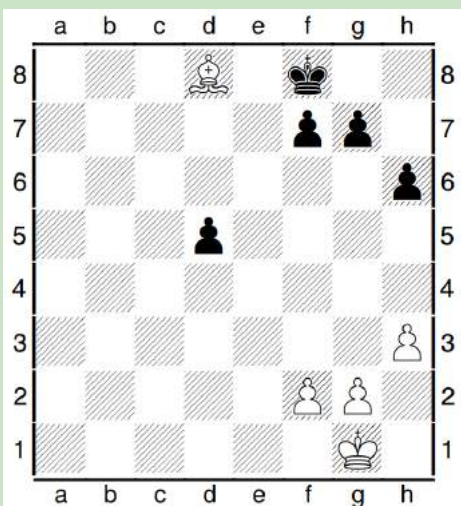
White to play



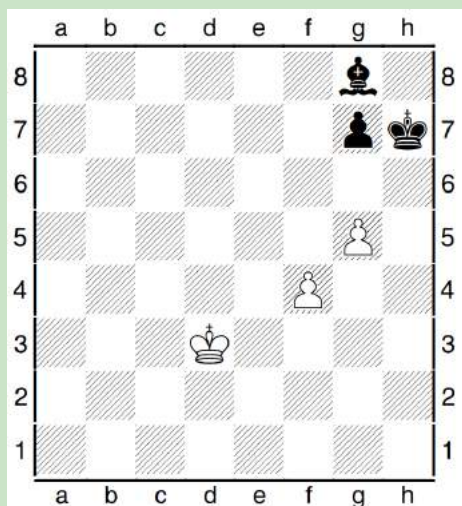
Black to play



White to play



Black to play

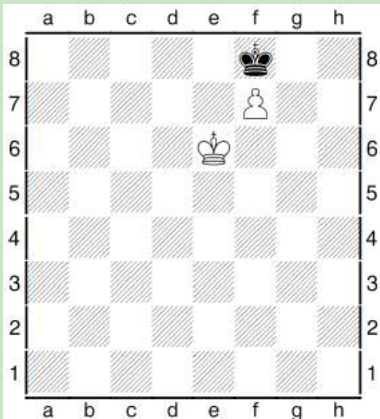


## WINNING WITH AN EXTRA PAWN PART 2

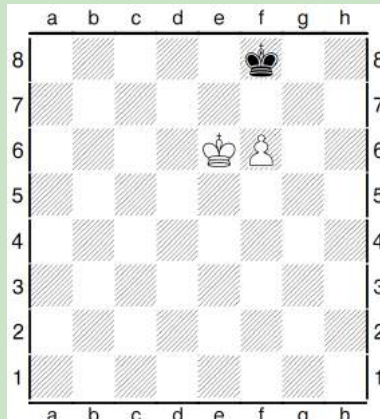
Winning with an extra pawn is usually a lot harder if all the pawns are on the same side of the board.

You can't use the same plan of creating a passed pawn and then running over to capture the pawns on the other side because there aren't any pawns on the other side to capture.

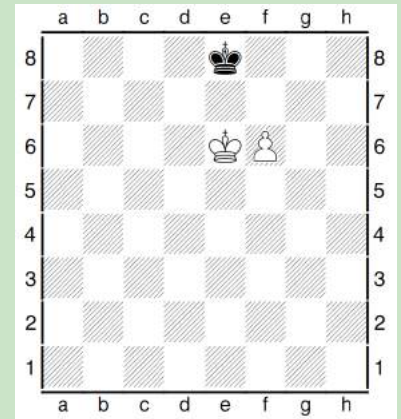
First of all remind yourself about the basic king and pawn positions so that you know what you're aiming for.



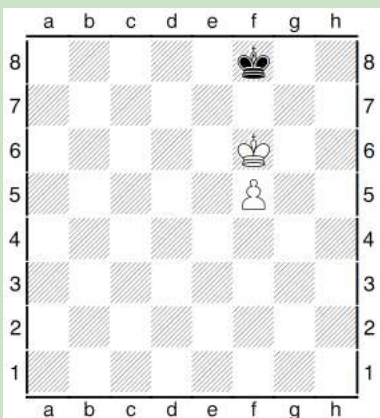
1. White to play: draw  
Black to play: white wins



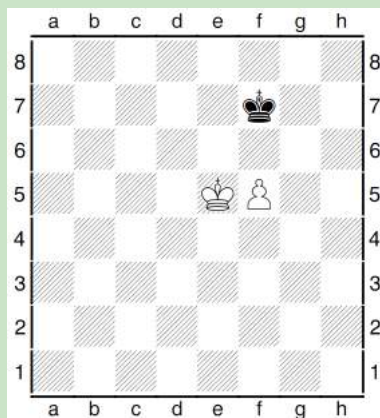
2. White to play: white wins  
Black to play: draw



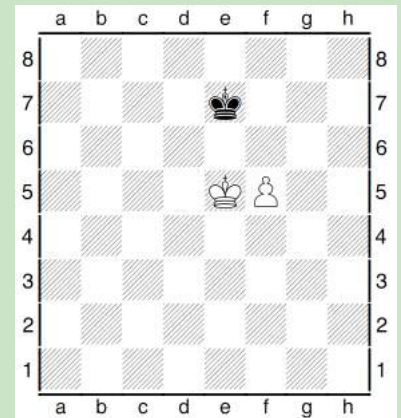
3. White to play: draw  
Black to play: white wins



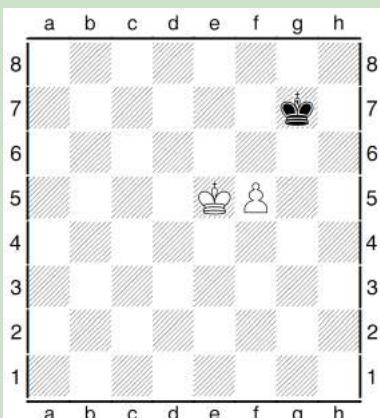
4. White to play: white wins  
Black to play: white wins



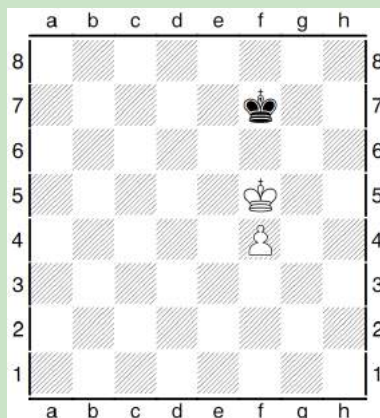
5. White to play: draw  
Black to play: draw



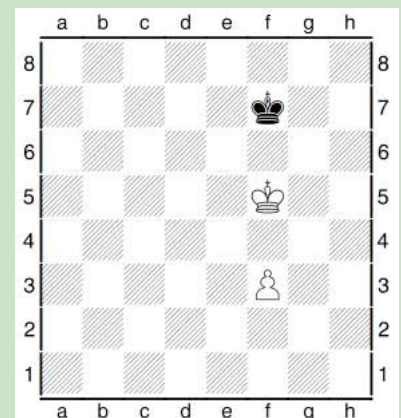
6. White to play: draw  
Black to play: draw



7. White to play: white wins  
Black to play: draw



8. White to play: draw  
Black to play: white wins



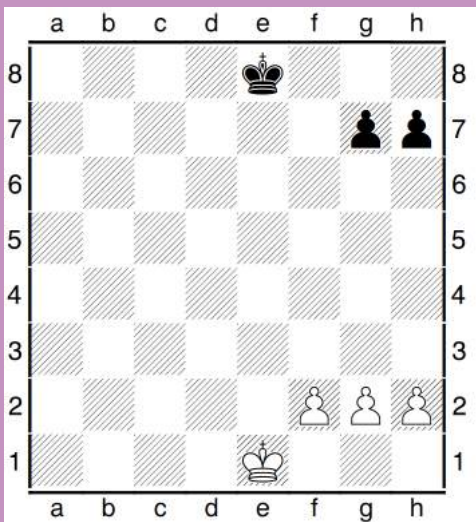
9. White to play: white wins  
Black to play: white wins



Note that in positions 5 to 9 above the result is the same if you move the position back down the board by one (or more, if you can) ranks.

So you win by moving your king in front of the board, reaching a position where the enemy king is opposite you and it is their move. They have to give way allowing you to move round the side, or to move forwards.

You have to UNDERSTAND these positions as well as REMEMBER them. So play each position through with both colours and make sure you really understand what is happening and why it is happening.



When you're happy that you understand these positions it's time to move on and play out this position.

It's White to move and win from this position. Play it out yourself a few times and see if you can win before reading on.

Here's how the play might go.

1. Ke2

As before, White starts by moving their king into the centre.

1... Ke7

2. Ke3 Ke6

3. Ke4 g6

4. f4

Just as when there were pawns on both sides of the board, White leads with the pawn which doesn't have an opposite number.

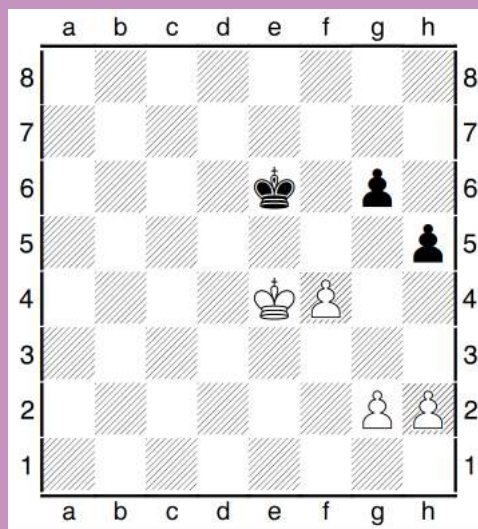
4... h5

Now you have to be careful. You can win if you keep your pawns together but if you allow them to be split it's only a draw. 5. h3 would be a mistake: Black would reply with h4 and capture en passant when you played g4, after which you wouldn't be able to win. **DON'T FORGET THE EN PASSANT RULE!**

5. g3 Kf6
6. h3 Ke6
7. g4 hxg4
8. hxg4 Kf6

In this position White will only draw if they advance either pawn. 9. f5 gxf5 10. gxf5 is a draw as Black's king is behind the pawn. Or 9. g5+ Ke6 and Black has the OPPOSITION so White can make no progress. So White has to go round the side instead.

9. Kd5



Take a look at three possible moves that Black can play in this position.

Variation 1

- 9... Kf7
10. Ke5 Ke7
11. g5!

Taking the OPPOSITION. Now Black has to give way and White comes round the side again. But instead f4-f5 would only draw.

- 11... Kf7
12. Kd6 Kg7
13. Ke6 Kg8
14. Kf6 Kh7
15. Kf7

White will capture the black pawn next move.

Variation 2

- 9... Ke7
10. Ke5 Kf7
11. f5!

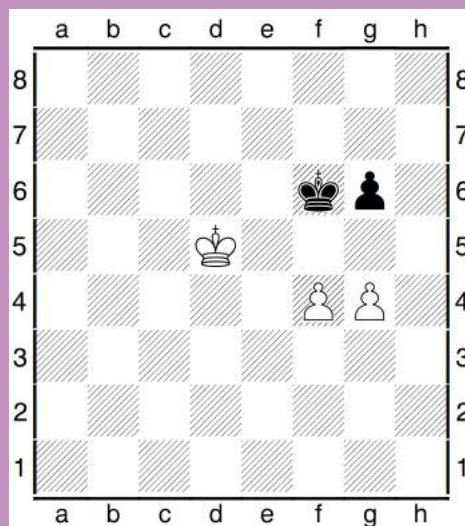
This time g4-g5 only draws because Black can take the OPPOSITION with Kf7-e7. But instead f4-f5 wins.

- 11... gxf5
12. Kxf5

White will only draw if they play g4xf5 because they won't be able to get in front of the pawn.

- 12... Kg7
13. Kg5

Now White takes the OPPOSITION, forcing Black to give way, when they can win by going round the side, for instance:



13... Kf7  
14. Kh6 Kg8  
15. g5 Kh8  
16. g6 Kg8  
17. g7 Kf7  
18. Kh7

Variation 3

9... g5  
10. f5

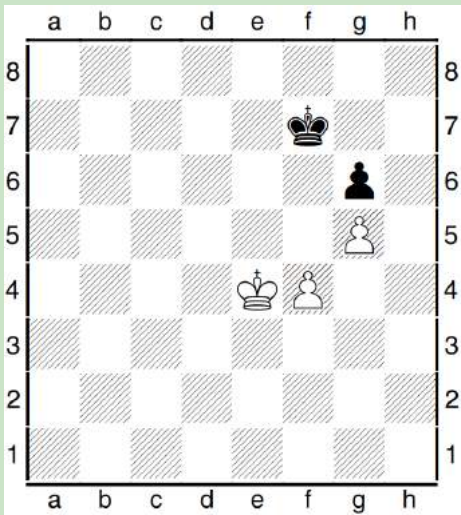
Capturing the pawn with fxg5 will only lead to a draw with correct defence.

10... Kf7  
11. Ke5 Kg7  
12. f6+ Kf7  
13. Kf5

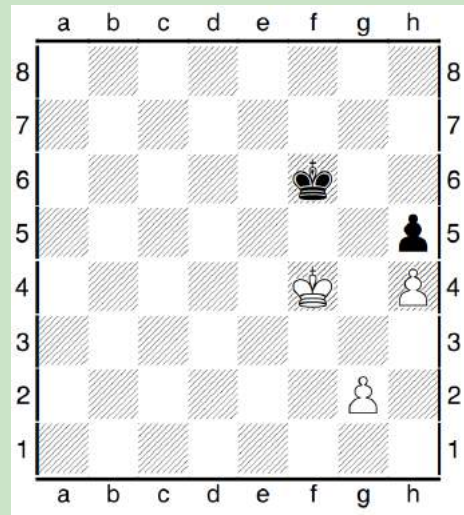
White will capture the black pawn next move.

It's not so easy, is it? You really need to think hard and look ahead to get this sort of position right.

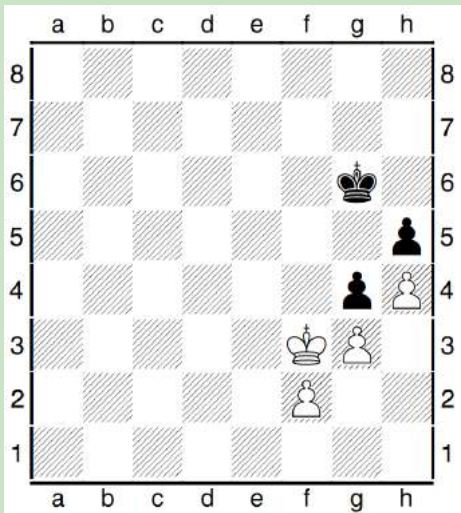
Now try out some of these positions for yourself. You have to find the best move: the only move to win or draw. Play them out against a friend, your teacher or a computer and see how you get on.



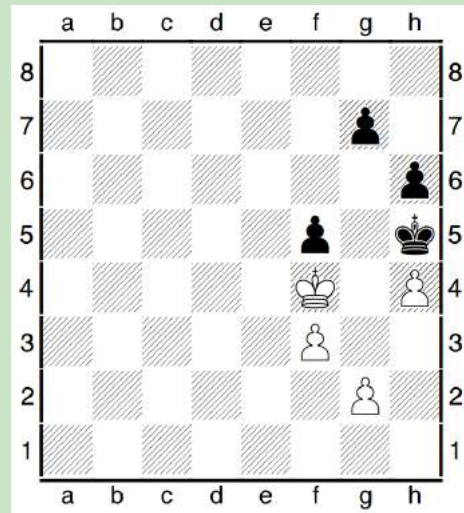
Q49. What is White's winning move?



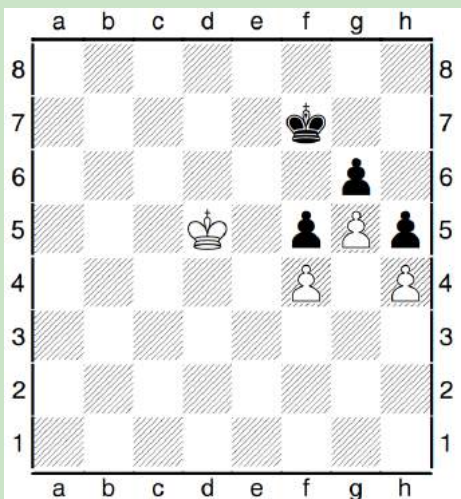
Q50. What is White's winning move?



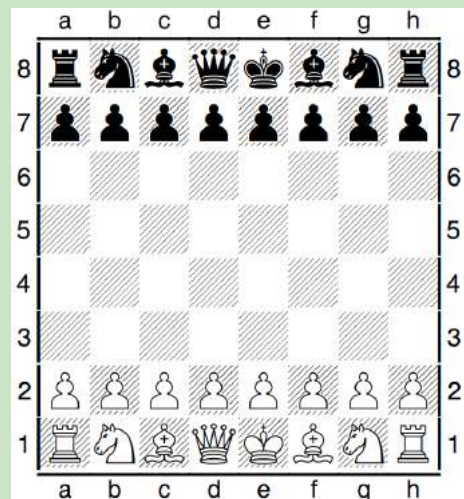
Q51. What is White's winning move?



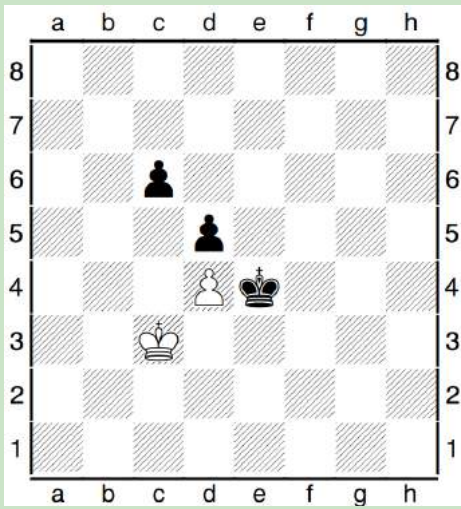
Q52. What is White's winning move?



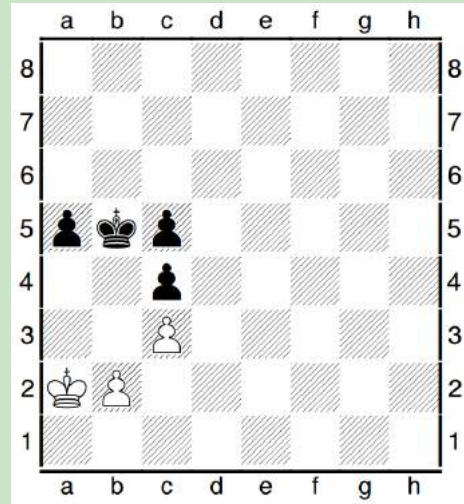
Q53. What is White's winning move?



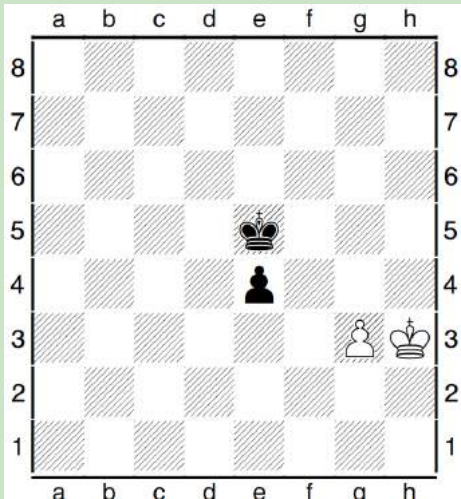
Q54. What is White's winning move?



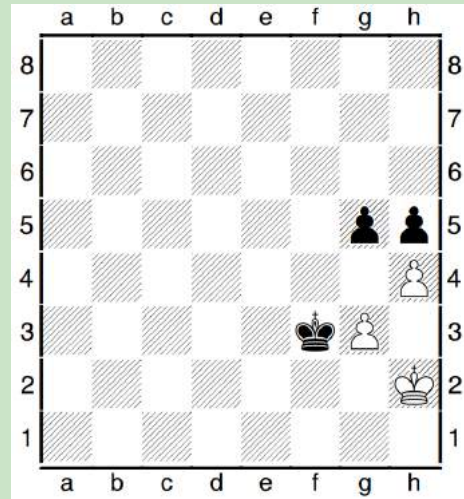
Q55. What is Black's winning move?



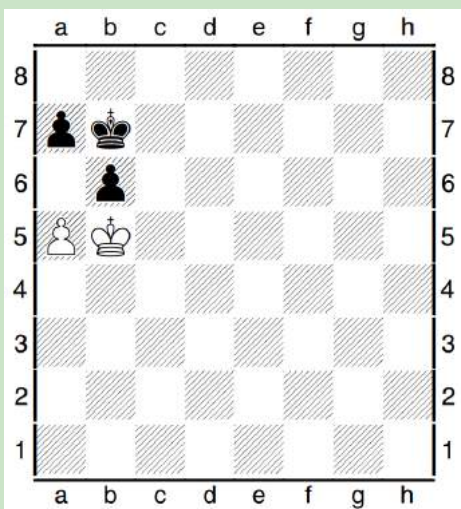
Q56. What is Black's winning move?



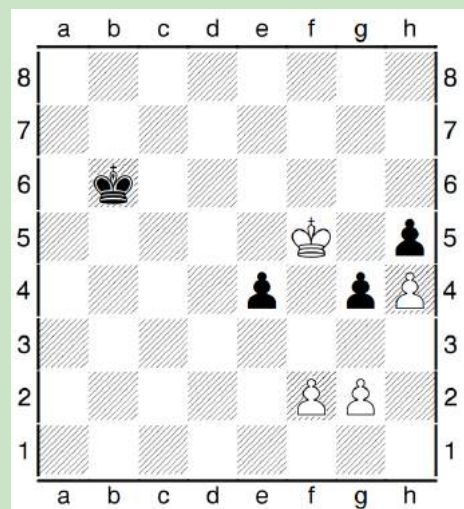
Q57. What is Black's winning move?



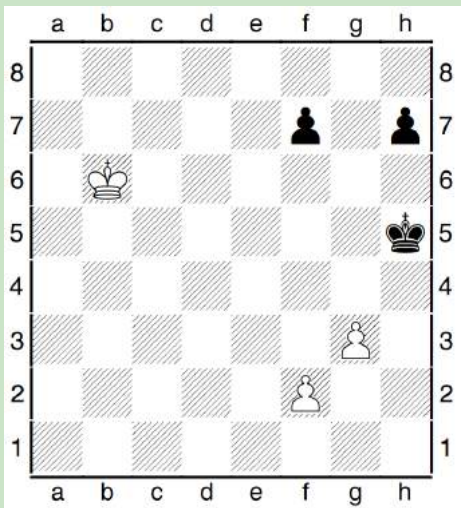
Q58. What is Black's winning move?



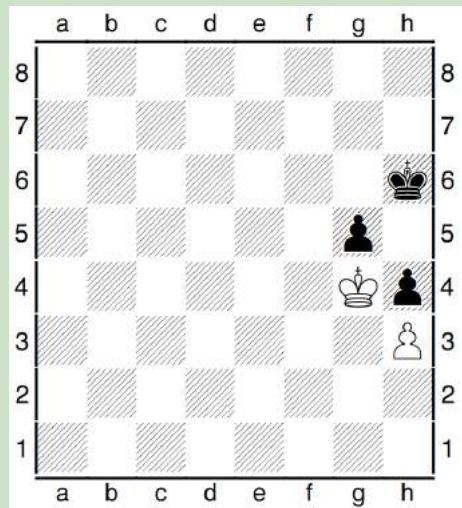
Q50. What is Black's winning move?



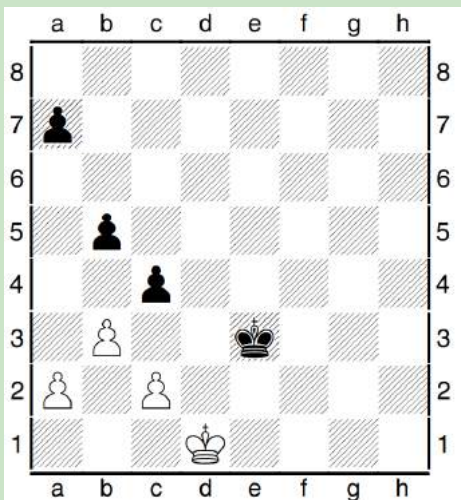
Q60. What is Black's winning move?



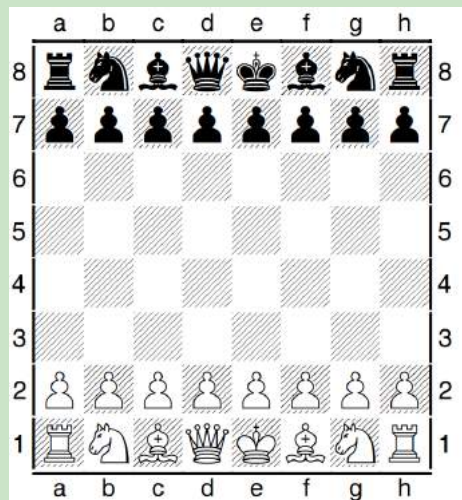
Q61. What move should White play to draw?



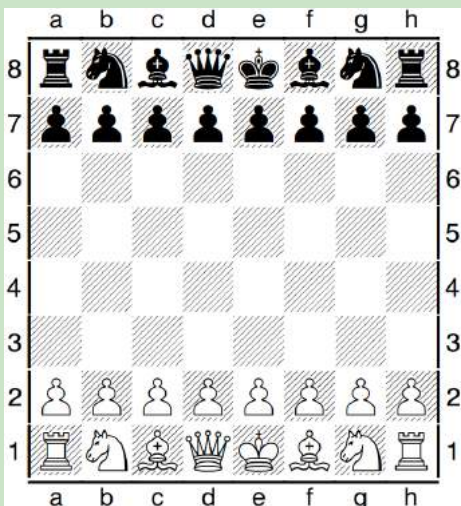
Q62. What move should White play to draw?



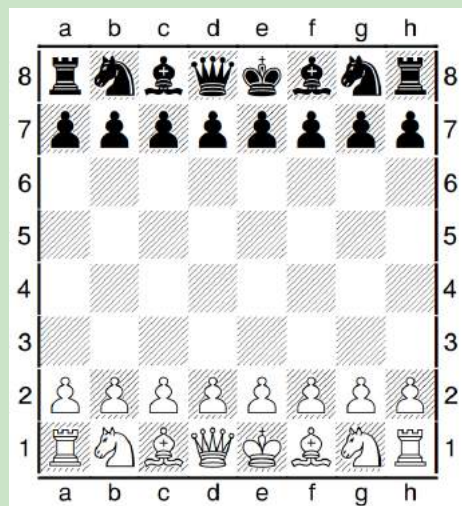
Q63. What move should White play to draw?



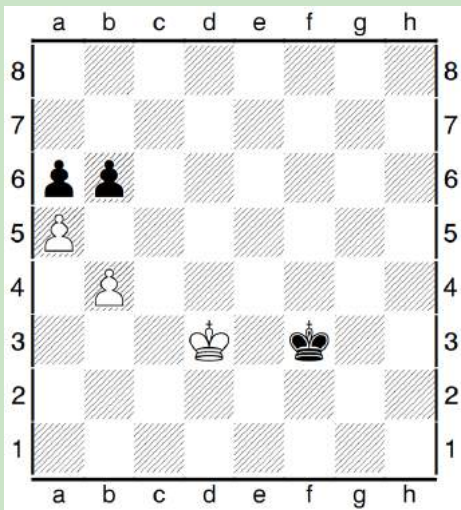
Q64. What move should White play to draw?



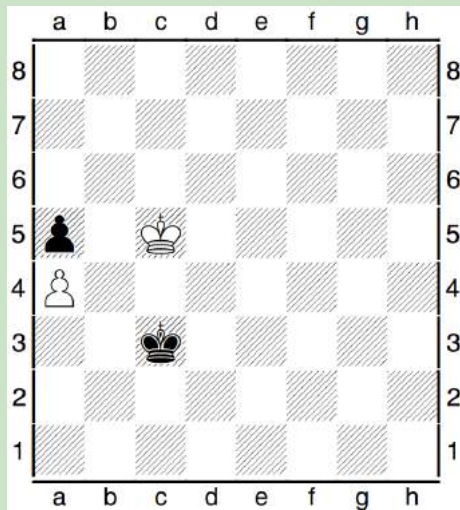
Q65. What move should White play to draw?



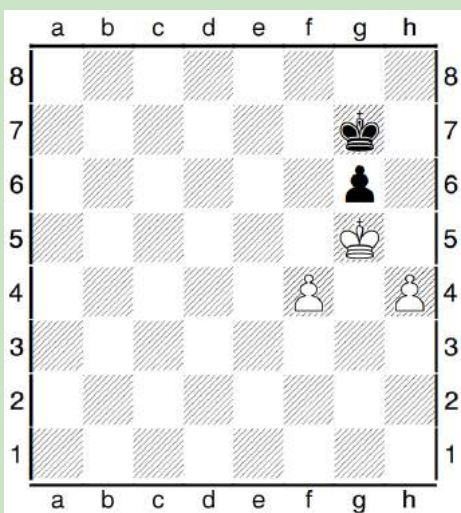
Q66. What move should White play to draw?



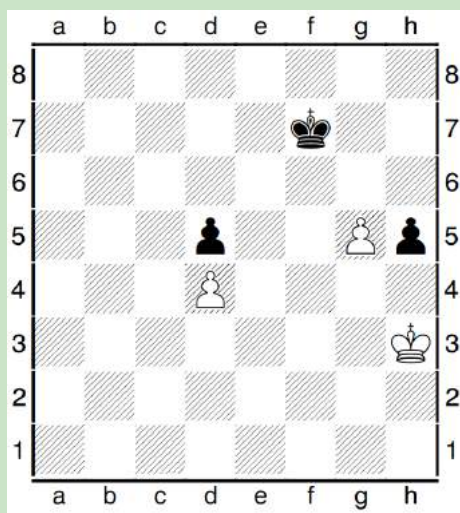
Q67. What move should Black play to draw?



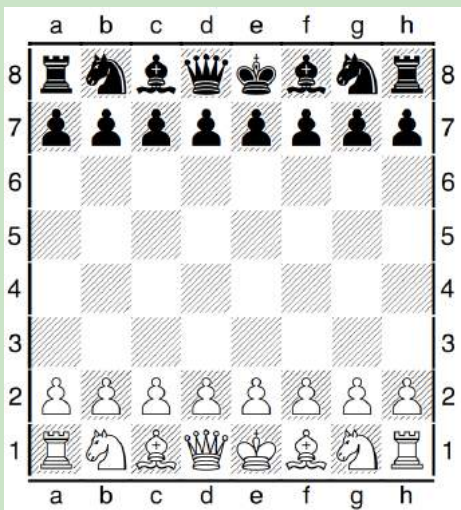
Q68. What move should Black play to draw?



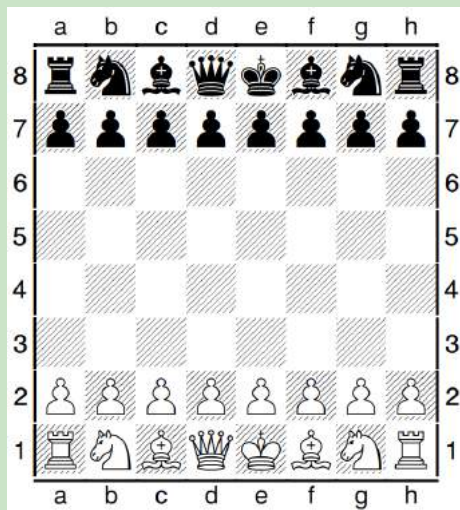
Q69. What move should Black play to draw?



Q70. What move should Black play to draw?



Q71. What move should Black play to draw?



Q72. What move should Black play to draw?

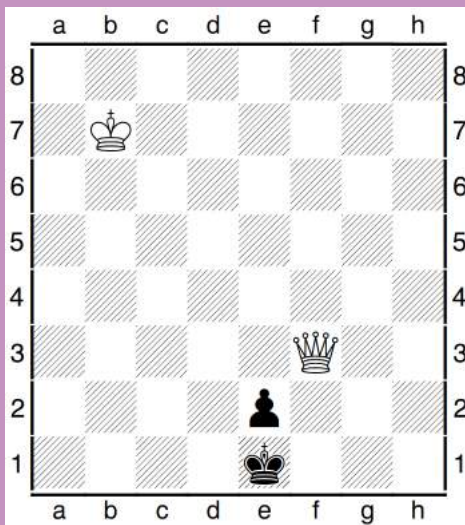
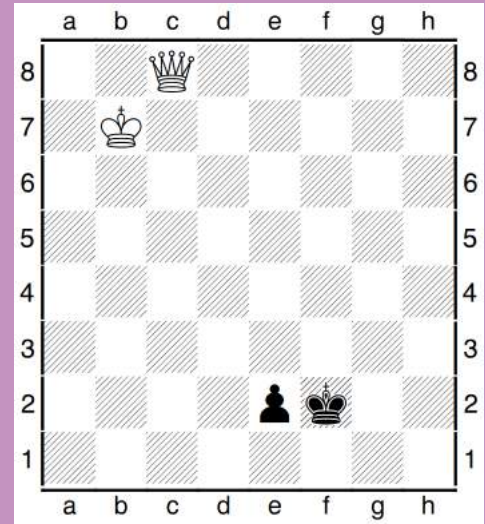
## QUEEN AGAINST PAWN

If both players have a passed pawn you may well reach a position where you promote to a queen while your opponent's pawn reaches the seventh rank.

Can you win this sort of position? Let's take a look.

Let's start from this position, with White to move. This is how the plan works.

1. Bring your queen as near as possible to the black king by a series of checks, pins and attacks on the pawn.
2. When the black king is in front of the pawn advance your king.
3. When the black king moves back out go back to stage 1 and start again.
4. When your king is close enough you can win the pawn and deliver checkmate.

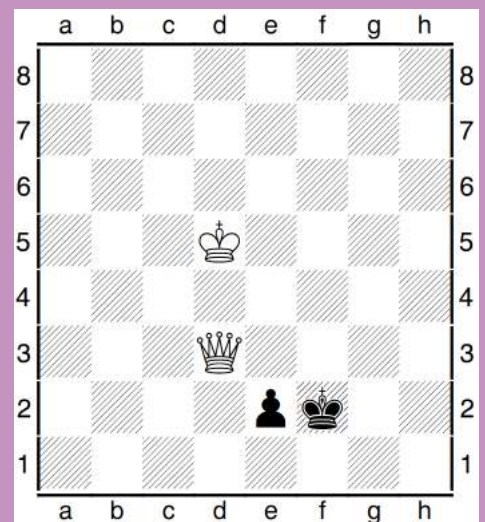


Play through the moves and see how it works.

1. Qf5+ Kg2
2. Qe4+ Kf2
3. Qf4+ Kg2
4. Qe3 Kf1
5. Qf3+ Ke1

End of Stage 1. Note the white queen's zigzag manoeuvre. Now the black king is in front of the pawn your king can approach.

6. Kc6 Kd2
7. Qf2 (PIN) Kd1
8. Qd4+ Kc2
9. Qe3 Kd1
10. Qd3+ Ke1
11. Kd5 Kf2





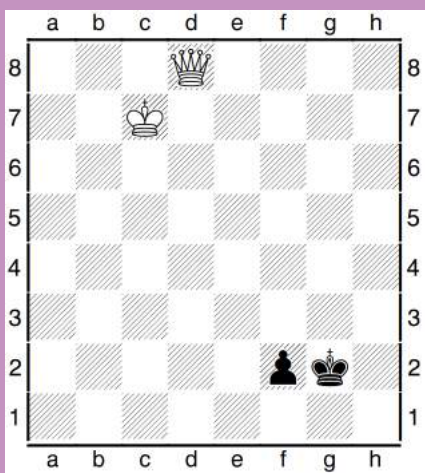
Now we repeat moves 7 to 11 again on the other side of the board.

12. Qd2 (PIN) Kf1
13. Qf4+ Kg2
14. Qe3 Kf1
15. Qf3+ Ke1
16. Ke4 Kd2

Now the white pieces are close enough we can move in and force CHECKMATE.

17. Qd3+ Ke1
18. Kf3 Kf1
19. Qxe2+ Kg1
20. Qg2#

It takes a long time to win this position but it's not too hard once you get the idea.

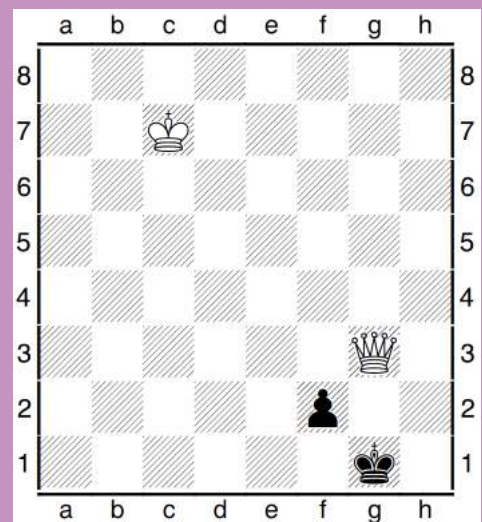


Next, we're going to move everything one square to the right so that you now have a bishop's pawn rather than a centre pawn.

This time play the position out for yourself before reading on and see what happens.

1. Qg5+ Kh2
2. Qf4+ Kg2
3. Qg4+ Kh2
4. Qf3 Kg1
5. Qg3+

So far it's the same as in the previous example but now something interesting happens. What do you think Black should play here? You only have two choices.



If Black moves to f1 the white king can approach, but look at what happens if Black goes to h1 instead.

Now if White takes the pawn it's STALEMATE. As Black is threatening to promote White has no way of making any progress. If you don't believe me try it out for yourself.

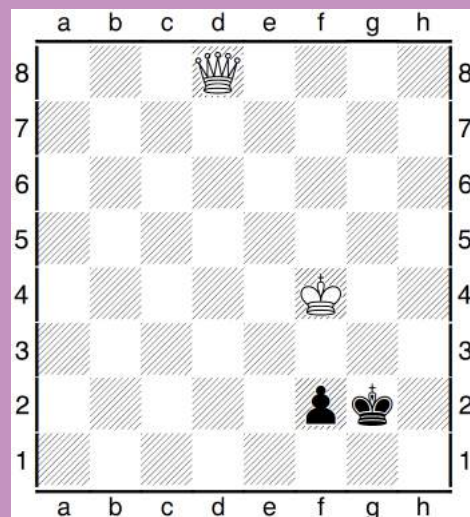
If you find yourself with a queen against a knight's pawn you can win the same way as against a centre pawn. But if your opponent has a rook's pawn again it's a draw because of STALEMATE.

But sometimes you can win against a bishop's pawn or a rook's pawn if your king is close enough by mating the enemy king when the pawn promotes.

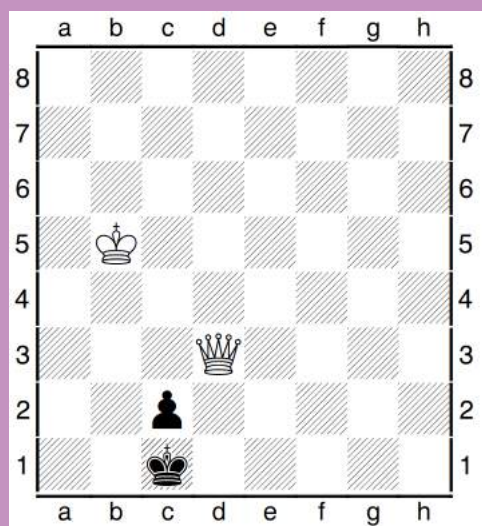
Here's an example.

1. Qg5+ Kh2
2. Qh5+ Kg1
3. Qg4+ Kh2
4. Qg3+ Kh1
5. Qh3+ Kg1
6. Kg3 f1Q
7. Qh2#

Black could promote to a knight on move 6 which would prevent an immediate mate but White would still win quickly.



Endings with a queen against a bishop's pawn can be tricky and require accurate calculation. Let's look at a few practical examples.



It's Black to move in this position. You might want to play it out yourself first.

Black can draw by playing 1... Kb2 when White's king is not quite near enough for them to win.

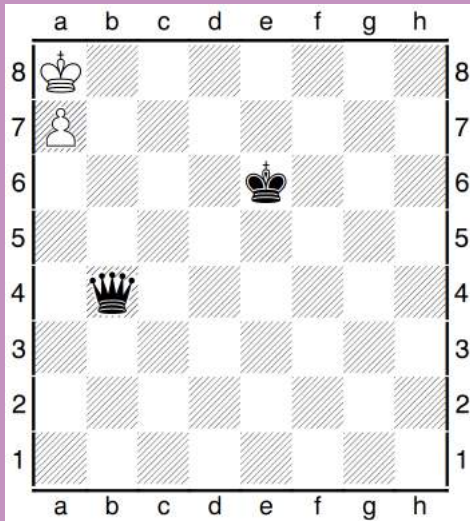
But instead they played 1... Kb1, leaving their pawn pinned and giving White an extra move. Now White can win by advancing their king to the fourth rank. Can you work out the winning sequence? It goes:

2. Kb4 Ka1
3. Qc3+ Kb1
4. Kb3! c1Q

(Queen against queen is usually a draw, but not here!)

5. Qd3+ Ka1
6. Qa6+ Kb1
7. Qa2#

White didn't find this and after 2. Qb3+ Ka1! their king was one square too far away and the game was soon drawn.



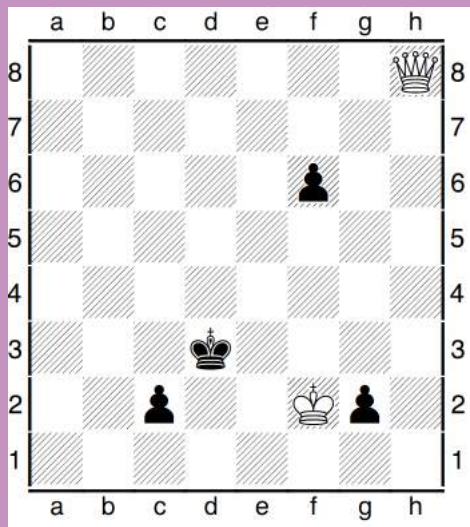
Here's an example with a rook's pawn.

In this position the black king is within reach. But an immediate king move would be STALEMATE.

The quickest way to win is:

- 1... Qe7
2. Kb8 Kd6
3. a8Q Qc7#

Again promoting to a knight would lose more slowly.



Finally, consider this position with White to play. The white queen has to contend against three black pawns, two of which are on the 7th rank. You might want to play it out a few times first to see what happens. Can White win or should it be a draw, or even a win for Black. What do you think?

In fact White has several ways to win this position. A trick well worth knowing is to get your queen onto the queening square, when you'll win easily. White can do this by playing 1. Qh6 followed by Qc1. Try this out for yourself.

Another way to win is to play 1. Qh3+. Now if Black plays 1... Kd2 you play 2. Qe3+ Kd1 3. Qe1#. Or if 1... Kc4 you can, if you want to be clever, play 2. Kxg2 c1Q 3. Qc8+ with a SKEWER. Finally, if 1... Kd4 2. Qe3+ wins easily.

In the game White chose a different plan which was a lot harder to win with.

1. Qd8+ Kc3
2. Qxf6+ Kd3
3. Qf3+ Kd2
4. Qe2+ Kc1

### 5. Kxg2?

This move only draws as Black has time to set up the stalemate defence. There's a win here for White but it's tricky to find. They have to get their queen on the b-file first to force the black king in the wrong direction.

Here's how it goes: 5. Qb5 Kd1 6. Qb3 Kc1 7. Kxg2 Kd2 8. Qb2 Kd1 9. Kf2 Kd2 10. Qd4+ Kc1 11. Qb4 Kd1 12. Qe1#

5... Kb1

6. Qd3 Kc1

Now Black's losing again. They could draw either by playing Kb2 or by using the stalemate defence straight away with Ka1.

7. Kf2

Again it's not so easy for White to find the right plan here. As in the line above they should first put their queen on the bfile to prevent the stalemate defence before approaching with their king: 7. Qb3 Kd2 8. Qb2 Kd1 9. Kf2 c1Q 10. Qe2#

7... Kb2

8. Qd2 Kb1

9. Qb4+ Kc1

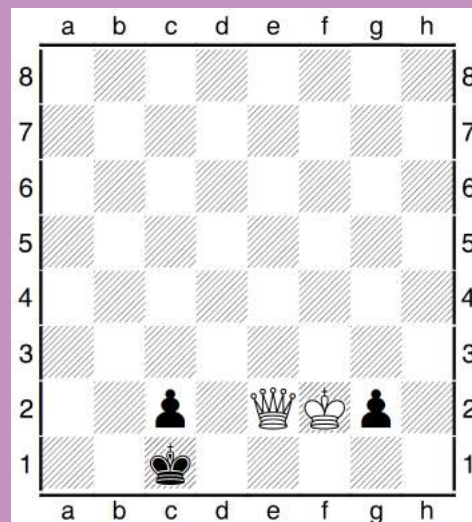
The final mistake, giving White's king the move they need to approach. They could have drawn by playing either Ka1 or Ka2.

10. Ke3

White finds a mate in two. There was another one as well: 10. Kf1 Kd1 11. Qe1#. But you have to be careful: Ke1 or Ke2 would have been STALEMATE.

10...Kd1

11.Qd2#



So now you know how to win with an extra pawn.

In later chapters we'll look at positions where there are only pawns on one side of the board (this is harder) and positions where you have another piece on the board as well (this is often harder still).

Many chess games are decided in this way. You win a pawn, trade everything off and win the ending.

So if you're a pawn (or more) ahead, the easiest way to win is usually to trade off pieces to reach a pawn ending. You should also try to keep pawns on both sides of the board. The more pawns you have the more chances you have to get one to the end and promote to a queen. Likewise, if you find yourself a pawn (or more) behind you need to try to avoid exchanging pieces. In particular, try to make sure you don't trade off your last piece into a lost king and pawn ending.

You'll find as you get stronger that most of chess is not about playing sacrifices and getting a quick checkmate. In many more games you'll just win material, trade off and win the ending.

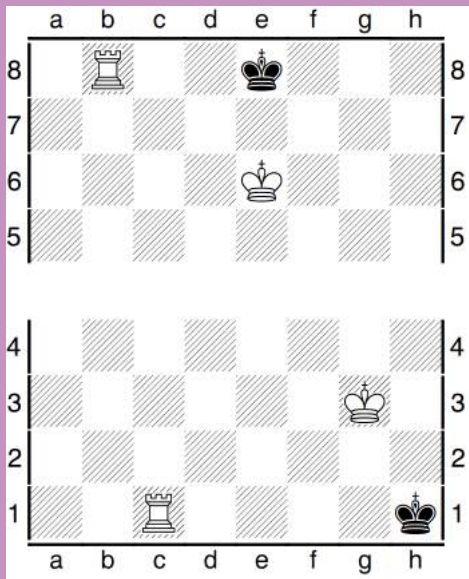
Now it's time to look at how to checkmate with a king and rook against a king.

### KING & ROOK CHECKMATE

You already know how to get checkmate with a king and queen.

The most common endings are rook endings, so you'll also find yourself quite often having to get checkmate with a king and a rook against an enemy king.

Here's how to do it. First of all, look at the checkmate positions.



Here's what a rook checkmate looks like. You've already seen a very similar checkmate with the queen.

At the top of the diagram the black king is on the side of the board and the white king is two squares away towards the centre.

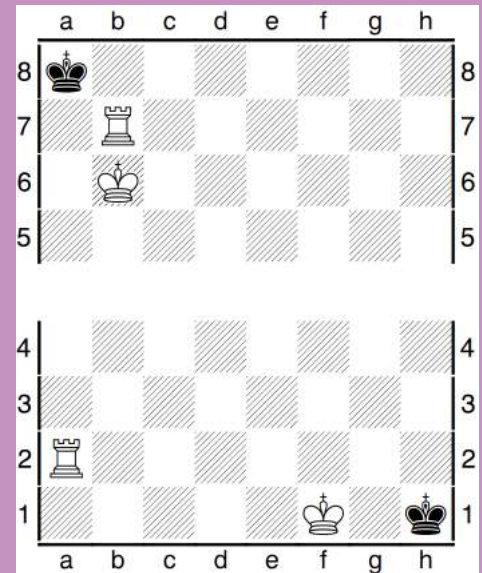
If the enemy king is in the corner your king can also be a knight's move away (but two rows away from your rook) as in the checkmate at the bottom of the diagram.

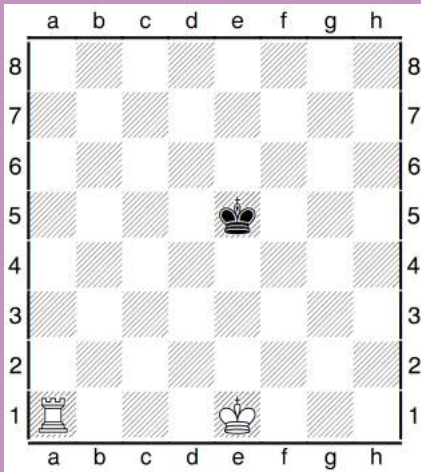
There are not so many stalemate positions to worry about. Stalemate will only happen if the enemy king is in the corner as in this diagram.

You're going to look at two methods of getting checkmate. The first method involves boxing the king in and gradually forcing them into the corner.

Here's your plan.

1. Set up a barrier with your rook
2. Move your king up the board
3. Use your king and rook together to form a box
4. If you can play a rook move to make the box smaller, then do so
5. If you can't make the box smaller move your king towards the enemy king instead
6. When the king's in the corner use your rook to get checkmate
7. Play through the moves on your board.





1. Ra4

White moves the rook to set up an electric fence and stop the king escaping.

1... Kd5

2. Ke2 Ke5

3. Ke3 Kd5

4. Re4

White uses the rook to form a box. Now the king is trapped in the north west corner of the board.

4... Kc5

5. Rd4

Making the box smaller.

5... Kc6

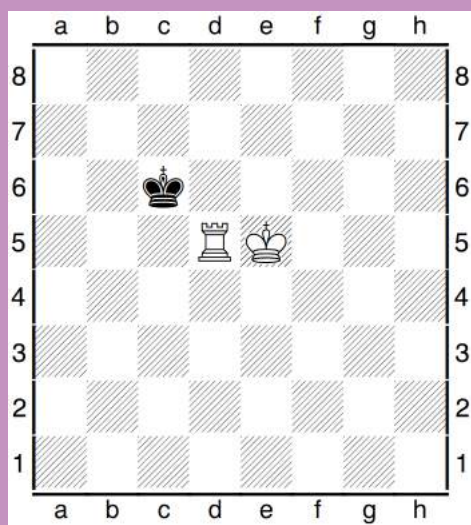
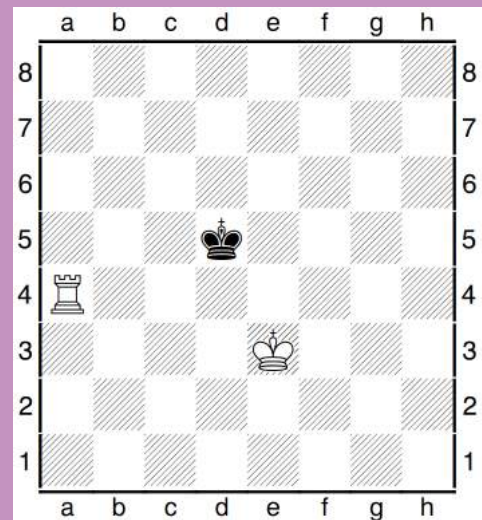
6. Ke4

Now you can't make the box smaller so you move your king up instead.

6... Kc5

7. Ke5 Kc6

8. Rd5



White keeps on repeating the same plan, gradually driving the black king into the corner. See how Black's king is now in a box of nine squares.

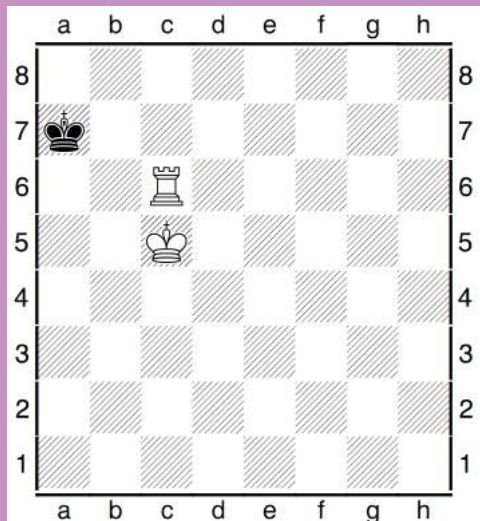
8... Kc7

9. Rd6 Kb7

10. Kd5 Kc7

11. Kc5 Kb7

12. Rc6 Ka7



Now the black king is on the side of the board so White makes sure they can't escape, then moves their king into place for the checkmate.

13. Rb6 Ka8
14. Kc6 Ka7
15. Kc7 Ka8
16. Ra6#

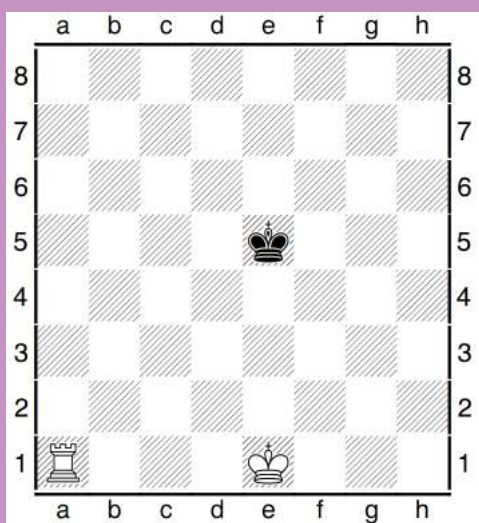
Go away and practise this method yourself before moving on.

The second method is slightly different. The plan now is to force the king back to the side one row at a time.

It works in this way:

1. Set up a barrier with your rook
2. Move your king up the board to where it's a knight's move away from the enemy king
3. When their king moves opposite you play a check with your rook to force the king back
4. If they head for the side instead it's quicker to go back to the first method and box them in
5. When they get to the side of the board again move your king a knight's move away from them.
6. If they move away from your king play a waiting move with your rook
7. When their king's opposite you, use your rook to get checkmate

Again, play through the moves to make sure you understand the plan.



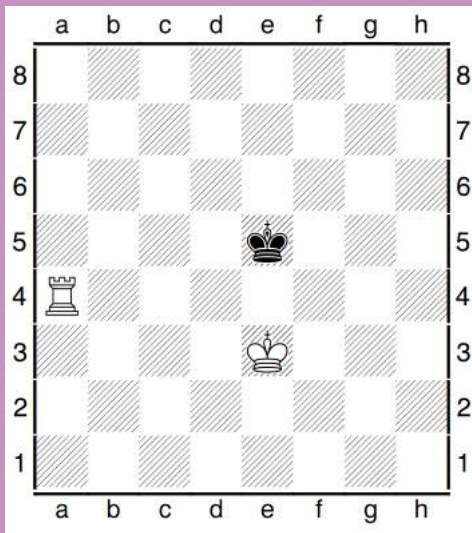
1. Ra4 Kd5
2. Ke2 Ke5
3. Kd3

This time we move the king a knight's move away from their opposite number.

- 3... Kf5

Black tries to run away.

4. Ke3 Ke5



Black wants to stay in the centre, but now the kings stand opposite each other a check will force them back.

5. Ra5+ Ke6

Now White does the same thing again. Their king moves a knight's move away from the black king.

6. Kd4 Kf6

7. Ke4 Ke6

8. Ra6+

Another check to force the black king back towards the edge.

8... Kd7

9. Ke5 Kc7

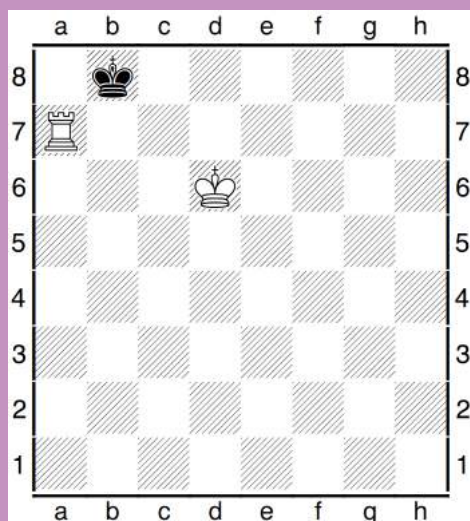
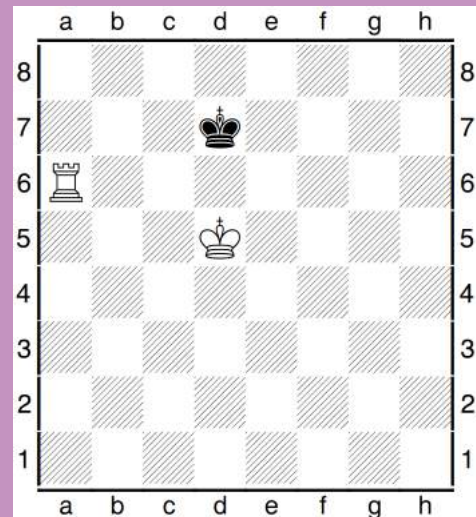
10. Kd5 Kd7

This time a check will give Black no choice but to go to the edge of the board.

11. Ra7+ Kd8

12. Ke6 Kc8

13. Kd6 Kb8



Now White's quickest way to win is Ra7-c7 (try it out for yourself) but watch how White can also win by playing two WAITING MOVES.

14. Rh7 Kc8

15. Rg7 Kb8

Now the rook is safe the white king can approach.

16. Kc6 Ka8

17. Kb6

Black's king has reached the corner so they can't run away but has to move back opposite the white king.

17... Kb8

18. Rg8#

Set up some different starting positions with king and rook against king and see how quickly you can get checkmate using these methods.



Now look at this position.

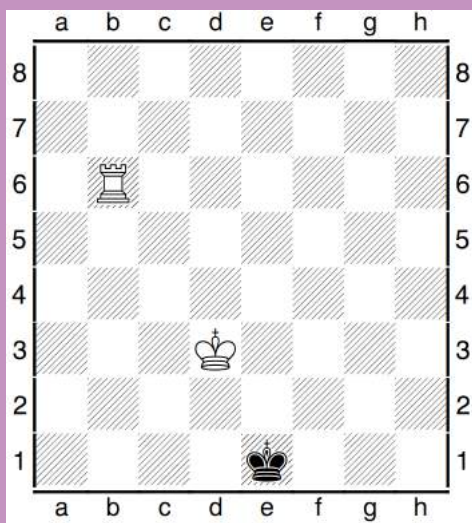
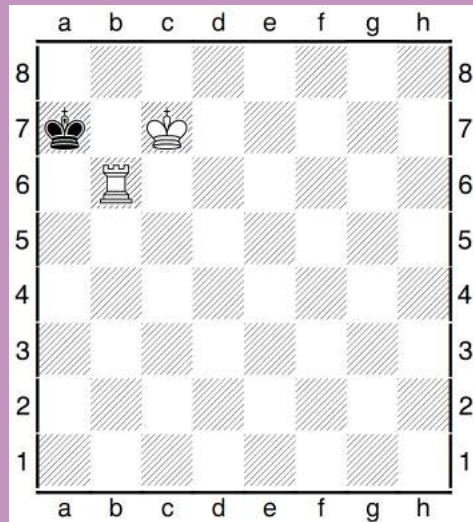
In the first checkmate example it was Black's move. The only move was Ka8, when White could play Ra6#.

Suppose it's White's move instead. You can force checkmate in two moves (You play a move and, whatever Black does, you can get checkmate next move). Can you work out how? Stop and see if you can find out the answer before moving on.

You could try moving your king to c6 but after Ka8, Ra6 is no longer mate.

You could try moving your rook back along the b-file, for instance Rb1. Now if Black plays Ka8 you can get checkmate, but there's no mate if Black plays Ka6 instead.

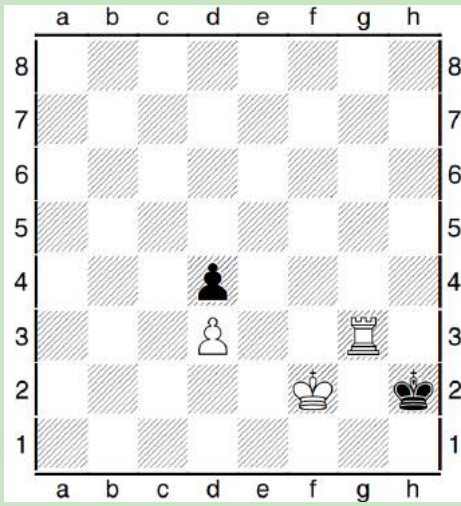
So you have to play a rook move which forces them to move to a8. There are six ways of doing this. Moving your rook to c6, d6, e6, f6, g6 or h6 will all work. Black will have to go into the corner and your rook bounces back to a6 with checkmate. Well done if you worked out the right answer!



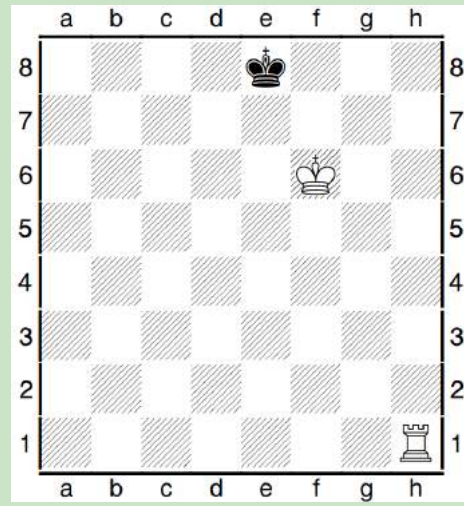
Here's something similar. How can White force checkmate in two moves here? Again, try to work it out for yourself first.

You want to make sure the black king moves to d1, not to either f1 or f2, so the answer is Rf6. Now Black's only move is K-d1 when your rook can rush down to f1 saying "checkmate".

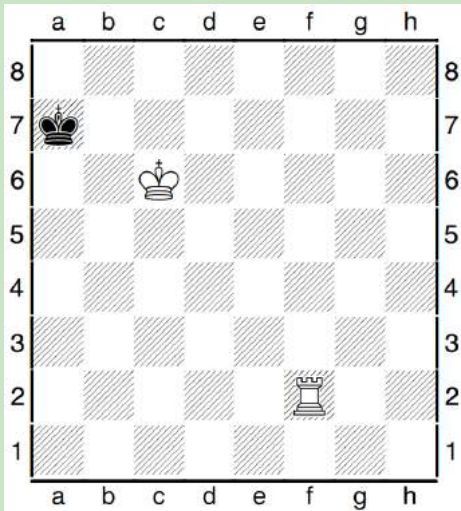
Try to solve these positions in which you have to use the same idea to force checkmate in two moves.



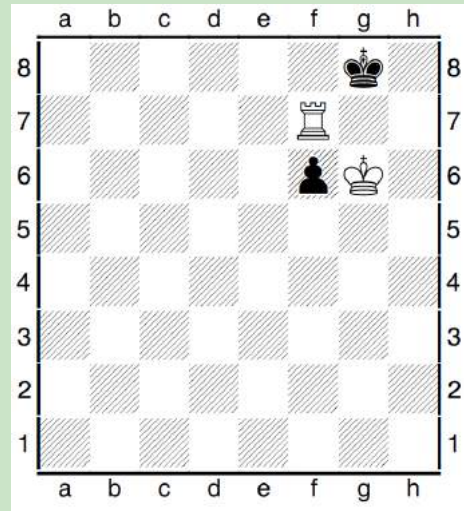
Q37. How can White force mate in 2 moves?



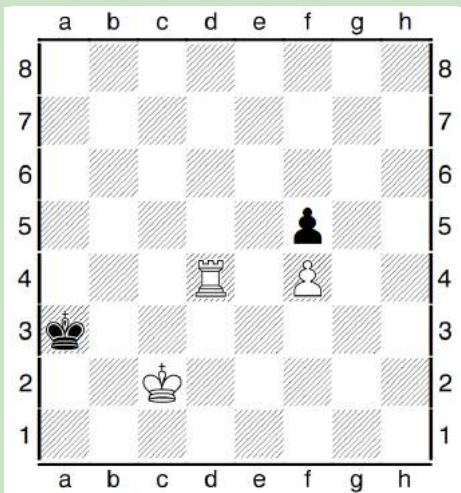
Q38. How can White force mate in 2 moves?



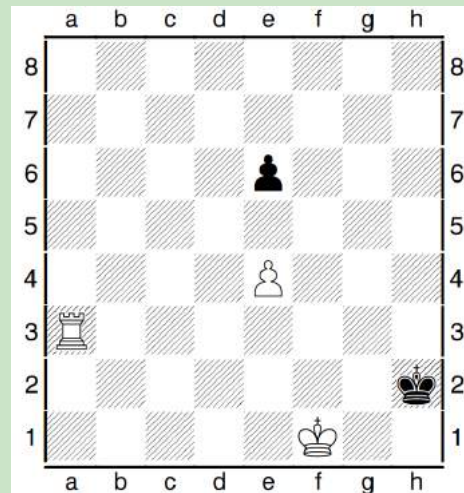
Q39. How can White force mate in 2 moves?



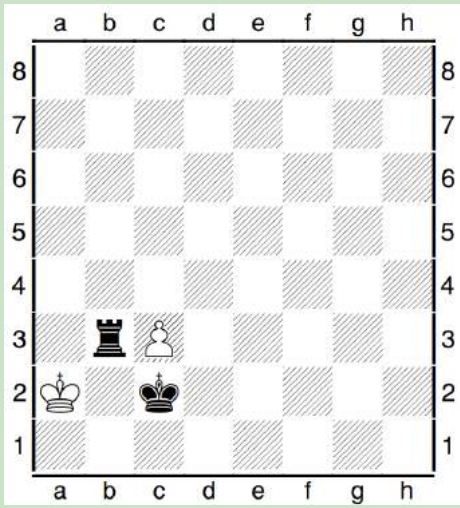
Q40. How can White force mate in 2 moves?



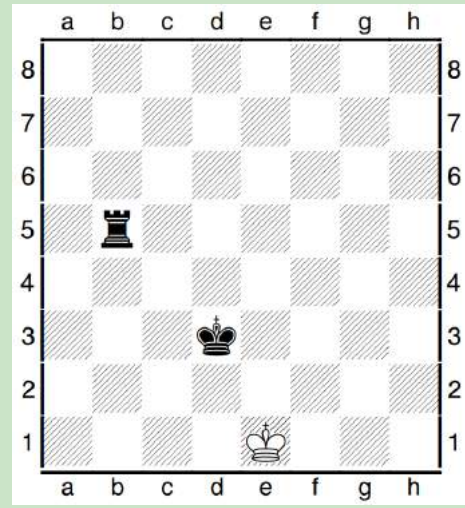
Q41. How can White force mate in 2 moves?



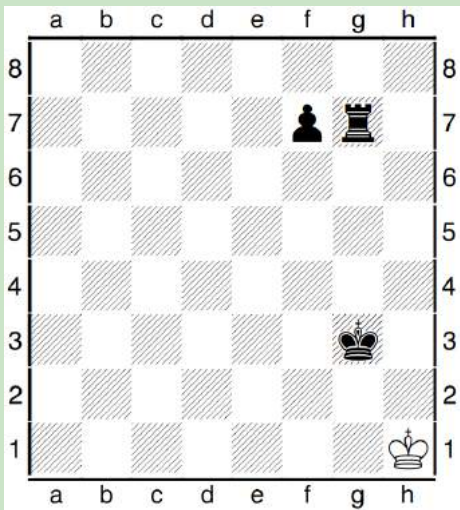
Q42. How can White force mate in 2 moves?



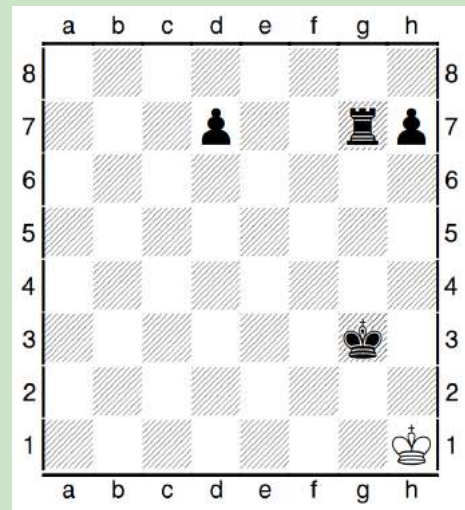
Q43. How can Black force mate in 2 moves?



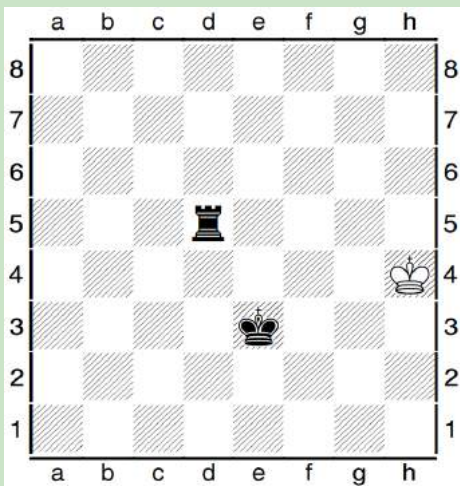
Q44. How can Black force mate in 2 moves?



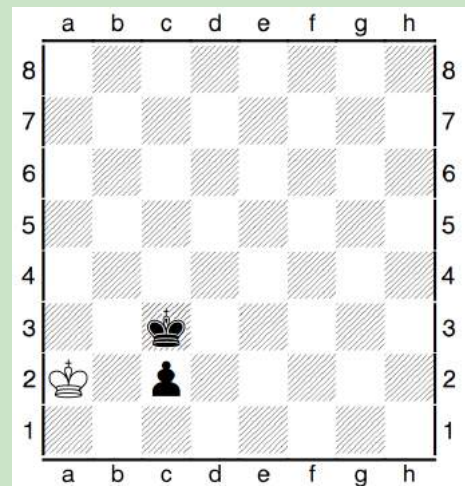
Q45. How can Black force mate in 2 moves?



Q46. How can Black force mate in 2 moves?



Q47. How can Black force mate in 2 moves?



Q48. How can Black force mate in 2 moves?

## ROOK AND PAWN ENDINGS

Rook endings happen more often than any other ending. The reason is very simple. Rooks get stronger as more exchanges take place and more open files are created. So they're very often the last pieces to be developed in the opening, and the pieces that are most likely to be left in the ending.

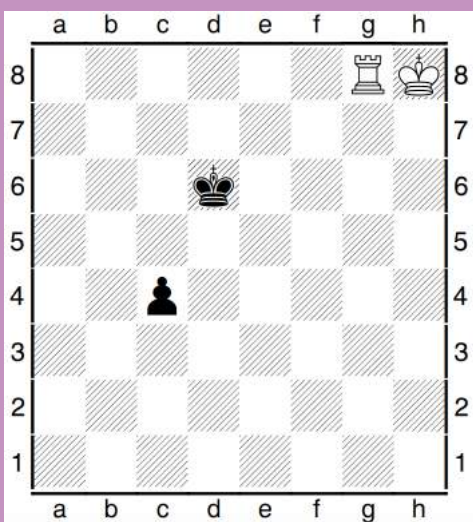
You now know how to force CHECKMATE with king and rook against king.

But there's a lot more to learn about rook endings. Most of it is based on understanding and accurate calculation, but there are also a few positions you need to know.

We'll start with positions with rook against pawn. If you have the rook and your king is close enough it will be usually be easy enough for you to round up the pawn. Sometimes, though, it will need a bit of care.

There are also many positions where your king will be too far away and you'll have to give up your rook for the pawn to stop it queening.

There are other positions where it's very hard to calculate the result. You don't yet need to know too much about this, but there's just one type of position you should know. The winning plan is very simple once you see it but not so easy to find.



It's White's move. Stop here and think about what you'd play before reading on. If you want a hint there's only one winning move here.

The answer is that you can win by playing Rg5 to CUT OFF the black king. The game might continue:

1. Rg5 c3
2. Kg7 c2

Now the black pawn is too far away from the king, so...

3. Rg1 Kc5
4. Rc1 Kc4
5. Rc2 and White wins.

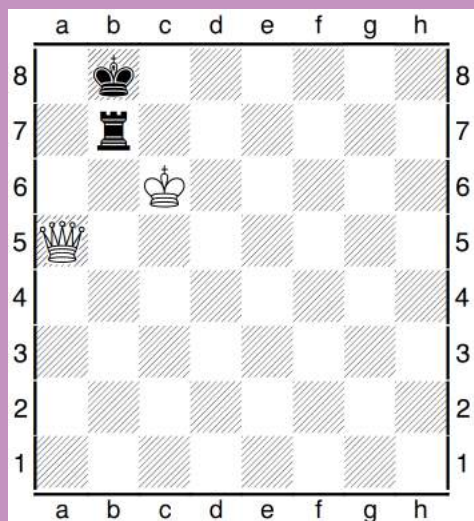
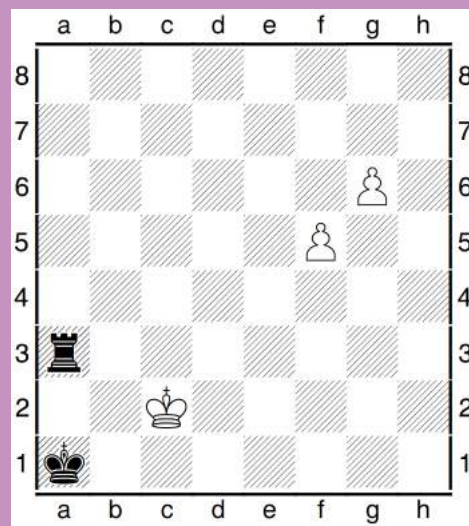
Sometimes two pawns can beat a rook if they are on adjacent files and far enough advanced.

Take a quick look at this position.

Play it out for yourself, with White to play.

You should discover that if you play either f6 or g7 you'll get a pawn through. You'll probably end up with a position with queen against rook, which we'll move on to next.

On the other hand, if it's Black's move here, you can win by playing Rg3 followed, if the white king moves, by Rg5.



Queen against rook is a win for the queen unless the player with the rook can win the queen or force stalemate. It's often not easy to play, though, and sometimes even very strong players are unable to find the win. You don't need to worry about it too much at the moment, but we'll just look at one quick example.

The idea is to separate the black king and rook and then win using a FORK of king and rook, or a move which THREATENS the rook and CHECKMATE at the same time.

Here's how the play might go, with Black to move:

- 1... Rb1
2. Qd8+ Ka7
3. Qd4+ Kb8
4. Qh8+ Ka7
5. Qh7+

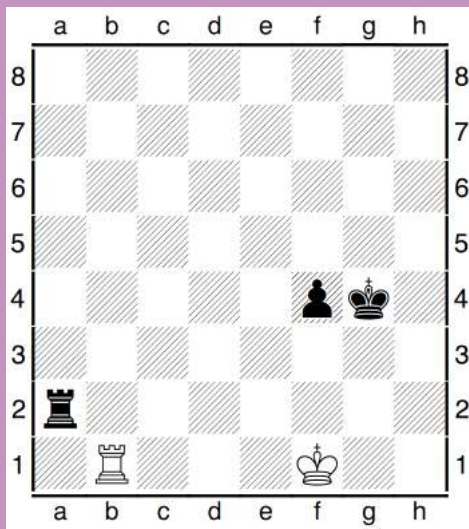
White plays a FORK to win the black rook.

Now we move onto positions with rook and pawn against rook.

The general principle here is that you need to occupy or control the promotion square to get the result you want.

If your opponent has the extra pawn and you keep your king on the promotion square you will usually (but not always) be able to draw.

There's one very good method which works in most positions. This is called the PHILIDOR POSITION.



Look at this position.

The easiest way for White to draw in this sort of position is to play:

1. Rb3

The idea of this move is to stop Black advancing the king and THREATENING a potential CHECKMATE. Black has no other useful moves so will probably play...

1... f3

Now the pawn has advanced to Black's sixth rank White must move the rook to the back rank in order to check the white king from behind while keeping well away from being attacked.

2. Rb8 Kg3

Black's threatening CHECKMATE so White has to start checking:

3. Rg8+ Kf4

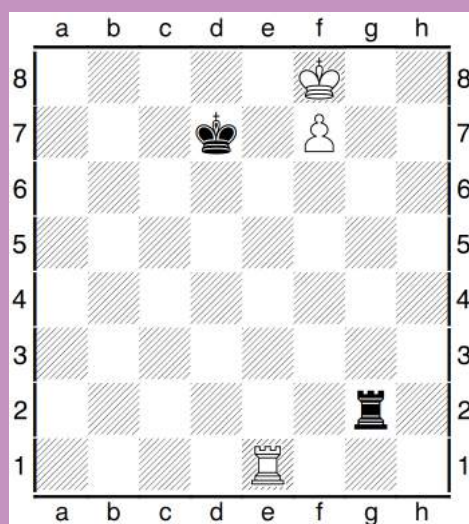
4. Rf8+ Ke4

5. Re8+ Kd5

6. Rd8+ Ke6

7. Rf8

White will win the black pawn leaving a drawn position.



Now let's look at a position where White has the pawn and the white king is on the promotion square. This is known as the LUCENA POSITION and the technique we're going to use is called BUILDING A BRIDGE.

White's king has occupied the promotion square but can't escape at the moment. So first we have to play a CHECK to drive the black king away.

1. Rd1+ Kc7

Now we BUILD A BRIDGE. You'll see the reason for this move later.

2. Rd4 Rg1

Black can do nothing but wait. Now the white king can emerge from hiding.

3. Ke7 Re1+

4. Kf6 Rf1+

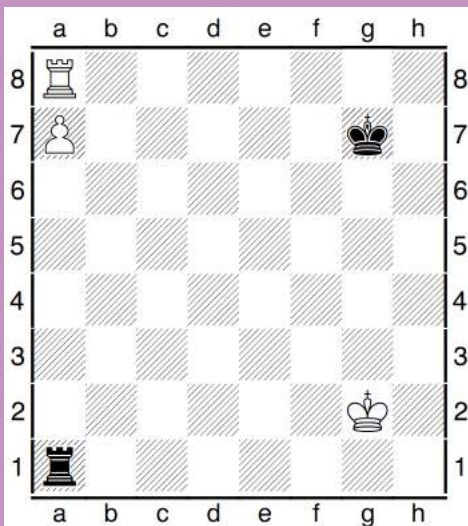
5. Ke6 Re1+

6. Kf5 Rf1+

7. Rf4

Now we see the reason for White's second move. Black cannot stop the pawn promoting. Just like with king and pawn against king, endings with a rook's pawn are much easier to draw. There's one trap you have to be careful about, though.

Look at this position.



It's Black's move in this position. As long as the black king stays on g7 or h7 White can make no progress. If the king moves to g6 White can win by playing Rg8+, gaining time to promote.

But suppose Black carelessly moves the king to f7. Now White has a clever way to win. Can you find it? Stop and look before reading on.

The answer is that after Kf7 White can play Rh8! Now if Black replies with Rxa7 White can win the rook by playing a SKEWER: Rh7+.

## WINNING WITH AN EXTRA PIECE

If you end up with just a king and pawn against a king you might be able to win. As you've seen it depends where the pieces are.

But if you end up with just a king and bishop or king and knight against a king the position is a draw. There's no way you can get checkmate.

So if you have an extra MINOR PIECE (bishop or knight) you're going to need to promote a pawn if you want to win.

If you've got more pawns than your opponent this is usually easy (although there's one important exception which you'll see later). If you've got a PASSED PAWN it's also usually easy. Otherwise, you'll have to win some enemy pawns first. How do you do this?

As in all endings you need a PLAN. It's no good just playing the first move you think of. You need to think ahead to work out where you want your pieces and how you're going to get them there.

Firstly, just like in all endings, your king has to be active. Always remember to use your king as a fighting piece in the ending.

Then you need to find a target. Your target will be an enemy pawn which is not defended by another pawn.

Sometimes you'll just be able to win the pawn because your opponent's king is too far away to defend it.

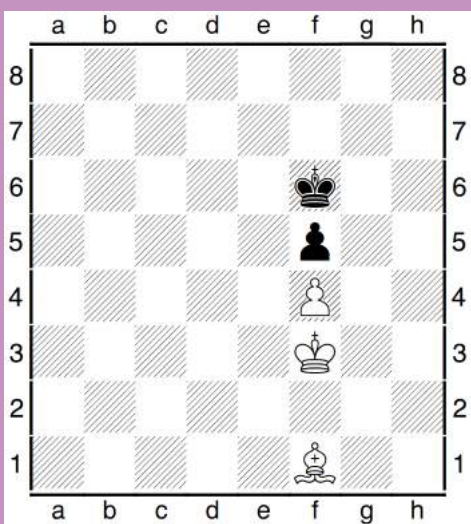
Sometimes you'll need to use a TEAM ATTACK. A TEAM ATTACK is where you attack a target with more than one piece.

So you might attack a pawn with a king and a bishop. Because your opponent only has a king they won't be able to defend the target.

If that isn't possible you'll need to use your pieces to control the squares round the enemy king and force them to move away.

Sometimes you'll be able to SACRIFICE your piece for a couple of pawns to reach a winning king and pawn ending.

You'll always need to make sure you don't run out of pawns.



Start by looking at this position. It looks at first as if Black can just sit there defending their pawn, but in fact it's very easy for White to win. Have a go yourself before reading on.

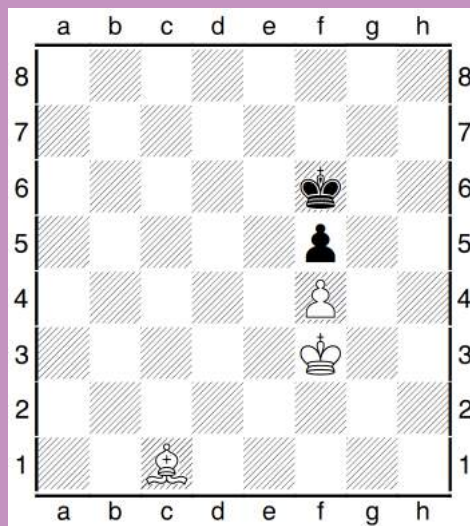


One way to win is to try to get your king round to attack the black pawn. See how it works.

1. Ke3 Ke6
2. Kd4 Kd6
3. Bc4 Ke7
4. Ke5 winning the pawn.

Or if Black tries Kf6 on move 2 the white king will go to d5 and then e5.

Now have a go at winning this position. Again, try it yourself before reading on.



Here's how play might go:

1. Ke3 Ke6
2. Kd4 Kd6
3. Ba3+

White plays a check to force the black king away.

- 3... Ke6
4. Bb4

White plays a WAITING MOVE so that the king will be able to advance.

- 4... Kf6
5. Kd5 Kg7
6. Ke5 Kg6
7. Bc5

White plays another WAITING MOVE. Black has to move away from the pawn and White will win easily.

Here, Black has an extra pawn, but it's still easy to win. First you must stop Black trading off your last pawn. Play it through yourself first before seeing how it's done.

1. Bd4+

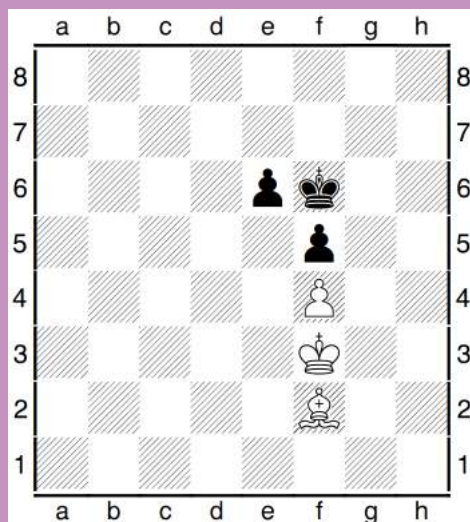
Ke3 would be a bad mistake: Black would be able to play e6-e5 and exchange off your pawn.

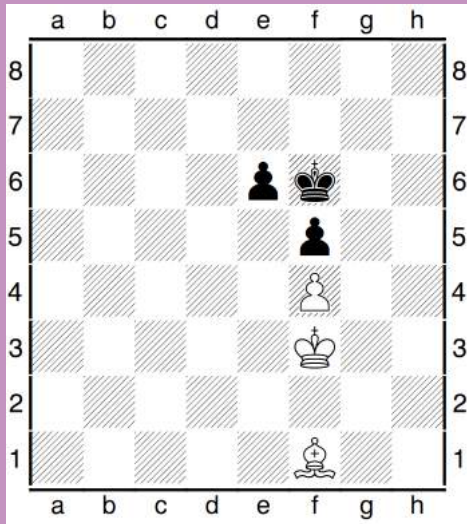
- 1... Kf7
2. Ke3 Ke7
3. Be5

Making sure Black will never play e5. Your target is the pawn on e6. You have to travel round to the queen side in order to approach it.

- 3... Kf7
4. Kd4 Ke7
5. Kc5 Kd7
6. Kb6 Ke7
7. Kc7 Kf8
8. Kd7 Kf7
9. Kd6

Now Black has to move away, leaving the pawn on f6 to be captured.





This position, though, is a draw. White cannot prevent Black from playing e6-e5 next move.

If you start with the white king on e3 instead of f3 it's an easy win.

1. Kd4

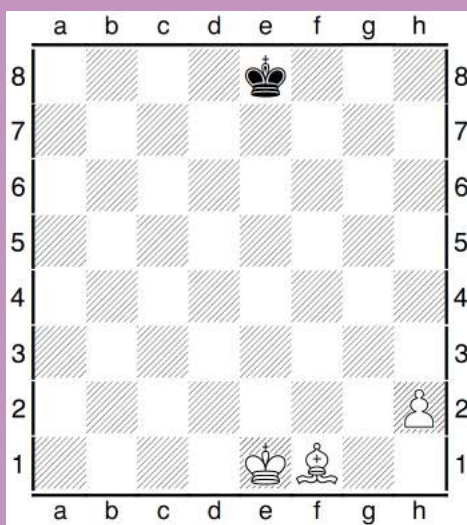
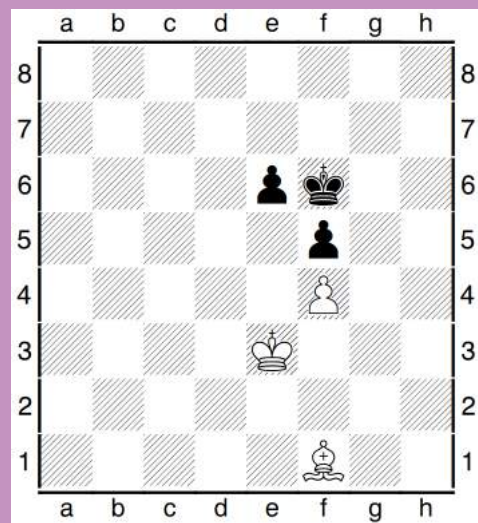
The only winning move. If the black king retreats White plays Ke5 followed by Bc4 winning the e6 pawn followed by the f5 pawn.

1... e5+

2. fxe5+ Ke6

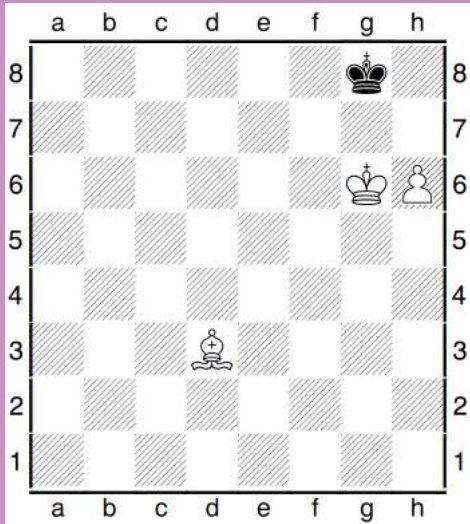
3. Bh3

PINNING the black pawn. Black has to move back and let White capture their pawn.



You'd usually expect to win easily with a bishop and a pawn against a king but there's one exception.

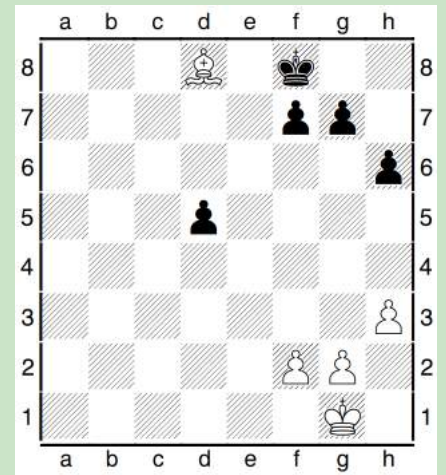
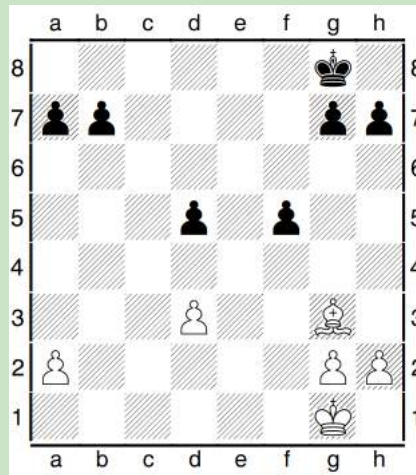
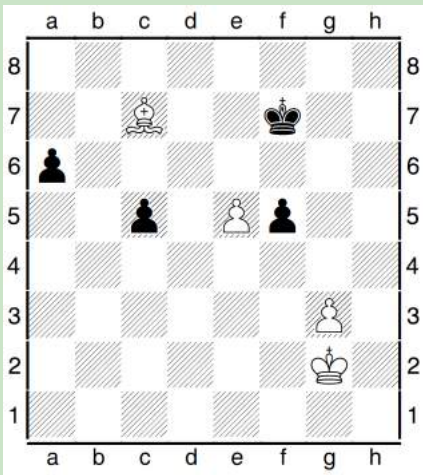
If you have a bishop and a rook's pawn, and the bishop is on the opposite colour to the queening square it's only a draw if the defending king can reach the corner. Try it out for yourself and see what happens.



You can get as far as this but once you advance your pawn to the seventh rank the black king will be stalemated in the corner.

If you have a bishop on a black square, though, it's an easy win. In the above diagram you just play h6-h7+ and if the black king tries to hide in the corner the bishop will be able to deliver checkmate along the long diagonal.

Play through these games. Take the side with the extra bishop and see if you can win. White to play



## ENDINGS WITHOUT PAWNS

Sometimes you'll find yourself in an ending without any pawns. It helps if you know which positions are winning and which are drawing.

We'll start with endings with bishops and knights.

King and knight against king.

It's a DRAW. There's no way you can get checkmate.

King and bishop against king.

It's also a DRAW. Again there's no way you can get checkmate.

King and bishop against king and knight.

It's possible for either side to win but only if the other player does something really stupid, so agree a DRAW.

King and knight against king and knight.

Again, you can only win if your opponent does something really stupid so agree a DRAW.

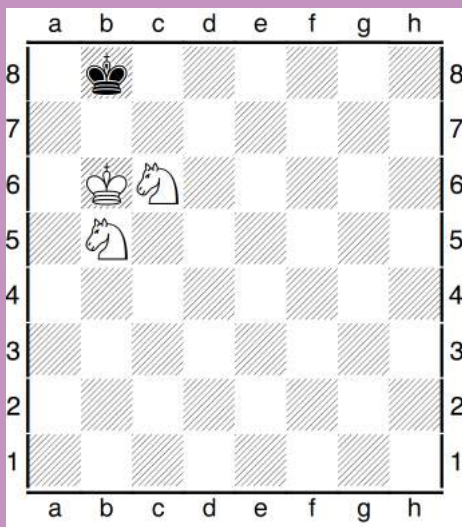
King and bishop against king and bishop.

If the bishops are on the same colour square it's a DRAW - there's no way you can get checkmate.

If the bishops are on opposite colour squares you can only win if your opponent does something stupid, so agree a DRAW.

King and two knights against king.

You can only win if your opponent makes a mistake so it's best to agree a draw



In this position if Black plays Ka8 White will play Nc7# but if they play Kc8 instead they're safe.

You can sometimes win with king and two knights against king and pawn, though, because you can force the enemy king into the corner. There's no stalemate because they have a pawn they can move.

Here's an example. White wins like this:

1. Kf3 Kh2
2. Ne3 Kh3

If 2... Kg1 White wins by playing 3. Kg3 Kh1 4. Nd2 Kg1 5. Nf3+ Kh1 6. Ng4 b3 7. Nf2# Or if 2... Kh1 then 3. Kg3 Kg1 4. Nd2 b3 5. Nf3+ Kh1 6. Ng4 b2 7. Nf2#

3. Ng2 Kh2
4. Nf4 Kg1
5. Ke2 Kh1
6. Kf2 Kh2
7. Nd2 b3

Setting a trap. If White takes the pawn it's only a draw.

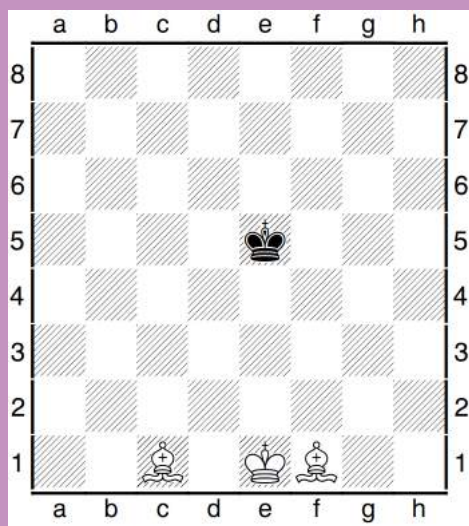
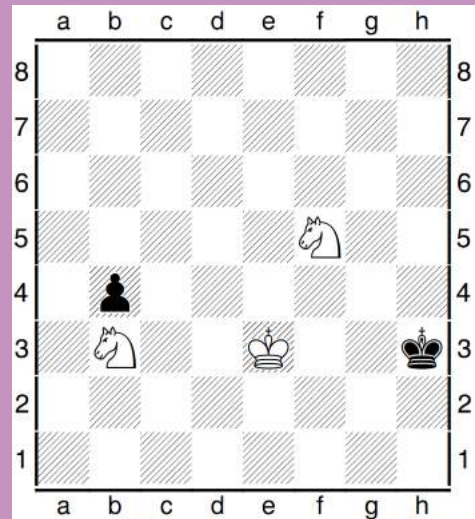
8. Nf3+ Kh1

9. Ne2

Without the pawn this would be STALEMATE.

- 9... b2

10. Ng3#



King and two bishops against king.

This doesn't happen very often but it's still worth learning. It's a bit harder than the king and rook checkmate.

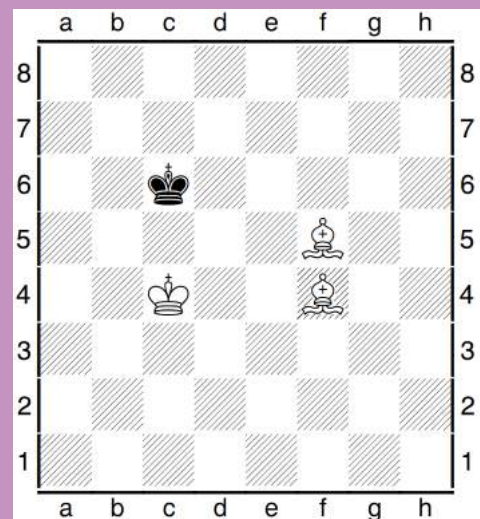
What you have to do is force the enemy king into the corner one diagonal at a time. To force checkmate you'll need your king a knight's move away from the corner and you'll also have to be careful to avoid STALEMATE.

Play through this example and see how it works.

1. Bd3

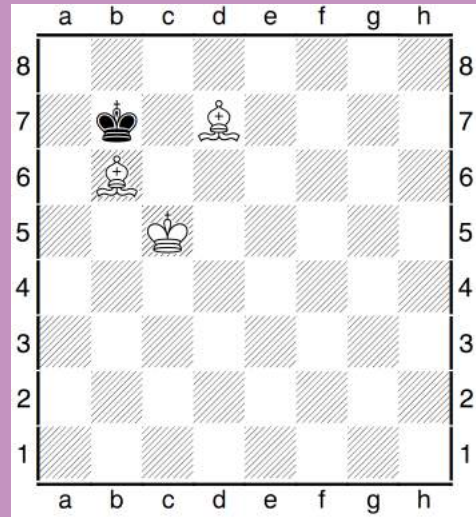
We start by putting the bishops on the next diagonals to each other: b1-h7 and c1-h6. We need the king to help us so next we bring the king up the board.

- 1... Kd4
2. Kd2 Kd5
3. Kc3 Ke5
4. Kc4 Kd6
5. Bf4+ Kc6
6. Bf5



Again the bishops are on neighbouring diagonals. Look at the squares they control.

- 6... Kb6
- 7. Bd7
- To control c6
- 7... Ka5
- 8. Kc5
- Forcing the black king towards the corner
- 8... Ka6
- 9. Bc7 Kb7
- 10. Bb6

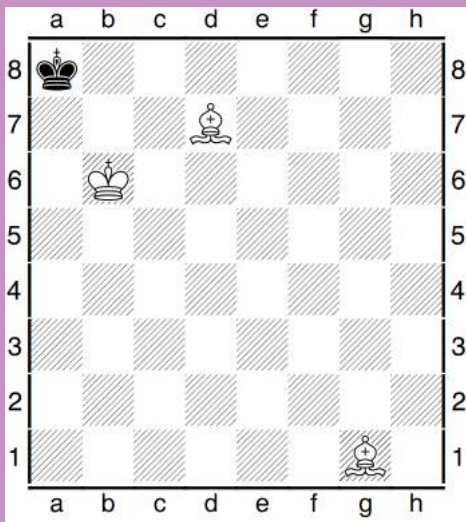


Now the bishops are on the a4-e8 and a5-d8 diagonals. The bishop on d7 also controls the c8 square. If the black king goes to a6 Bc8 is checkmate so they have to move towards the corner.

- 10... Kb8
- 11. Kc6 Ka8
- 12. Bg1

You have to be careful here. Kc7 would be STALEMATE. White retreats their bishop (c5, d4, e3 or f2 would have been just as good) to clear the b6 square for their king.

- 12... Kb8
- 13. Kb6 Ka8



You still have to be careful. Bh2 would be STALEMATE. White has to play a WAITING MOVE with one of their bishops to force Black to b8 first. They have several to choose from.

- 14. Bh3 Kb8
- 15. Bh2+ Ka8
- 16. Bg2#

That's how you do it. It's a good idea to practise it yourself until you're really good at it.

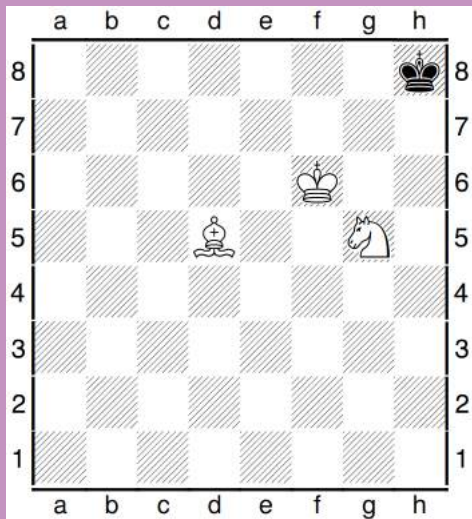
King, bishop and knight against king.

If you thought the two bishop mate was hard, this is a lot harder. It's very rare, though, so you don't really need to know it yet. We'll just take a quick look.

To force checkmate you have to drive the enemy king into a corner square of the same colour as that of your bishop's squares.

In this example White has a white squared bishop so Black has run into a black corner square.

Now we decide to force them to a8 one square at a time.



Here's how we might do it.

1. Nf7+ Kh7
2. Be4+ Kg8
3. Bf5

A WAITING move. We're going to play Bh7 next move to control the g8 square.

- 3... Kf8
4. Bh7 Ke8
5. Ne5

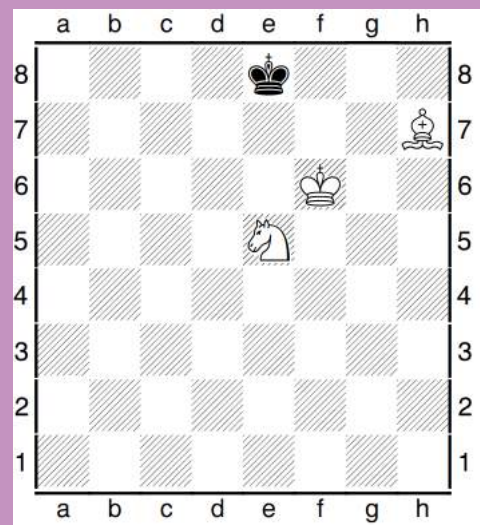
Heading for d7 to control the f8 square.

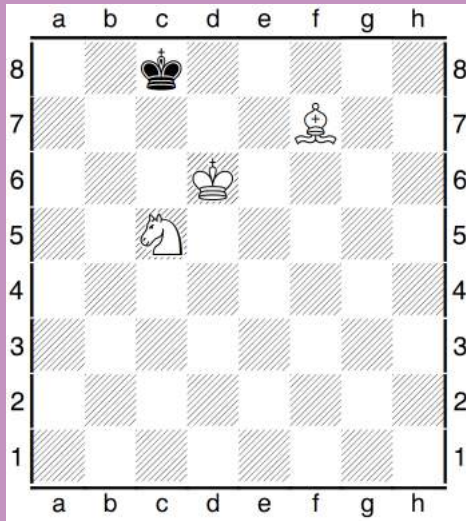
Now Black has two choices. Black can play Kf8 (Plan A) to try to get back to h8 or make a bid for freedom with Kd8 (Plan B). Let's look at each plan in turn.

- 5... Kf8
6. Nd7+ Ke8
7. Ke6 Kd8
8. Kd6 Ke8
9. Bg6+

Controlling e8. Now the knight has to go to b7 to control d8.

- 9... Kd8
10. Nc5 Kc8
11. Bf7



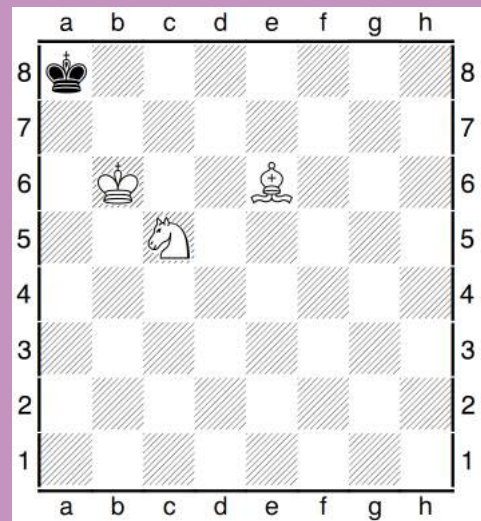


Another WAITING MOVE.

- 11... Kd8
12. Nb7+ Kc8
13. Kc6 Kb8
14. Kb6 Kc8
15. Be6+

Controlling c8 and forcing Black towards the corner.

- 15... Kb8
16. Nc5 Ka8



17. Bd7

Na6 would be STALEMATE so White plays another waiting move.

- 17... Kb8
18. Na6+ Ka8
19. Bc6#

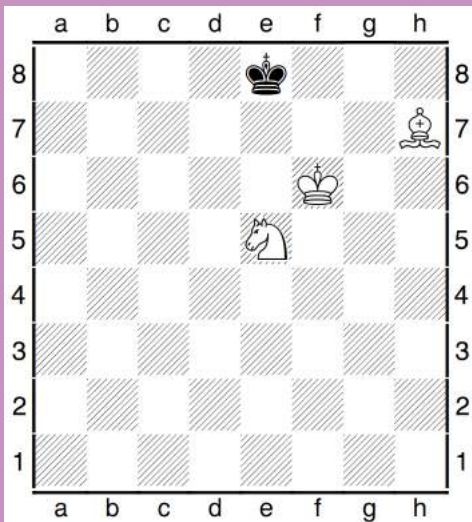
Look carefully at the routes taken by the white pieces.

The king moved along the 6th rank: e6, d6, c6, b6.

The knight performed a zigzag between the 5th and 7th ranks: f5, e4, d7, c5, b7.

The bishop zigzagged between the 6th and 7th ranks: h7, g6, f7, e6, d7, c6.





Now we go back to this position and see what happens if the black king tries to escape from the back rank.

- 5... Kd8
- 6. Ke6 Kc7
- 7. Nd7 Kc6

It looks as if Black's escaping, but...

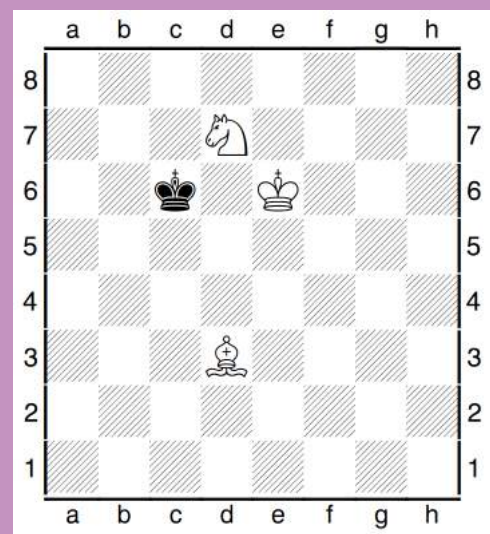
- 8. Bd3

Look carefully at this position. White's pieces form a net. Their knight controls c5 and b6 while their bishop controls b5 so Black's king has to move back towards the corner.

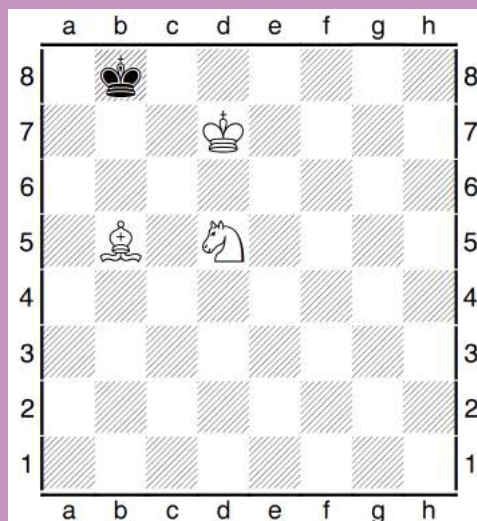
- 8... Kc7
- 9. Bb5

White could also play Be4, forcing the black king to the back rank, when they would switch to Plan A.

- 9... Kd8
- 10. Nb6 Kc7
- 11. Nd5+ Kd8



- 12. Kf7 Kc8
- 13. Ke7 Kb7
- 14. Kd7 Kb8



- 15. Ba6

The quickest way to win. The black king is now confined to the three corner squares.

- 15... Ka7
- 16. Bc8 Kb8
- 17. Nb4 Ka7
- 18. Kc7 Ka8
- 19. Bb7+ Ka7
- 20. Nc6#