

Chess Training Program for Teachers

Created by

Grandmaster Susan Polgar

President and Founder of the Susan Polgar Foundation

FIDE Senior Chess Trainer

2006 Women's World Chess Cup Champion

Winner of 4 Women's World Chess Championships

The only World Champion in history to win the Triple-Crown (Blitz, Rapid and Classical)

10 Olympic Medals (5 Gold, 4 Silver, 1 Bronze)

3-time US Open Blitz Champion

Currently the #1 ranked woman player in the United States

Ranked #1 in the world at age 15 and in the top 3 for more than 21 consecutive years

First woman in history to qualify for the Men's World Championship

First woman in history to earn the Grandmaster title



www.SusanPolgar.com
www.SusanPolgarFoundation.org
www.SusanPolgar.blogspot.com
www.BestChessTraining.blogspot.com

Lesson 1

Lesson goals:

- Excite kids about the fun game of chess
- Relate the cool history of chess
- Incorporate chess with education: Learning about India and Persia
- Incorporate chess with education: Learning about the chess board and its coordinates

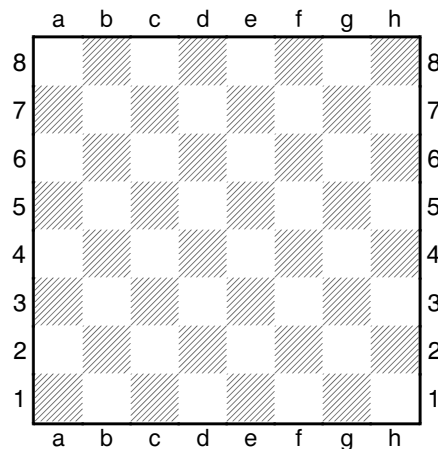
Who invented chess and why?

Talk about India / Persia – connects to *Geography*

Tell the story of “seed”.

There can be possible homework relating to India and Persia. Do online search or lesson in class. What are the countries called today (which used to be called Persia)? What is the population of India? Which countries border India? What is the official language of India? Etc.

Introduce “The Chess Board”



How many squares (64)? How many White / Black squares (32 each)?

What are Ranks (1-8), Files (a-h), Diagonals, Kingside, Queenside, etc.

The horizontal lines going up (1-8) are called Ranks, and the vertical lines from left to right (a-h) are referred to as Files. Diagonals are rows of squares of the same color slanting across the board. There are many diagonals on the chessboard. The side with the letters a through d is called Queenside and e-h called Kingside.

Practice Names of squares. Find a1, c4, g6 and so on.

Stress how chess can be used in the children’s everyday life, such as reading a map. (*Geography*)

Lesson 2

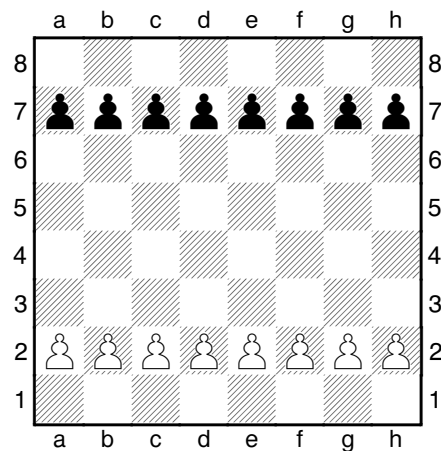
Lesson goals:

- Introduce the Pawn
- How the Pawn moves
- How the Pawn captures
- What is Pawn promotion?
- What is the scoring system in chess?

The Pawn - Value = 1 Point each.

There are eight Pawns for each side.

This is how we set them upon the 2nd and 7th rank



Here are the rules about Pawn moves:

Pawns move straight ahead one square at the time. However, in any chess game, each Pawn can move forward (jump) two squares once from its initial position. If a Pawn is still in its starting position it can choose to move one or two squares up. Once it has moved (one or two squares), that Pawn can only advance one square up at the time.

Pawns, unlike other chess pieces, capture differently than they move. The Pawn moves forward but captures diagonally.

Pawns are the only pieces which do not move backwards!

The Pawn is the only piece which can *promote* (become another piece). It can become any piece except a King. Once a Pawn reaches the last rank, the Pawn cannot remain a Pawn. It must become another piece such as Queen, Rook, Bishop or Knight. The Pawn usually promotes to a Queen as it is the most valuable piece in chess.

Play the “Pawn War” (without Kings!) game. The goal is to get across to the other side of the board and - promote. The one who promotes first wins!

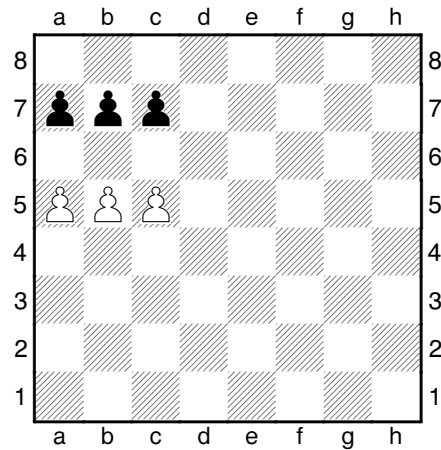
What is the scoring system in chess? *Math*

1 point for win

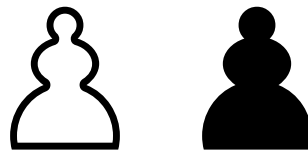
½ point for draw

0 for loss

At the end of the lesson show the basic pawn breakthrough with symmetrical Pawns.



Solution: 1.b6! The only move which wins! If then 1...axb6 2.c6! bxc6 3.a6 or 1...cxb6 2.a6! bxa6 3.c6. If it is Black to move the only correct defense is 1...b6! On the other hand, 1...c6 loses to 2.a6! or 1...a6 loses to 2.c6!

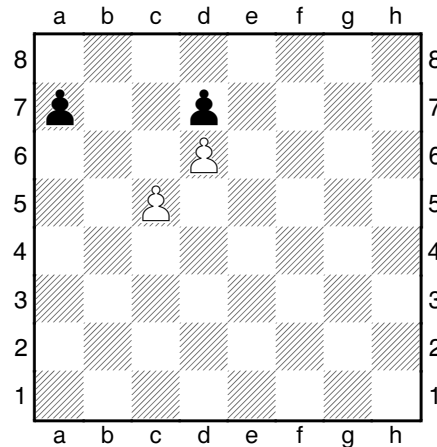


Lesson 3

Lesson goals:

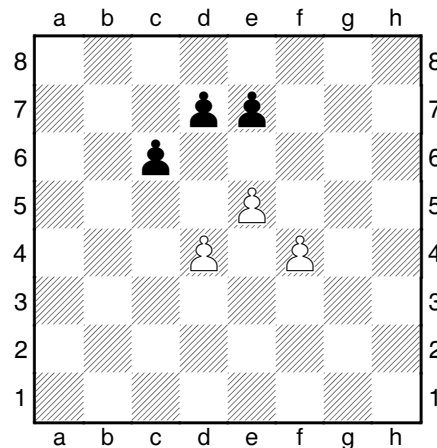
- How to use your Pawns more effectively
- The “Break through” in Pawn endgames
- Introduce a special “En passant” rule
- Relate to France / French culture

The importance of passed Pawns and how to create them!



In the position above, White can sacrifice a Pawn to create a passed Pawn and promote it. Solution: 1.c6 and after Black answers with 1...dxc6 2.d7 and the Pawn promotes on the next move.

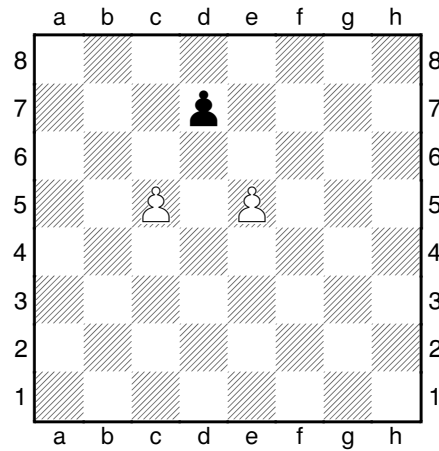
In the position below



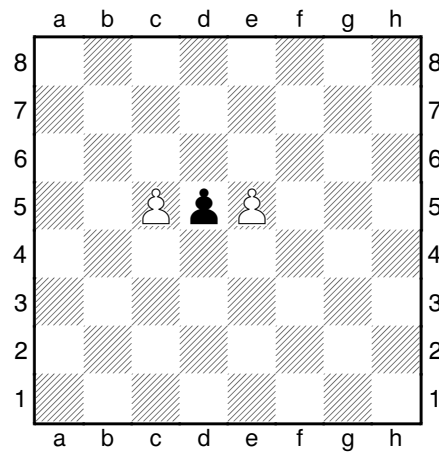
White should continue with f4-f5, followed by f5-f6 creating a passed Pawn.

The “En passant” rule: When any Pawn moves two spaces up from its initial position, it may need to worry about an unexpected danger. En passant is a French expression used in chess. It means “In Passing”.

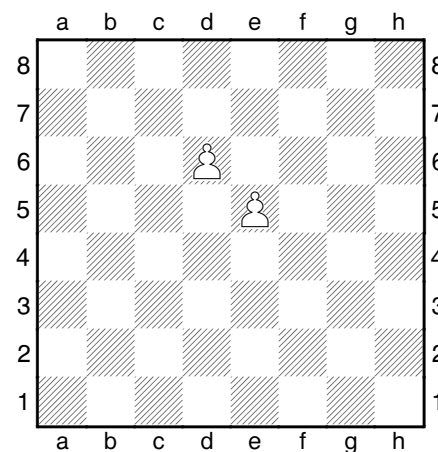
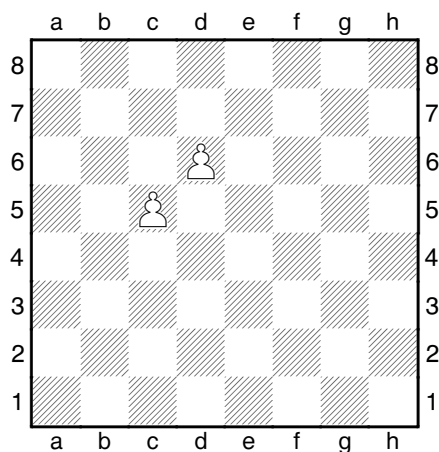
Let's see an example:



In the position above after Black plays 1...d7-d5



White can capture with either the e5 or c5 Pawn by moving it to d6 and removing Black's Pawn on d5 from the board, as shown in the diagram below.



Remember "en passant" can only be done immediately after the opponent's Pawn moved two squares up or this special right is lost.

Practice more "Pawn wars" while using the en passant rule as well!

The "French connection" lesson: Look for a couple of French related words, cities, food, etc.

Lesson 4

Lesson goals:

- Introducing the Rook
- The value of the Rook
- How the Rook moves and captures
- How the Rook can/should fight against Pawns

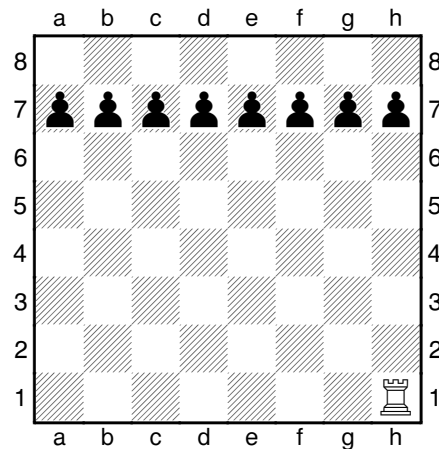
Introduce the Rook. Each side has two Rooks. Their starting positions are a1 and h1 for White and a8 and h8 for Black.

What does a Rook look like? A tower or castle

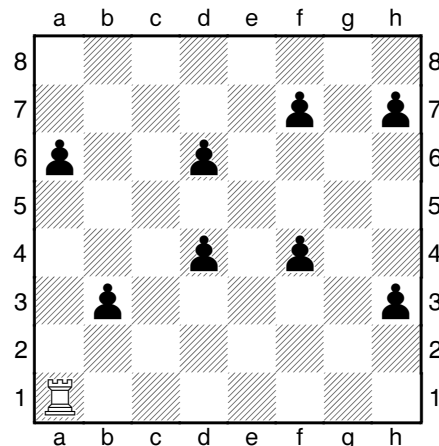
Value = 5 Points or equivalent to 5 Pawns

The Rook moves on “tracks like a train”. Always in straight lines, up, down, left, or right.

See examples of how to capture 8 Pawns (with no other pieces on the board, only White moves) with the Rook.



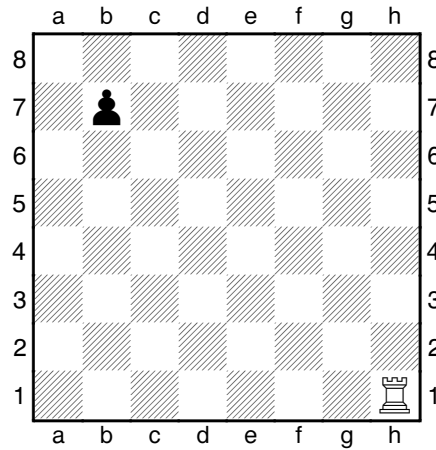
Solution: The Rook can capture all the Black Pawns, in the following order: h7, g7, f7, e7, d7, c7, b7 and a7. Here is another example:



Solution: The Rook can capture all the Black Pawns in the following order: a6, d6, d4, f4, f7, h7, h3 and b3.

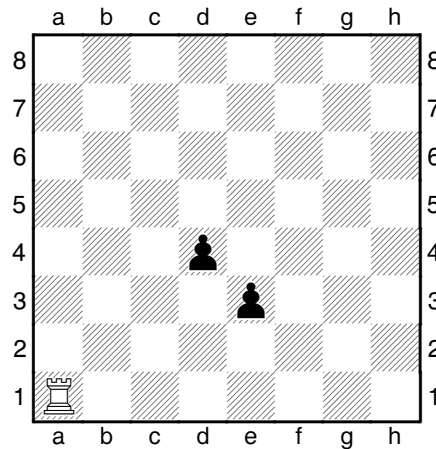
You can find many further examples in the “Chess Mazes” book.

See examples, when Rook versus Pawns, both sides are making moves.



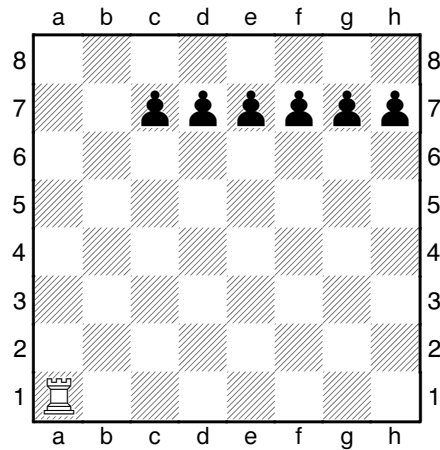
Which is the fastest way to capture the Black Pawn? 1.Rb1 then Rxb7

In the next position, White has to play accurately to make sure neither Black Pawn will promote.

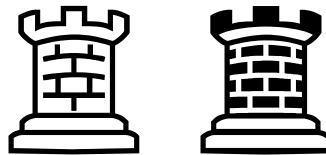


Here it would be wrong to attack the d4 Pawn with 1.Rd1 because after 1...e2 2.Re1 d3 one of the Black Pawns will promote. The correct answer is 1.Re1! and Black soon will lose both of the Pawns. For example: 1...d3 2.Rxe3 d2 3.Rd3.

Let the students play games from this position:



Play up to 20 moves. If by then white hasn't captured all of Black's Pawns or Black hasn't promoted any of the Pawns call it a draw.

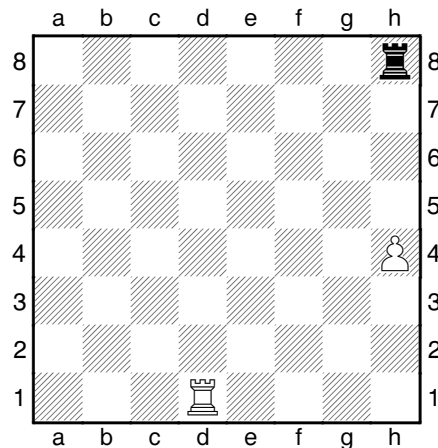


Lesson 5

Lesson goals:

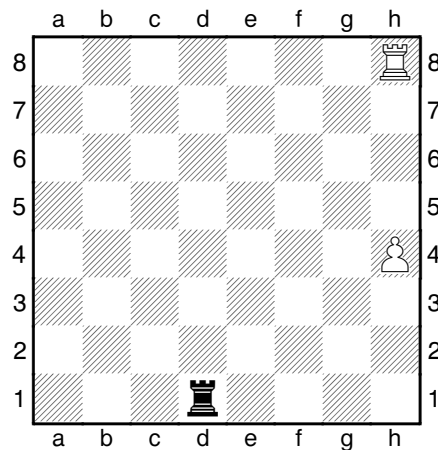
- How a Rook can best help (or fight against) a Pawn
- Introduce the Bishop
- How the Bishop moves and captures
- Compare the values of the Pawn, Bishop and the Rook

Here is a basic Rook and Pawn versus Rook endgame principle: usually a Rook is better behind a Pawn whether it is your own or your opponent's Pawn. See examples:



In the position above, the White Rook should defend the Pawn on h4 from h1. (Defending from d4 makes no progress as Black would simply make waiting moves with the Rook along the h file) Then, after 1...Rh5 (which tries to prevent a Pawn from advancing), White makes a "waiting move" 2.Rh2 or 2.Rh3. After that the Black Rook must move away from h5, allowing White's Pawn to advance. For example: 2...Rh8 3.h5 Rh6 4.Rh2 Rh8 5.h6 Rh7 6.Rh1 Rh8 7.h7.

On the other hand if the Rook of the defensive side is behind the Pawn, the Pawn cannot reach the promotion square successfully. Let's reverse the color of the Rooks from our last example.



Here Black can hold up White's Pawn by playing 1...Rh1 and simply making moves along the h file. (By the way 1...Rd4 2.h5 Rd5 3.h6 Rd6 4.h7 Rd7 also works in this case.)

Of course it is important to stress that these are basic training examples, no other pieces on the board.

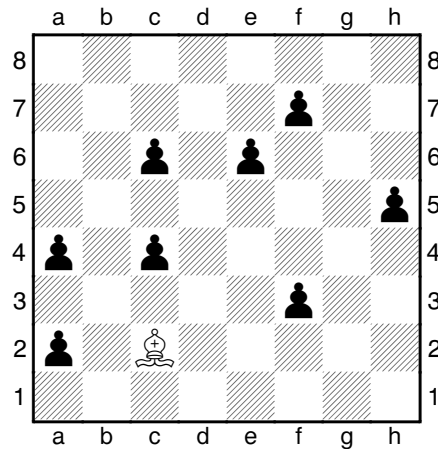
Introduce the Bishop. Each side has two Bishops. Their starting positions are c1 and f1 for White and c8 and f8 for Black.

What does the Bishop look like? Show several Bishops from various sets. The slit symbolizes the two-pointed hat that Catholic Bishops wear.

Value = 3 Points or equivalent to 3 Pawns

The Bishop moves only on *diagonals* consisting of the same color squares as the Bishop is on. It can never move to a different color square than where it starts at the beginning of the game.

Show examples of how to capture 8 Pawns (with no other pieces on the board, only White moves) with the Bishop.



Solution: The Bishop can capture all of Black’s Pawns (assuming that only White moves), in the following order: a4, c6, f3, h5, f7, e6, c4 and a2.

You can use the “Chess Mazes” book for further examples.

Play a few games 2 Bishops vs. 2 Rooks, each starting in their regular starting positions. If within 15 moves neither side won any piece it’s a draw. Whoever captures a piece wins the game. If one side wins a Bishop but on the next move the other side can capture a Rook, the side winning the Rook wins (as it is a more valuable piece).

Do math exercises. What is worth more? 1 Rook or 2 Bishops? 7 Pawns or a Rook? etc.

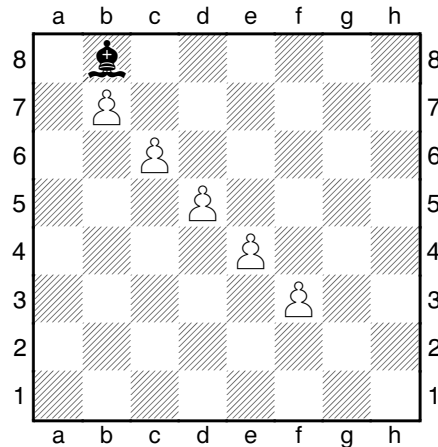


Lesson 6

Lesson goals:

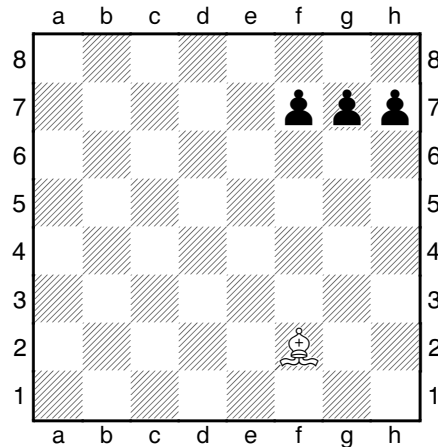
- How can the Bishop be used effectively against Pawns
- Introducing the Queen
- The value of the Queen
- How the Queen moves and captures

All Pawns can be blocked if they are on the same diagonal see example.



In the above position, the Black Bishop effectively blocks the road of all the White Pawns.

Again without Kings on the Board, play games of a Bishop versus 3 Pawns (from the position you see below) to get a better feel of the Bishop's powers and limitations.



If one of the Pawns promotes, that's a win, also if one side loses the Bishop that's a loss. If all the Pawns are lost, the side with the Bishop wins.

After experimenting in the classroom show the correct method of play:

White can hold up all three Pawns and eventually capture them. But only if White finds the correct plan starting with 1.Bc5!, followed by 2.Bf8. For example: 1...h5 2.Bf8 g5 3.Be7 g4 4.Bh4 f5 5.Bg3. Now Black starts losing the Pawns 5...h4 6.Bxh4 f4 7.Bg5 f3 8.Bh4.

However, attacking the Pawn from d4 would not serve the same purpose: 1.Bd4 f6! 2.Bc5 h5 3.Bf8 h4 4.Bxg7 h3 5.Bxf6 and after 5...h2 the Pawn cannot be caught.

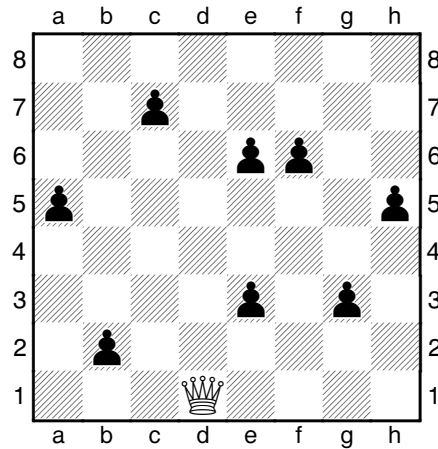
Introduce the Queen. Each side has one Queen. Their starting positions are d1 for White and d8 for Black.

What does the Queen look like?

Value = 9 Points or equivalent to 9 Pawns / 2 Bishops and 3 Pawns / 2 Bishops and 1 Knight / 2 Knights and 1 Bishop / 1 Bishop or 1 Knight and 6 Pawns, etc.

The Queen moves on files, ranks and diagonals. It is like a combination of a Rook and Bishop.

Show examples of how to capture 8 Pawns (with no other pieces on the board, only the side with the Queen moves) with the Queen.



The following is the correct order of captures: h5, a5, c7, g3, e3, e6, f6 and b2.

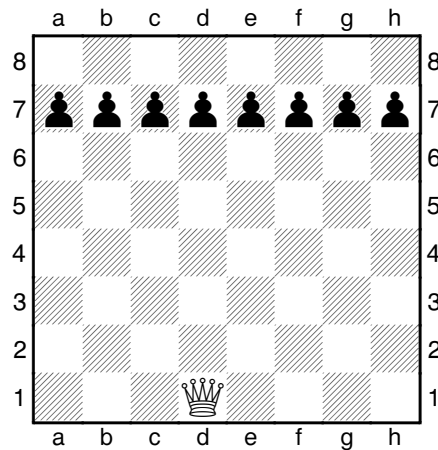


Lesson 7

Lesson goals:

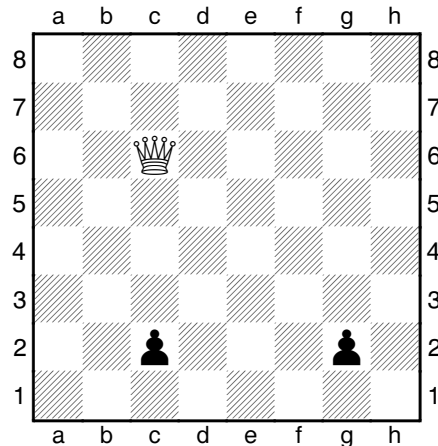
- How can the Queen be used effectively against Pawns
- The “8 Queens Puzzle” on an empty board
- Compare the value of the Queen to other pieces

Practice more examples of Queen fighting against the Pawns. Play out Queen versus 8 Pawns in their starting position. The easier example would be White to move first. To make it a little more challenging, let Black moves first.

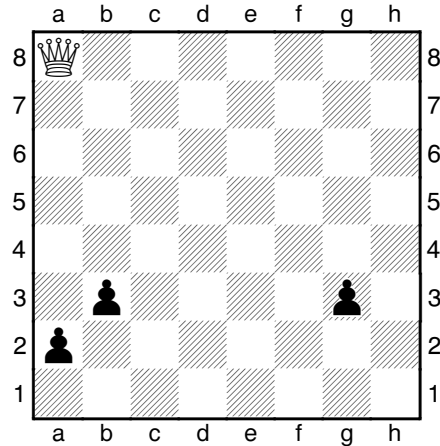


In this position, White should win against the eight Pawns because none of the Black Pawns are advanced.

The more advanced the Pawns are (meaning the closer to the promotion square they are) the more dangerous they are.

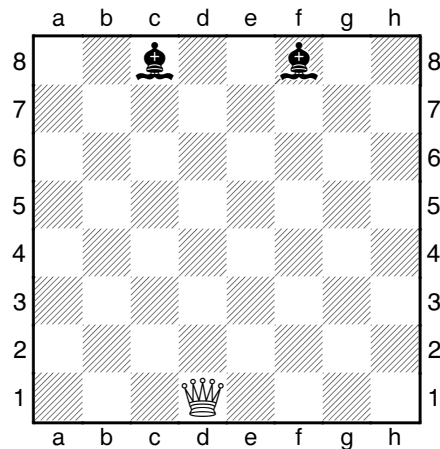


In this position, even though the Black Pawns are only one square away from promotion, they can be stopped by 1.Qc5!



In this position, Black has three far advanced Pawns. By giving one up on the Kingside with 1...g2, Black will have at least one of the three Pawns reach the promotion square.

Play Queen versus 2 Bishops game (no other pieces on the board). Black would move first here. Play 15 moves. If neither side captures any piece it's a draw.



Try to place 8 Queens on an empty board in a way that none of them can connect to other. In other words, you must place 8 Queens in such a way that none of them is in the path of another - horizontally, vertically, or diagonally.

Here is one of the many solutions: Queens on a8, b2, c4, d1, e7, f5, g3, h6.

Here is a place on the web to exercise it.

<http://www.pen.k12.va.us/Div/Winchester/jhhs/math/puzzles/games/queens/queens.html>

Lesson 8

Lesson goals:

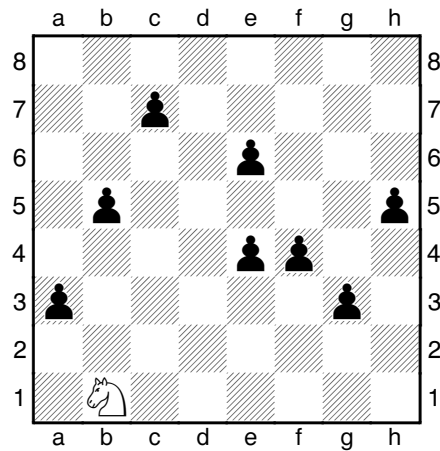
- Introduce the Knight.
- How does the Knight move and capture
- The “Knight Tour”
- The Knight’s value compared to the other pieces

What does the Knight look like?

Value = 3 Points or equivalent to 3 Pawns or 1 Bishop

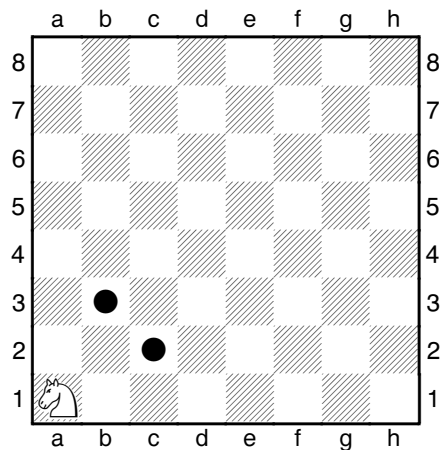
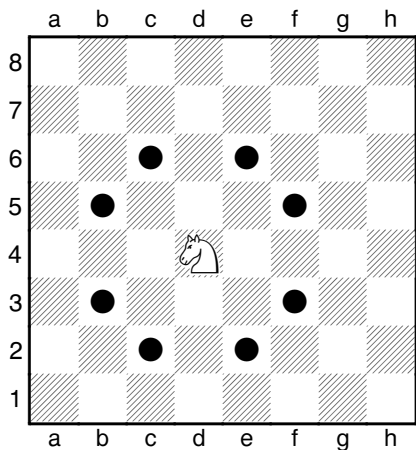
It’s also commonly referred to as horse or horsy. The Knight is the only piece which can *jump* over another piece. The Knight always alternates jumping from light to dark squares and then again dark to light and so on. It jumps in an L-shape.

Show examples of how to capture 8 Pawns (with no other pieces on the board, only the side with the Knight moves) with the Knight.



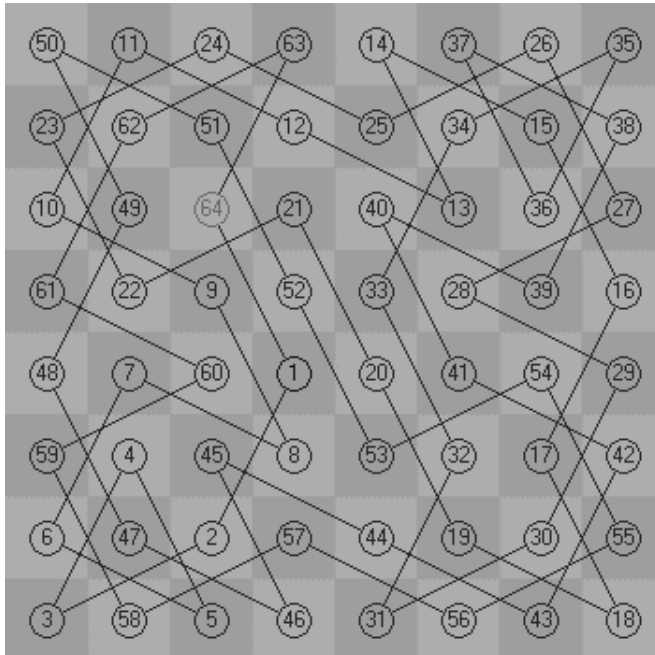
Solution: The Knight will capture all of Black’s Pawns (assuming that only White moves), in the following order: a3, b5, c7, e6, f4, h5, g3 and e4.

Show how a centralized Knight (in the middle of the board) has so many more choices of moves (8) than one in the corner (2).



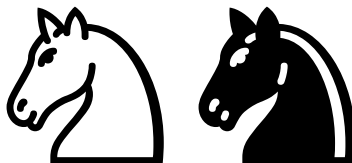
Try to jump with the Knight from one square to another covering *all* 64 squares on the chess board, landing only once on each square. Here is one of the countless solutions to the “Knight tour”. The Knight starts at square #1 and ends at #64. Here is a wonderful link to practice it:

<http://www.worle.com/chess/index.html>



If you are really interested to learn more about this fascinating subject read this:

<http://www.chessbase.com/columns/column.asp?pid=163>



Lesson 9

Lesson goals:

- Summarize the value of all the pieces
- Introduce the King
- How does the King move and capture
- What is one of the goals in chess: Checkmate!
- What is the difference between check and checkmate

Pawn = 1
Knight = 3
Bishop = 3
Rook = 5
Queen = 9

Summarize of the value of all the pieces.

Practice capturing. Play “Market”. Capture the more valuable piece.

Last but not least, introduce the King.

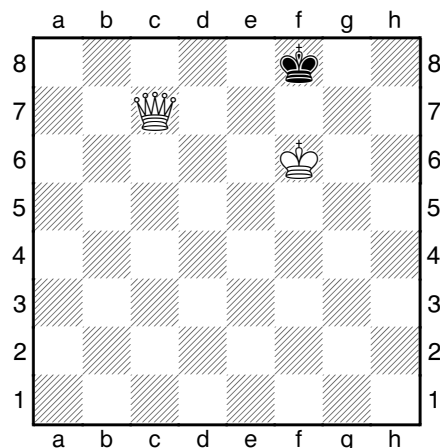
It is a slow piece and can only move one square at a time. However, it can move in any direction.

Play games with only the two Kings on the board. Whoever reaches the other end of the board first (1st/8th rank) wins.

Goal of a chess game: Checkmate! Explain the difference between check and checkmate.

Show a sample checkmate with each piece.

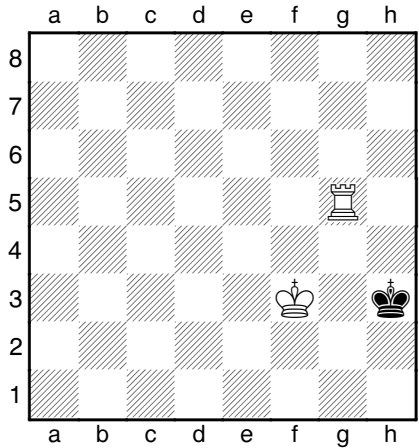
Let’s start with the Queen.



In the position above White can checkmate in four different ways. 1.Qb8, 1.Qc8, 1.Qd8 or 1.Qf7. Also point out where White can check: 1.Qd6, 1.Qc5, 1.Qe7 and 1.Qg7.

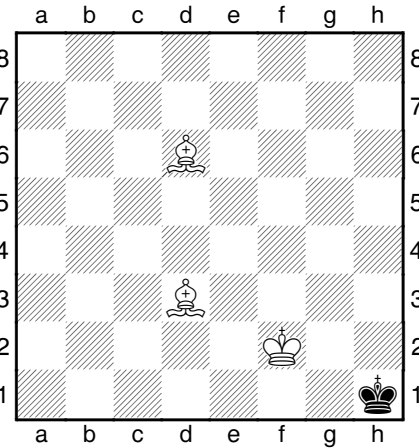
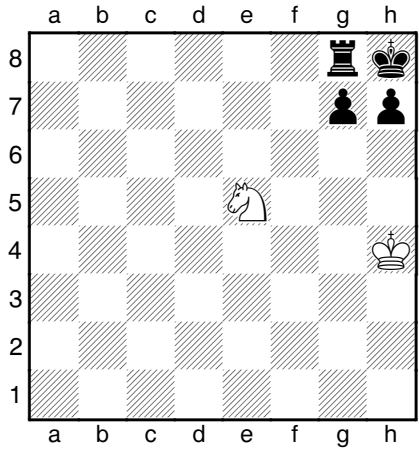
Explain after each check where would the Black King escape.

Now let's see how the Rook and the Bishop checkmate:



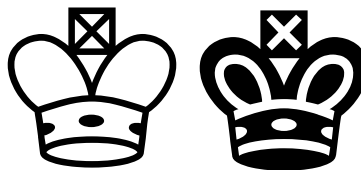
The Rook checkmates on h5 and the Bishop on e4.

And finally let's see a Knight and a Pawn checkmate.



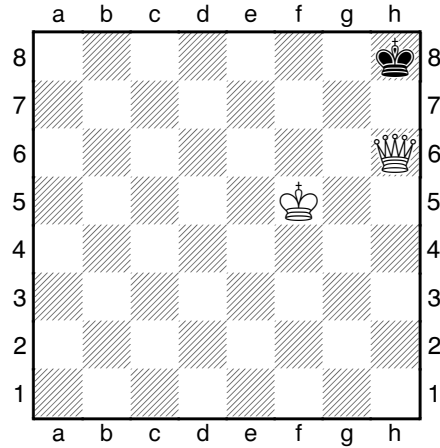
The Knight checkmates on f7 (which is called as smothered mate) and the Pawn checkmates on g7.

The number one requirement to give *checkmate* is to attack the opponent's King with one of our pieces. It can be any piece except our own King. A King can never ever directly attack the enemy King. The second requirement is – and this is the one which differentiates a check from a checkmate – to make sure the King has no escape.

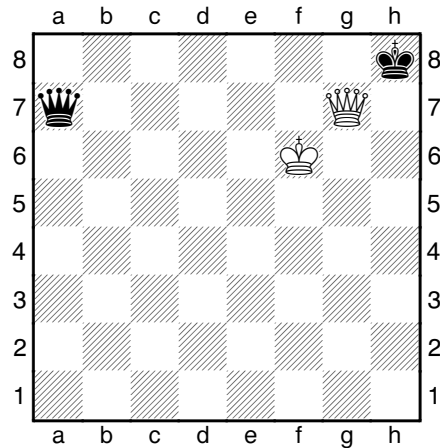


Let's see now some situations when it is almost checkmate but not quite.

In the next position, Black is in check but not checkmate.

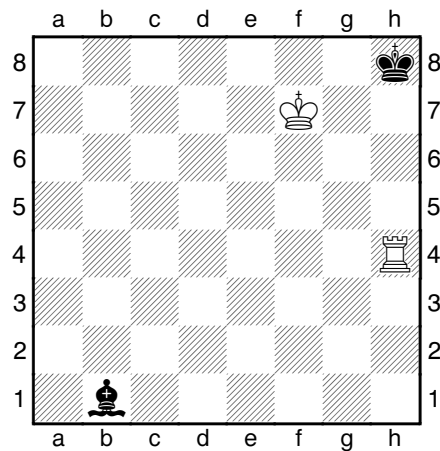


The Black King can move out of the check to g8.



Is Black checkmated in the above position? No, because the Black Queen can take the White Queen.

And here is an example when the check will be blocked by another piece interposing.



The Black King is in check and cannot escape. The White Rook cannot be captured either. Is it a checkmate? No, because the Black Bishop can block the check on h7.

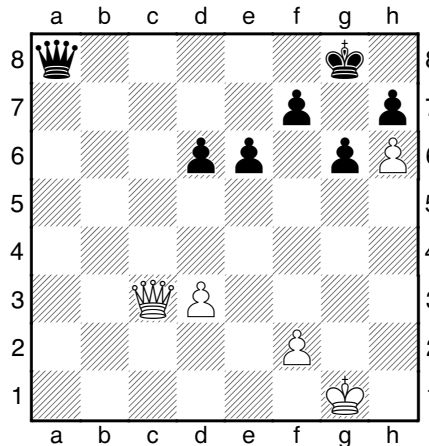
So, it is checkmate when the enemy King is under a direct attack and: 1. The King has no safe square to move to 2. It is not possible to block the check 3. It is not possible to capture the piece that is checking the King.

Lesson 10

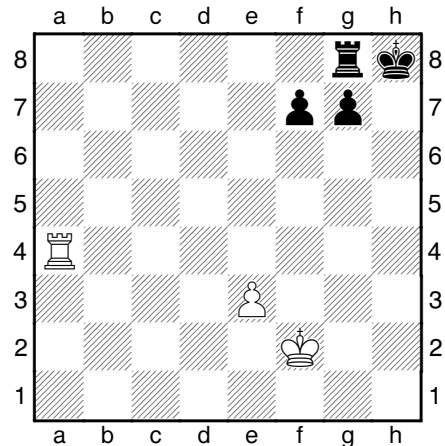
Lesson goals:

- How to checkmate in one move
- What is stalemate?
- Differentiate check, checkmate and stalemate

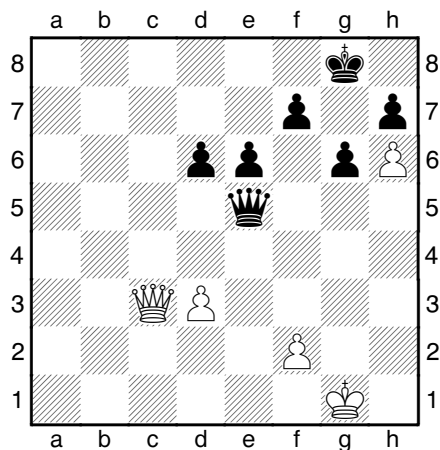
Practice checkmates in one move.



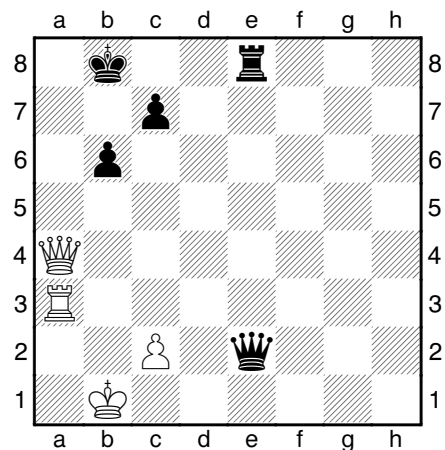
(1.Qg7)



(1.Rh4)



(1.Qc8)



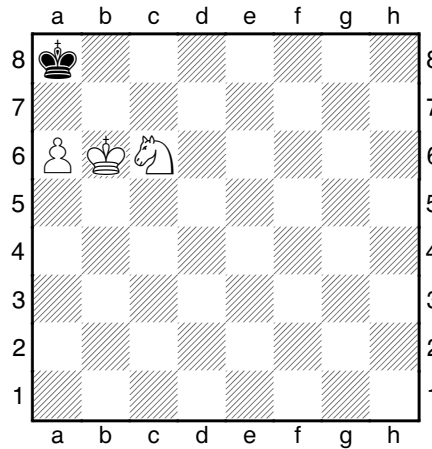
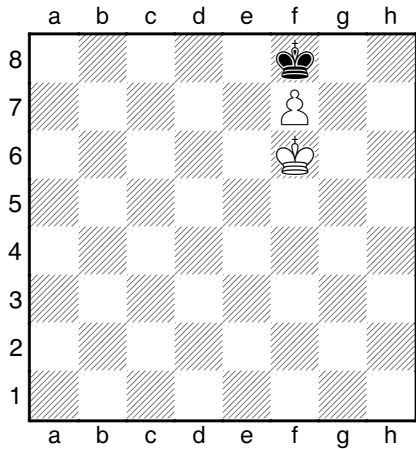
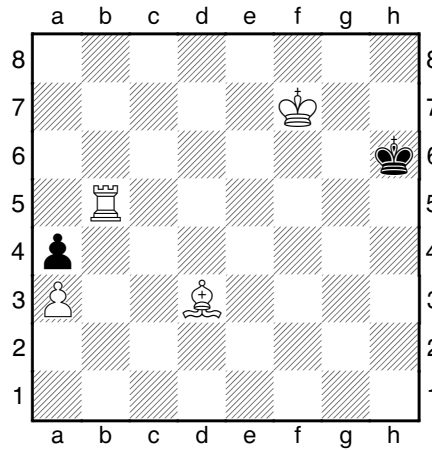
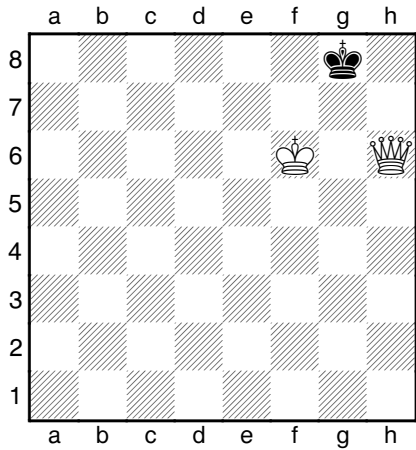
(1.Qa8)

Introduce Stalemate.

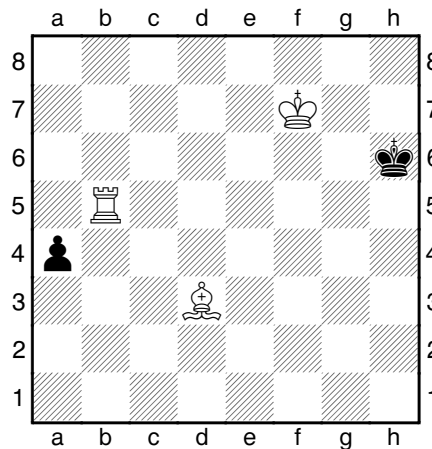
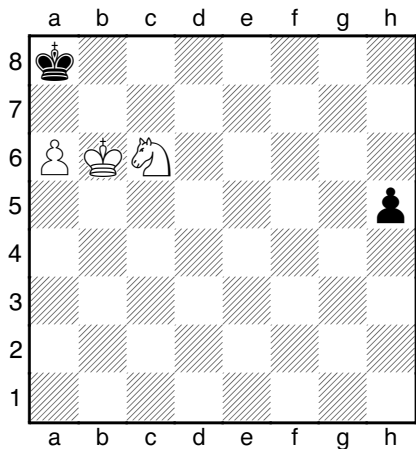
A stalemate happens when it is a player's move, his or her King is not in check, yet no legal move can be made. When stalemate occurs, the game results in a *draw*, meaning each player gets half a point. That can be very disappointing for the side which has a big advantage. Make sure you do your best to avoid stalemate when you are in a winning position.

Here are some examples.

In the four positions below, it is Black's turn. They are *stalemate* positions.



But the following positions are not stalemate, even though the Black King has no legal moves because the Pawn can move.



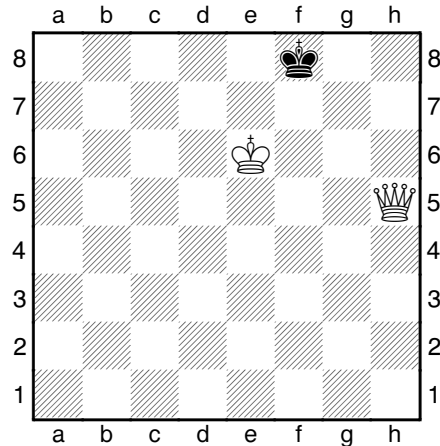
Lesson 11

Lesson goals:

- How to checkmate with King and Queen versus a lone King

Do test on differentiating between check, checkmate and stalemate.

Test for Lesson 11



White to move. Show two ways White can checkmate. Show four ways that give check. Which one of the checks would be a big mistake? Show a move that would end the game in stalemate instantly and therefore should be avoided.

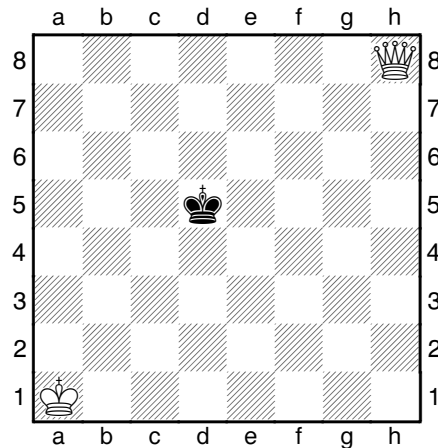
Learn to checkmate with K+Q versus K with no other pieces on the board.

There is one very important fact that we need to know about endgames with only K+Q versus K on the board: The King can only be checkmated at the *edge of the board*, namely either on the a or h file or being on the 1st or 8th rank. Naturally if there is even one single other piece on the board for either side this is not the case.

Here is the game plan:

- 1) Force the King to the edge of the board
- 2) Cut it off and making sure it stays there
- 3) Bring the King to help
- 4) Checkmate!

Now let's see it in practice:

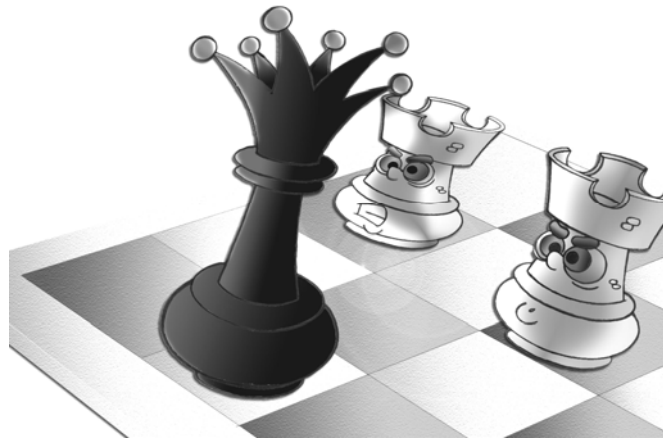


The Black King is right in the middle of the board on d5. Knowing the above mentioned "fact" we have to put as a priority forcing the Black King to the "wall".

1.Qf6 With this move, White has put the Black King in a "box". Meaning the Black King cannot cross the f file or the 6th rank. **1...Ke4** The Black King still can stay in the middle of the board.

2.Qg5 Kd4 3.Qf5 Ke3 4.Qg4 With each move, White is tightening the belt, making the box smaller and smaller. **Kd3 5.Qf4 Kc3 6.Qe4 Kd2 7.Qf3 Kc2 8.Qe3 Kd1** We have achieved goal Part 1 of the plan, the Black King has been forced to the edge of the board. With the next move White makes sure it stays there.

9.Qf2 Kc1 And now, it is time for Part 3, bringing the King to help. **10.Ka2 Kd1 11.Kb3 Kc1 12.Qc2** **checkmate.**



Lesson 12

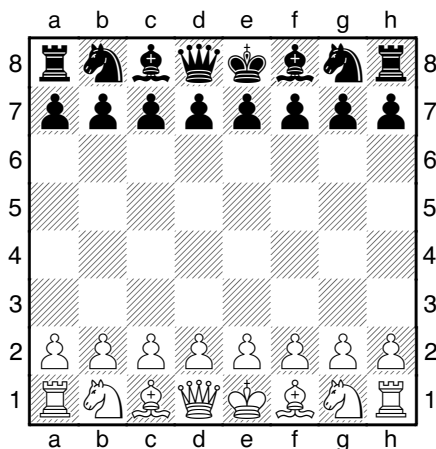
Lesson goals:

- How to set up all the chess pieces on the board
- Center
- Development
- King safety
- Basic Opening Principles

Repeat K+Q versus K checkmate method learned in Lesson 11. Let the students play a King and Queen versus King position. The side with the Queen has 20 moves to checkmate. If there is no checkmate within 20 moves, the other side wins.

(Note, this only a special rule for this exercise, not in a real game. In a real game one has up to 50 moves to checkmate. However from any given position K+Q vs. K checkmate can be reached in no more than 17 moves.)

How to set up all the pieces. Rooks are in the corner, next to the Rooks the Knights, next to them the Bishops. In the middle are the King and the Queen. The Queen is always on its on color.



White starts the chess game.

Teach the children to put the pieces neatly in the middle of the square and not in between two or more different squares.

The center (e4, d4, e5, d5 squares)

Castling rules. What is its purpose? The put the King in safety. Usually we recommend castling within the first 6-8 moves of the game to avoid the King getting in trouble.

Basic opening principles

1. Control the Center!
2. Develop your pieces as soon as possible!
3. Castle as soon as possible!
4. Do not bring out your Queen early!
5. Do not move the same piece twice, before you have completed development! (unless it is being attacked or you can capture something for free).

Chess notation

If a Queen moves from d1 to h5, we would write Qd1-h5 or simply Qh5. The symbol for capturing a piece is x. Therefore, if you capture a piece you would write Qxh5. If you give a check you add a “+” after the move.

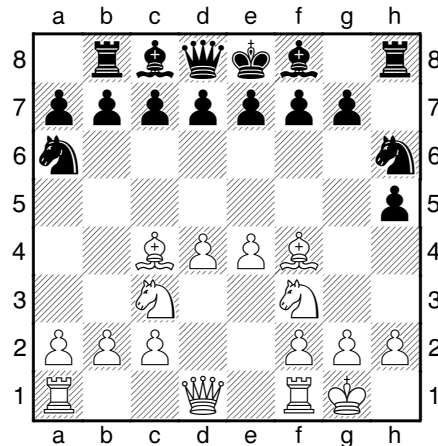
For a Rook move, you write R; For a Bishop move B; King move K; Knight move N (not to mix it up with a King move). If a Pawn moves you do not need to write P, just the name of the square the Pawn is moving to. Castling has a special notation. Castling to the King (short) side you write 0-0 and 0-0-0 for castling to the Queenside.

How to record a chess game and why? Here are two important reasons: To be able to go back and learn from your mistakes or to show off a beautiful combination. Also to be able to prove what the position is on the board in case your opponent tries to cheat.

Show miniature games. One side follows the basic opening principles while the other breaks the rules. (Also see Game 1 from Volume 1 of Polgar: Winning Chess the Easy Way)

Here is a sample which demonstrates a good start for White and a bad start for Black:

1.e4 h5 2.d4 Rh7 3.Nf3 Na6 4.Nc3 Rb8 5.Bc4 Rh8 6.0-0 Nh6 7.Bf4



In this example, White has been nicely following the basic opening principles, while Black has completely neglected them. Let the class play games focusing on following the basic opening principles and on captures.

Order of importance in chess: checkmate, winning pieces, gaining small strategical advantages.

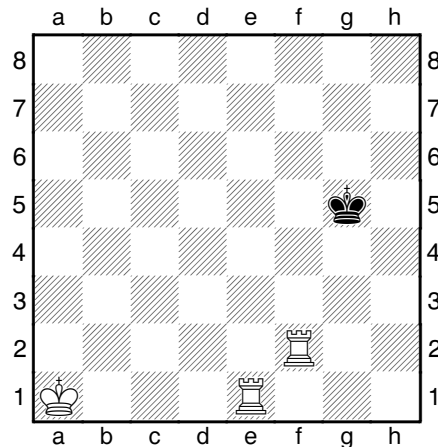


Lesson 13

Lesson goals:

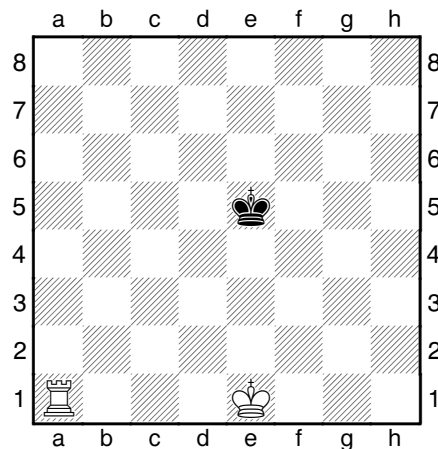
- How checkmate with two Rooks versus a lone King
- How checkmate with one Rook versus a sole King

Learn K+2R versus K checkmate method.



The method we checkmate a sole King with two Rooks is: using one Rook to limit the King's mobility (like in the above example, the Rook on f2, stops the Black King from crossing through the f file) and other Rook to check the King forcing it towards the edge of the board. Let's see how this actually works: 1.Rg1+ Kh4 2.Rh2 checkmate. You do not really need the help of the (White) King to checkmate a sole King with two Rooks.

How to checkmate with a Rook a sole King. Here, we will *need* the help of our King as one Rook cannot do it on its own.



The first step: Limiting the mobility of the Black King. **1.Ra4 Kd5** Next White brings the King to help. **2.Kd2 Ke5 3.Kd3 Kd5 4.Ra5+ Ke6 5.Kd4 Kf6** Now that the King is close by, ready to help, the White Rook starts limiting more and more the Black King's moves. **6.Re5 Kf7 7.Kd5 Kf6 8.Kd6 Kf7 9.Re6 Kg7 10.Ke7 Kg8 11.Rg6+ Kh8 12.Kf7 Kh7** And now an important waiting move **13.Rf6** (Any Rook move towards the Queen side would work, like 13.Ra6, 13.Rb6 and so on with the same purpose) **Kh8 14.Rh6 checkmate.**

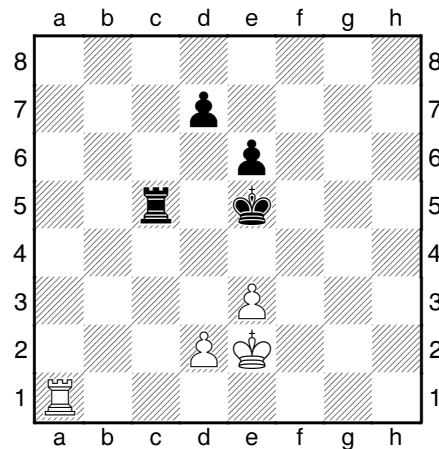
Lesson 14

Lesson goals:

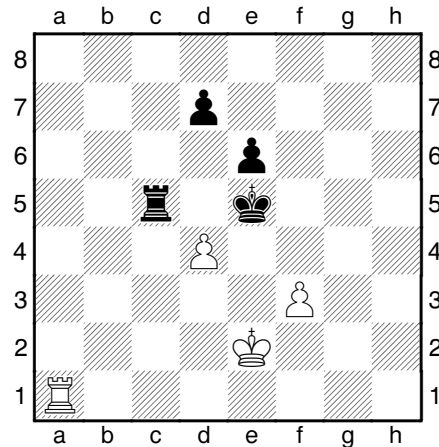
- Introduce “Fork”
- Pawn forks
- Knight forks
- “Family fork”

What is a fork? It is a tactical tool to gain material advantage or to checkmate. It is also called double attack. It means you attack two targets at once. Usually we would refer to attacking two of the opponent pieces at the same time. When one of the attacked pieces moves away we capture the other. In some other cases, we threaten with checkmate and attack an enemy piece.

Each piece can fork. Let’s start with Pawn forks.

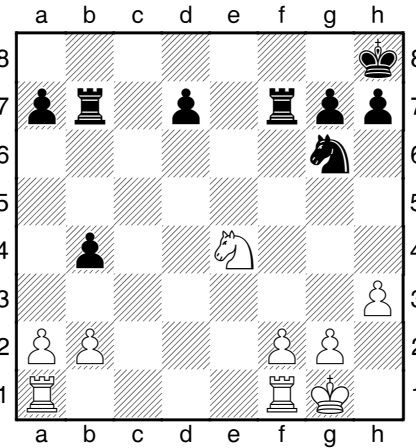
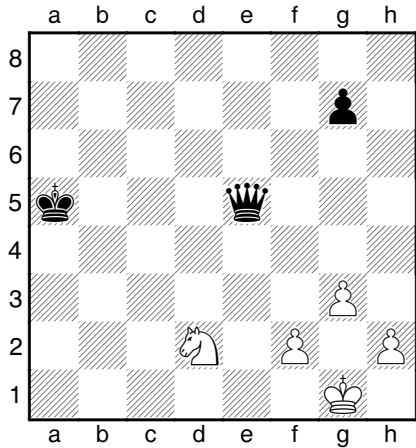


In the above diagram position White can fork with 1.d4, checking Black’s King and attacking Black’s Rook simultaneously. Black will end up losing the Rook. In this case it was important that the d4 square was protected by White’s e3 Pawn. Otherwise the Black King could capture it (on d4) as shown on the diagram below.

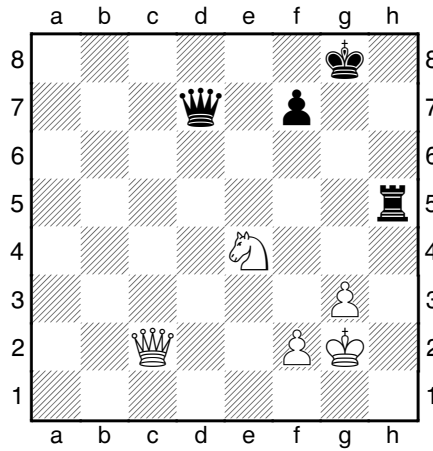


The Knight is the strongest forking piece. Let’s see some basic Knight forks:

In the first one the solution is 1.Nc4+ and in the second one, 1.Nd6 winning material in both cases.



Now let's see what is a "family fork". That occurs when a Knight attacks three major pieces (King, Queen and Rook) at the same time.



1.Nf6+ results a "family fork".



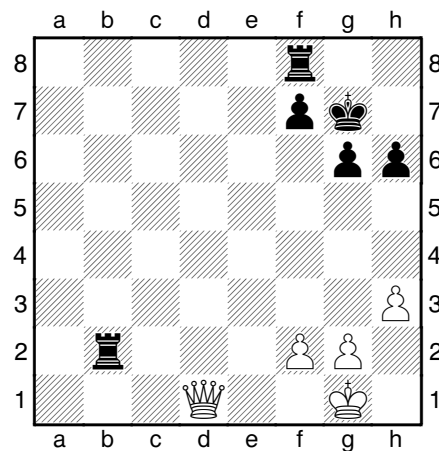
Lesson 15

Lesson goals:

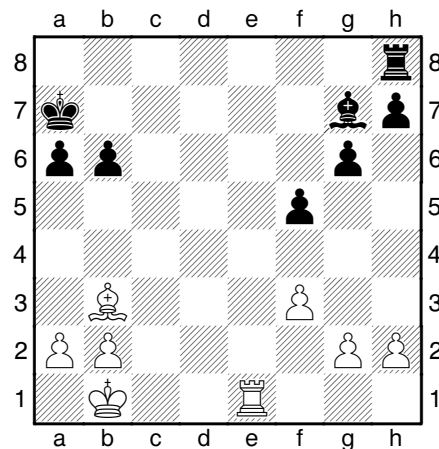
- Queen Fork
- Bishop Fork
- Rook fork
- King fork
- Counter fork

Let us learn in this lesson about Queen, Rook and Bishop forks. In concept, they are no different from the Knight and Pawn forks which we have already learned about in lesson 14.

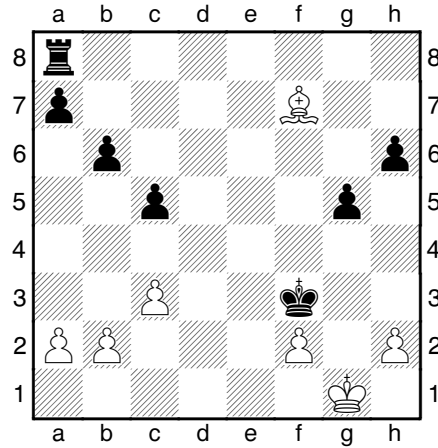
Here are a few examples:



In this position the White Queen can fork with 1.Qd4+.

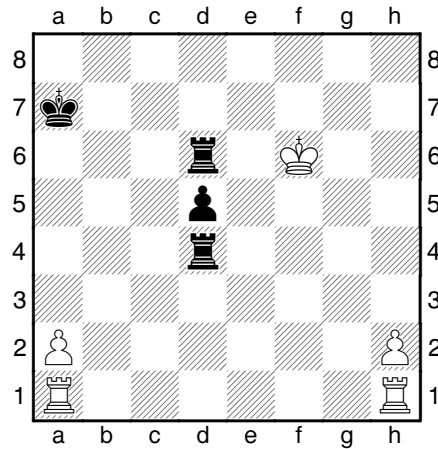


Here the White Rook will make the fork with 1.Re7+. And in the next position the Bishop is the “star”.



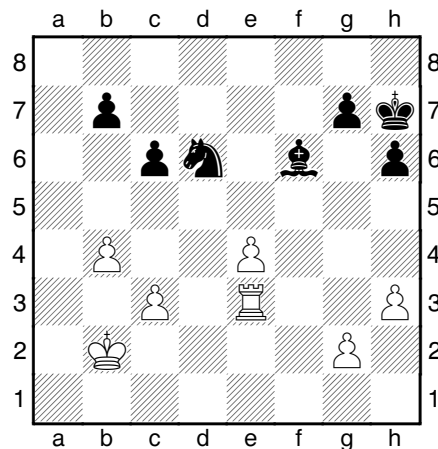
Here the solution is 1.Bd5+ forking Black's King and Rook.

Even the King can fork, although it is rare.



In the position above, White is in check, yet after moving out of the check with 1.Ke5, the King attacks both Black Rooks – resulting a fork and a gain of a Rook.

Not all forks are “deadly”. In some cases you can answer a fork with a “counter fork”.



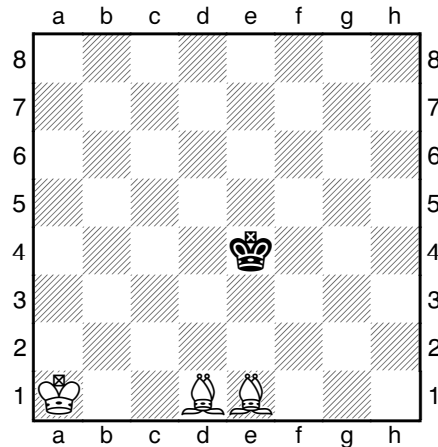
In this position White seemingly can gain material by playing 1.e5, attacking both Black Bishop and Knight. However, after a closer look we can recognize that Black comes out ahead after 1...Nc4+ winning White's Rook.

Lesson 16

Lesson goals:

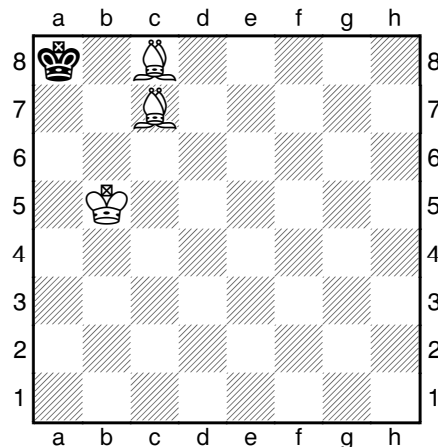
- Checkmate with two Bishops against a lone King.
- The Pin
- Absolute Pin
- Relative Pin
- Making pins

Checkmating with two Bishops and King against a lone King is somewhat slower than checkmating with the Queen or Rook. However, the general method is pretty much the same.



The two Bishops together with the King need to squeeze the other King to the edge of the board and then to the corner. **1. Kb2 Kd4 2. Bc3+ Ke4 3. Bc2+ Kd5 4. Kb3 Kc5 5. Bf5 Kd5 6. Kb4 Kc6 7. Kc4 Kd6 8. Bf6 Kc6 9. Be5 Kb6 10. Bd7 Ka5 11. Bc7+ Ka6** Again the goal is accomplished. The King has been forced to the edge of the board.

12. Bc8+ Ka7 Now the Black King is limited to moving back and forth between the a7 and a8 squares.
13. Kb5 Ka8



Again White has to be careful not to stalemate with **14. Ka6** or **14. Kb6**. **14. Be5 Ka7 15. Kc6 Ka8 16. Kc7 Ka7 17. Bd4+ Ka8 18. Bb7** checkmate.

Practice position to play out:

White: Ke8, Be1, Bd1 Black: Ke4 Try to checkmate within 30 moves.

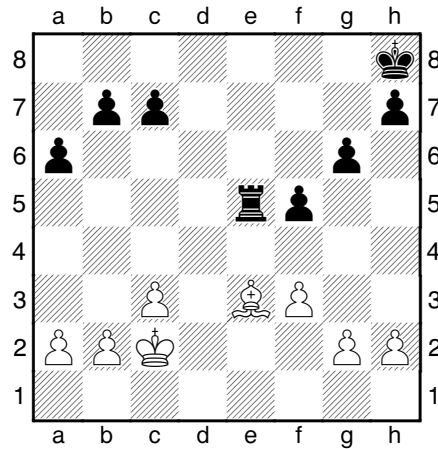
A sole Bishop and King versus a King is a draw. It is impossible to win with no other material on the board. The same goes for a King and Knight versus King only.

A King and two Knights versus King is also a draw unless the lone King is already in the corner and ready to be checkmated.

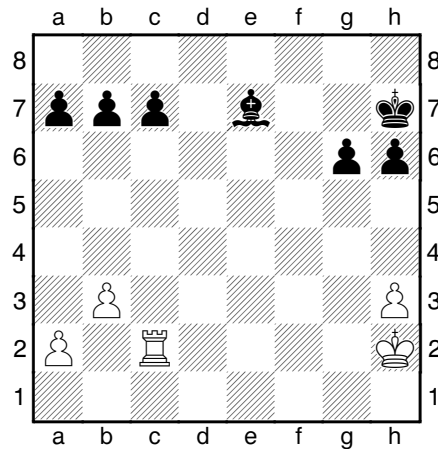
A *pin* is a move which forces one of the opponent's pieces to stay still because moving it would expose the King or a more valuable piece behind it. A pin is a very common and powerful tool often resulting in winning material or even in checkmate. A pin can only be created by three pieces: Bishop, Rook or Queen.

There are two types of pins: Absolute pin and relative pin. In an absolute pin, the pinned piece is in front of the King and it is not allowed to move. While in a relative pin, the pinned piece is allowed to move but would lose a piece (which is behind the pinned piece).

Here are a few examples of how to make pins.

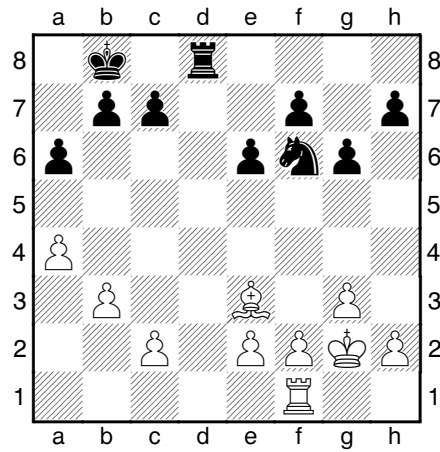


Here, White can pin and win the Rook with 1.Bd4 – an absolute pin.



In the position above, White by capturing Black's Pawn with 1.Rxc7 pins the Bishop which cannot run away.

Now let's look at an example of a relative pin.



Here after 1.Bg5, Black loses at least the Knight as after the Knight would move Black's Rook on d8 would fall.

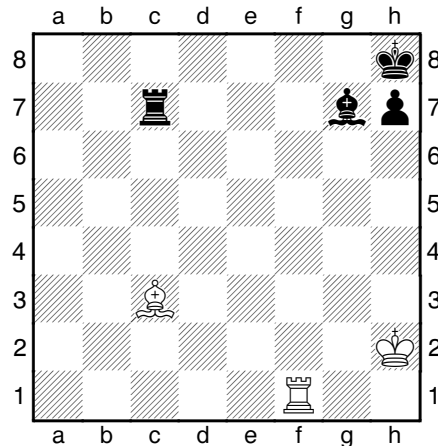


Lesson 17

Lesson goals:

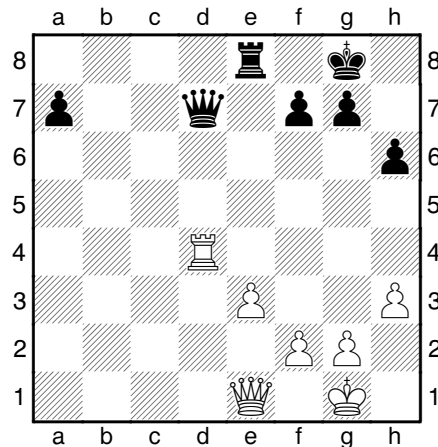
- How to use pins.
- Getting out of a Pin

There are cases when creating a pin does not result in immediate material gain. That happens when the *pinning piece* is of the same or higher value than the *pinned piece* and the pinned piece is on a protected square.



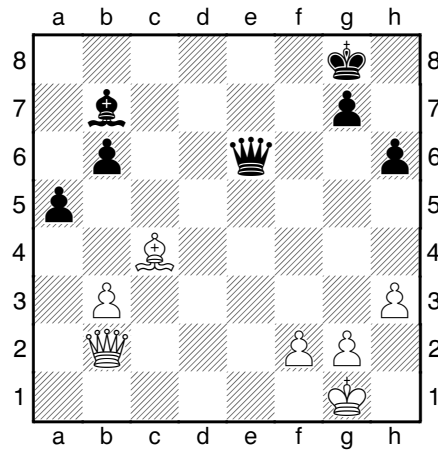
In this position, the White Bishop is pinning another Bishop. Capturing Black's Bishop would only result in a trade and no gain. However, because the Black Bishop is restricted to moving only on the a1-h8 diagonal, White can take advantage of this situation and play 1.Rf8 checkmate!

Here is another example where Black is winning material, thanks to an existing pin.

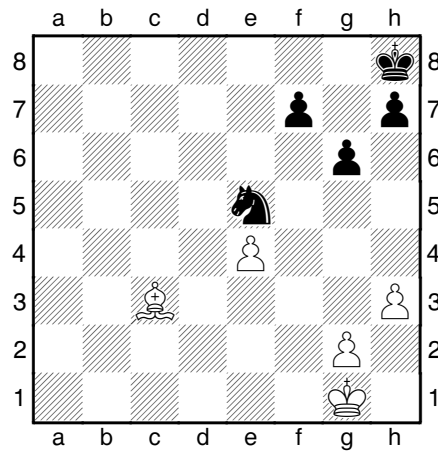


The solution is 1...Qxd4 and after 2.exd4, Rxe1+ and Black has won a Rook.

However, there are pins which look scary but you can get out of!



For example in the above position, Black can successfully defend by blocking the pin with 1...Bd5.



Or here, Black's Knight seems to be in trouble but 1...f6 saves the situation.



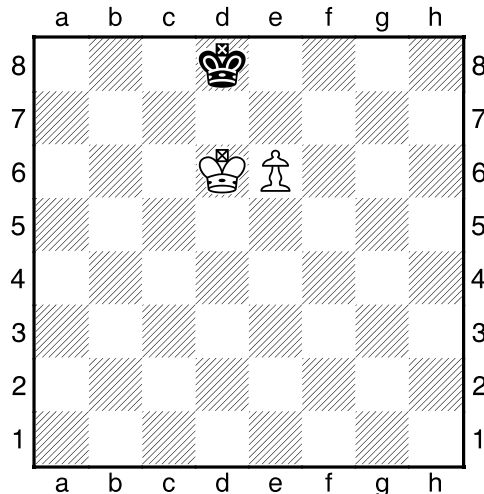
Lesson 18

Lesson goals:

- Basic Pawn Endgames (opposition)

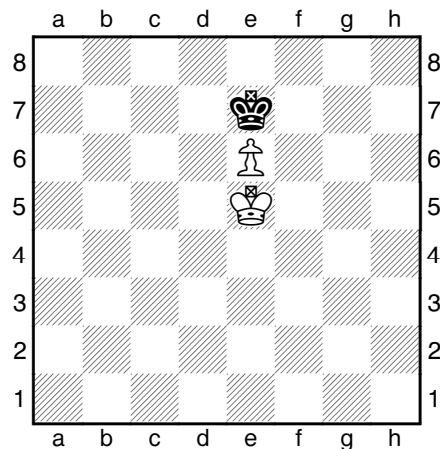
In our first example, we shall see a basic Pawn endgame, where White has an extra Pawn.

K+P on the 6th vs. K



In this position, it is critical who is to move. In this case, it is not a pleasure to have the obligation to move. With Black to move, after 1...Ke8 trying to stay on the White Pawn's promotion square, White will push the Pawn 2. e7 and now Black has no other move than 2...Kf7, when after 3. Kd7 the Pawn will become a Queen. However, if in the starting position it is White's turn Black with correct defense can hold the position to a draw. **1. e7+ Ke8** and now the only move which does not lose the Pawn is **2. Ke6** but that results in stalemate (draw).

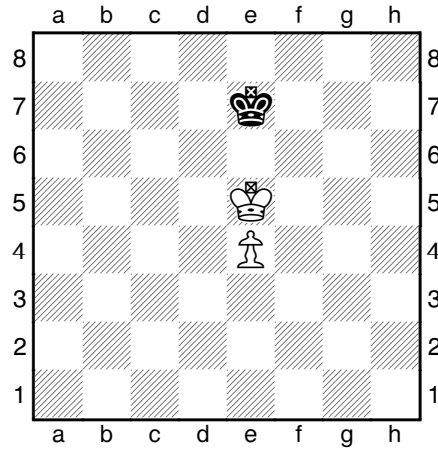
K+P on the 6th vs. K #2



In this position, Black can draw the game. Black has three choices where to move his King but only one is good enough not to lose. **1...Ke8!** (It would be wrong to play 1...Kd8 2. Kd6 Ke8 3. e7 Kf7 4. Kd7 and White wins or; 1...Kf8 2. Kf6 Ke8 3. e7 Kd7 4. Kf7 and White also wins).

2. Kd6 Kd8 (or 2.Kf6 Kf8 3.e7 Ke8 4.Ke6 stalemate) and we reach the previous diagram position.

“Opposition” #1

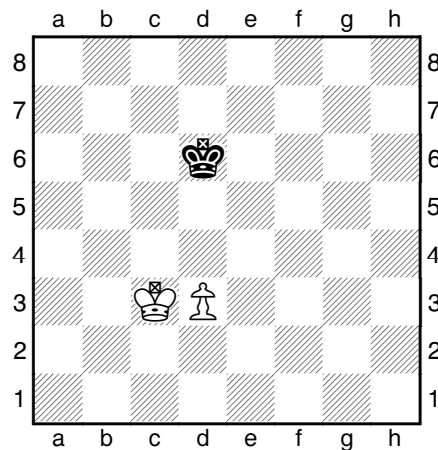


Here, the White King is right in front of its own Pawn. The two Kings are opposite each other. Whoever needs to give up this "opposition" is losing the battle. If it is Black's turn White will win the following way: 1...Kd7 2. Kf6 Ke8 3. Ke6 Kd8 4. e5 Ke8 5. Kd6 Kd8 6. e6 Ke8 and 7. e7.

If it is White to move Black is able to draw: **1. Kd5 Kd7** The only right move to maintain the opposition. After 1.Kf5 the answer would be 1...Kf7.

2. e5 Ke7 3. e6 and now as we already learned from the previous position **3...Ke8! 4. Kd6 Kd8 5. e7+ Ke8 6. Ke6** Stalemate.

“Opposition” #2



What is the only winning move for White? **1. Kd4!** gaining the opposition **1...Kd7 2. Kd5 Ke7 3. Kc6** (Going on the opposite side from Black's King) **Kd8 4. d4 Kc8 5. d5 Kd8 6. Kd6! Ke8 7. Kc7** and the d Pawn marches through.

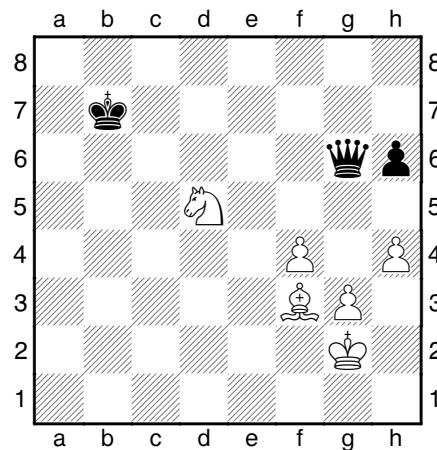
Lesson 19

Lesson goals:

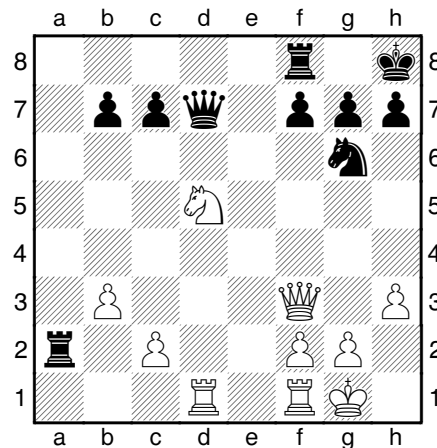
- Discovered check
- Discovered attack
- The “Mill” in Chess

The “discovery” is a very important and powerful tactical tool in chess. It has different variations such as the “discovered check”, the “discovered attack”, the “Mill”, and “double check”.

Let us look at an example of each, starting with the discovered check.



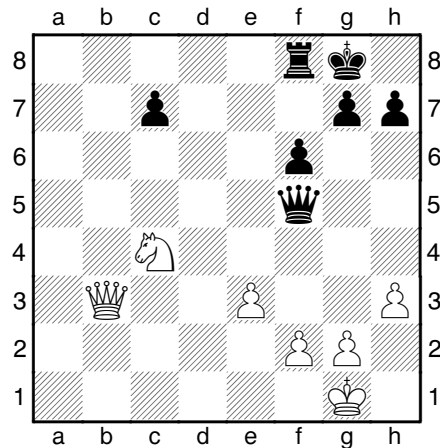
In the position above, White by moving the Knight will “uncover” the Bishop and therefore check the Black King. If the Knight is able to find a square, from where it attacks something (for example, like the Black Queen), that is how White can take advantage of such opportunity. The correct move is 1.Ne7+. After Black moves out of the check, White captures the Queen with 1.Nxg6.



In this position, if the Black King was on g8 instead of h8 – then Nd5-f6+ would be the answer. But now, there is no discovered check. However, White can gain material by playing 1.Nb4, exposing the Rook on d1 to attack the Black Queen on d7, while the Knight attacks the Black Rook on a2.

As we can see discovery is a special sort of a double attack.

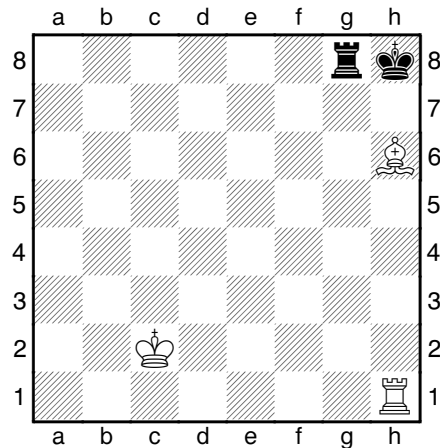
In the next position, we shall see why discovery is so special.



Normally in this position 1.Nd6+ looks bad as it seems that the Pawn on c7 can capture it. However, because of the *discovered check* (the Queen from b3 checking Black’s King) Black needs to get out of check and lose the Queen.

So the main power of discovery is that often you can put your piece to an “unsafe looking” square.

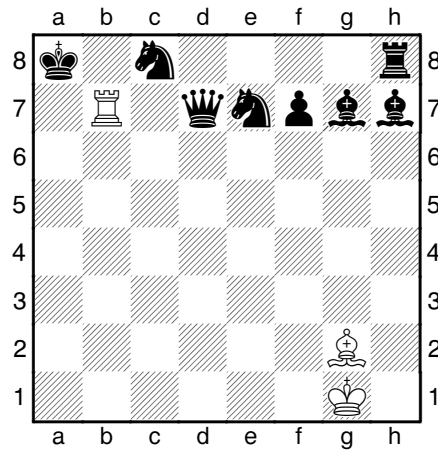
Sometimes you can even use a discovery to checkmate!



Solution: 1.Bf8 checkmate!

What is the “Mill” in chess? It is repetitive discovered checks. Let’s see in practice:

In the following position, Black has an overwhelming material advantage. But as we shall see, it will not be for long...



The first capture is obvious, **1.Rxd7+ Kb8** Now White forces the Black King Black to the “discovery” **2.Rb7+ Ka8** and starts picking up the rest of Black’s pieces. **3.Rxe7+ Kb8** and back again... **4.Rb7+ Ka8** **5.Rxf7+ Kb8** and again... **6.Rb7+ Ka8** **7.Rxg7+ Kb8** and again... **8.Rb7+ Ka8** **9.Rxh7+ Kb8** **10.Rxh8** and White is ahead a Rook!

What amazing beauty!



Lesson 20

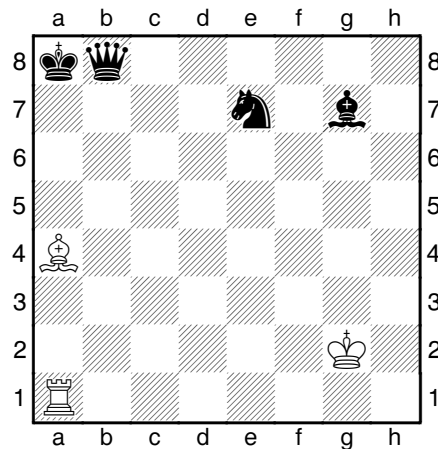
Lesson goals:

- Double check
- Trapping pieces

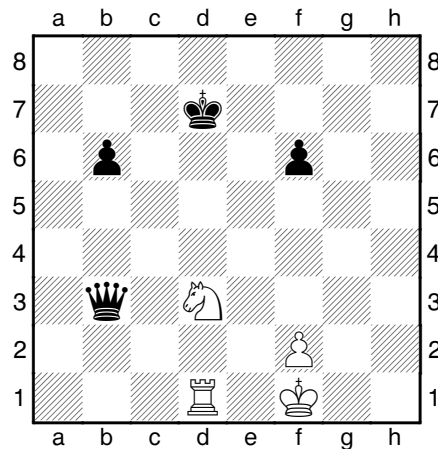
Double check is an even more powerful version of discovery.

When you give a double check neither check-giving piece can be captured.

Here are a few examples:



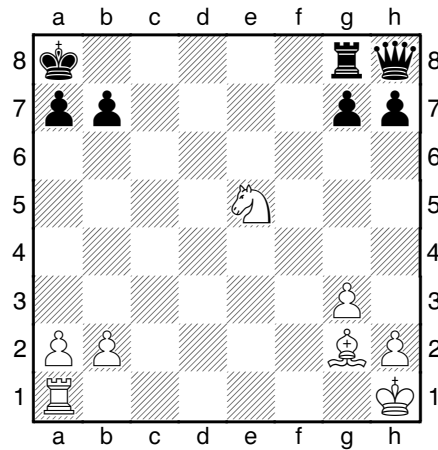
White's Rook is under attack, but White can still checkmate in one with 1.Bc6! (putting the Bishop also under attack – by Black's Knight).



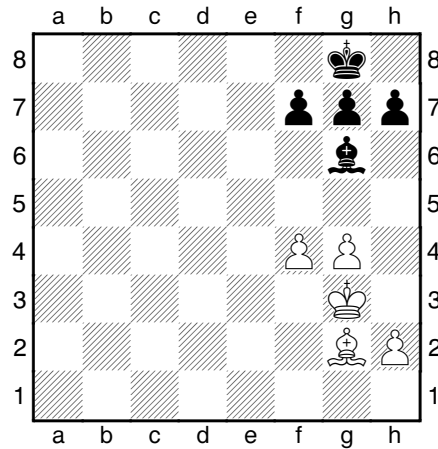
Here the regular discovery with 1.Nc1+ fails, because Black can capture the Rook on d1. But the double check comes to the rescue! 1.Nc5+ wins the Black Queen, as neither the Knight or the Rook can be captured, because the King is in check from both!

Another way to gain material is simply trapping pieces. When we trap the King, we call it “checkmate”. When we trap any of the other pieces it's simply “trapping” a certain piece.

Let's see a couple examples:



Isn't Black's Queen in a weird place right in the corner? Yes, and it cannot move anywhere either. So all White needs to do is to attack it with 1.Nf7 and the Queen is trapped.



In the position above, after 1.f5 Black's Bishop has no escape. If it were Black to move, Black would have the time to escape with 1...Bc2 for example or make an escape square with 1...f6.

Lesson 21

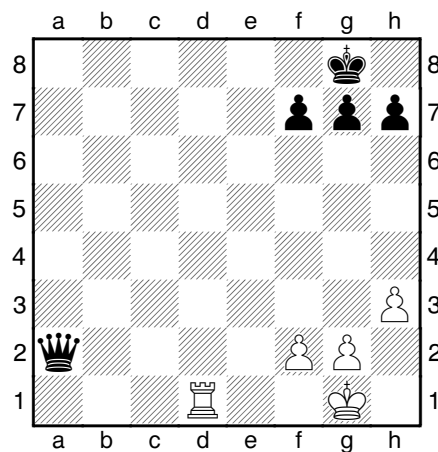
Lesson Goals:

- Back rank checkmate
- Pattern recognition

The back rank checkmate traps is one of the most frequent that beginner players fall into. Even more experienced chess players sometimes forget about it.

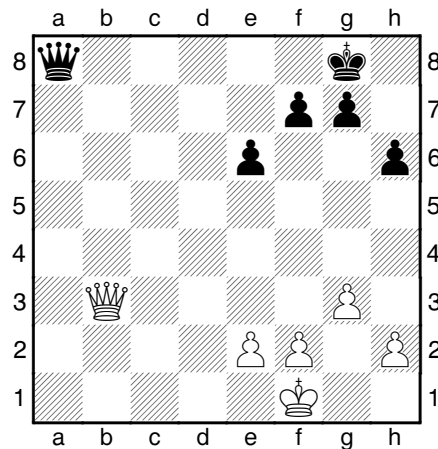
We refer to the “back rank problem” when the limitation of the chessboard, the 8th rank for Black and the 1st rank for White causes one side to get checkmated.

Here is the most basic illustration of it.



In the above position, White can checkmate with 1.Rd8 because the Black Pawns in front of the King don't allow the King move up to the seventh rank and since there is no 9th rank on the chessboard, the Black King has no escape.

If it would have been Black's turn in this same position, one of the defenses would be 1...h6 “opening a door” for the King to escape after 1.Rd8+ with 1...Kh7. Another method of defense would be 1...Qa5, protecting the critical d8 square.

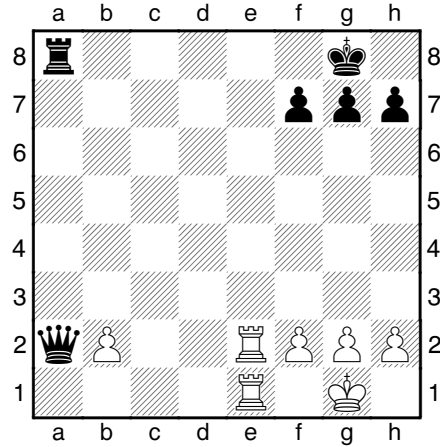


In this example, Black can checkmate in one with 1...Qh1.

The only two pieces which can give back rank checkmate are the Rook and the Queen.

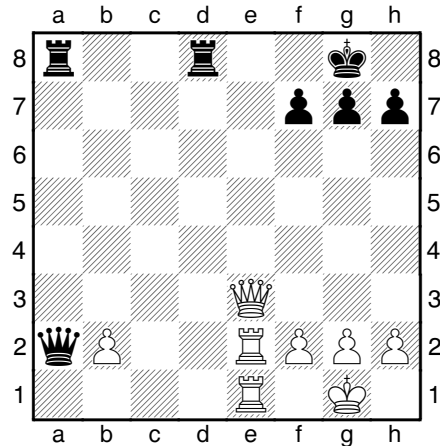
Pattern recognition is one of the most important aspects of chess. It is estimated that an average chess grandmaster can recognize about 20,000 chess patterns or more.

Now we shall see how to recognize this same pattern (of back rank checkmate) from a distance of 2 or even 3 pair of moves!



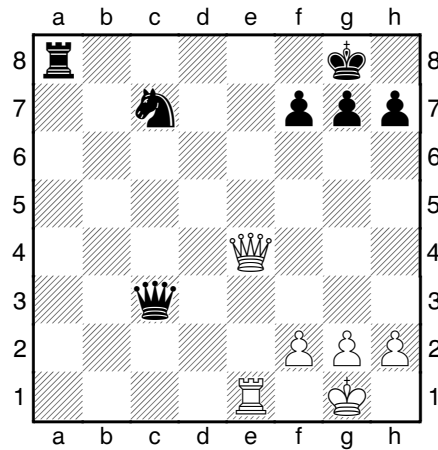
Here Black has a Rook protecting the e8 square. Yet, White succeeds after 1.Re8+ Rxe8 2.Rxe8 checkmate.

In the next position, Black has two Rooks guarding the back rank and still not enough...

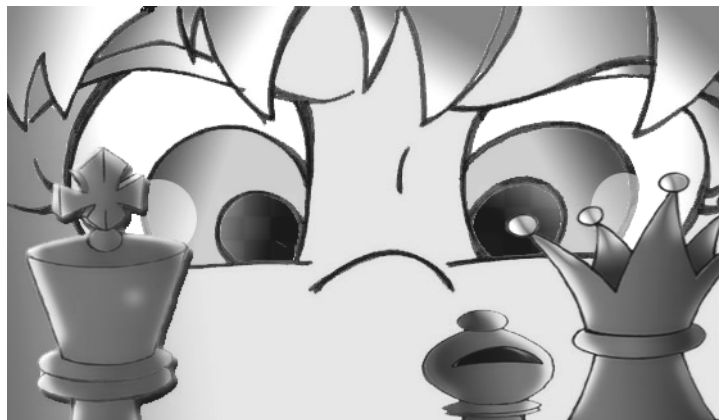


Here White is even willing to sacrifice the Queen to achieve the goal. 1.Qe8+ Rxe8 2.Rxe8+ Rxe8 3.Rxe8 checkmate.

In the following example, Black guards the e8 with both the Rook and the Knight.



Here 1.Qe8+ would not work because of simply 1...Rxe8 2.Rxe8+ Nxe8 and White ran out of ammunition. However, 1.Qxa8+ serves the purpose! White sacrifices the Queen to get rid of all Black's defense of the crucial e8 square. 1...Nxa8 2. Re8 checkmate. This is called removing the guard or deflection.



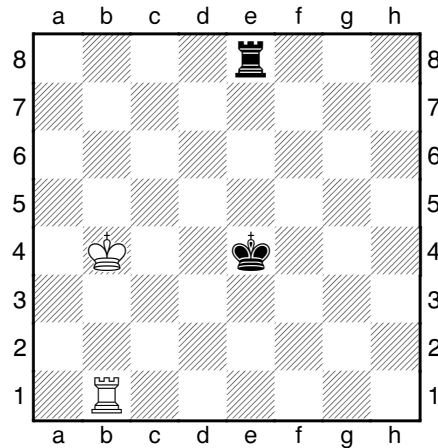
Lesson 22

Lesson Goals:

- Skewer

Another important tactical tool is the skewer. Just like in real life as you would make a skewer of meat and vegetables in chess you “skewer” two enemy pieces on the same line (which can be on a file, rank or diagonal).

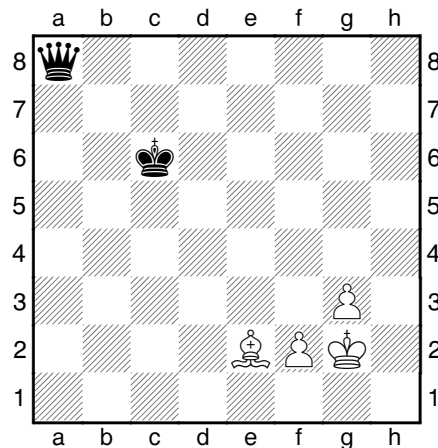
This is how it works.



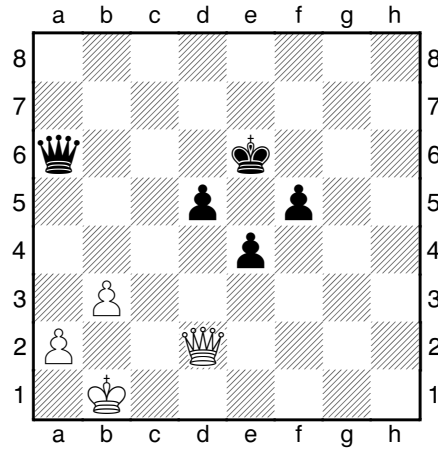
In this position, if it is White to move, White can play 1.Re1+ (skewer) and as soon as the Black King moves away from the check from the e file, White captures the Back Rook on e8.

On the other hand, if it was Black's turn, Black would play 1...Rb8+ achieving a skewer.

Now let's see a skewer with the Bishop.

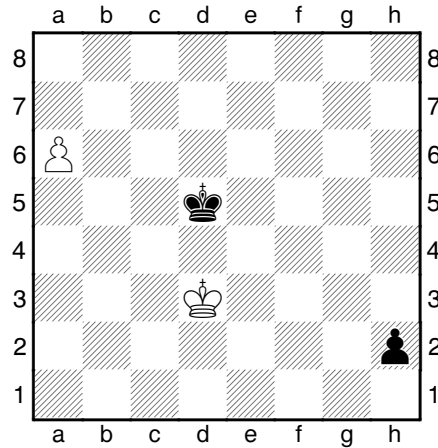


Here, Black suffers because the King and Queen are lined up on the same diagonal. White having a light squared Bishop, can take advantage of this with 1.Bf3+.

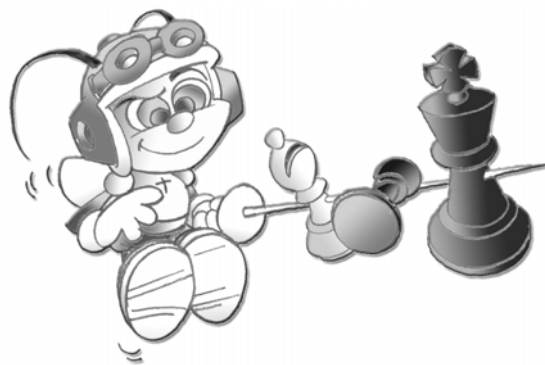


In our third example the Queen is the hero. The solution is 1.Qh6+ winning Black's Queen.

In our final example, Black seems to be doing well. The Black Pawn is only one square away from the promotion square (h1). Yet White is in a winning position.



The solution is 1.a7 and after Black promotes the Pawn with 1...h1Q, White also promotes but with a check and skewer...right away winning Black's new Queen.



Lesson 23

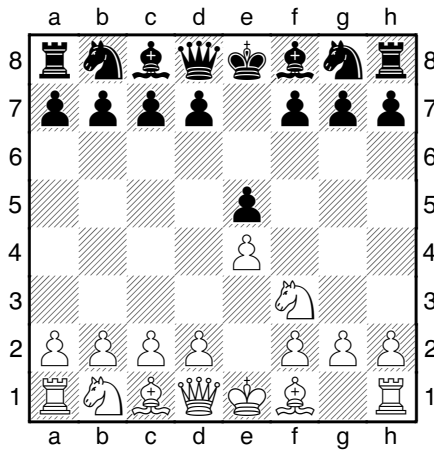
Lesson Goals:

- Opening traps

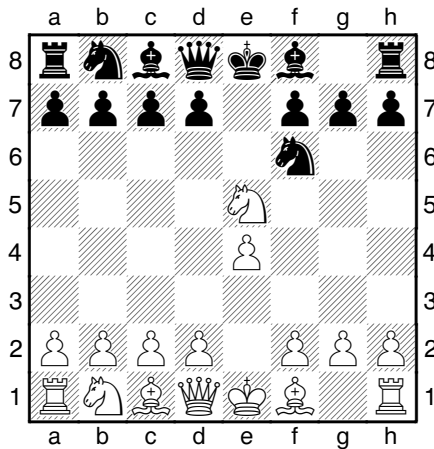
Normally you can be safe by following the general opening principles; however there are famous opening traps good to know about.

“Petroff defense”

From the starting position: **1.e4 e5 2.Nf3**

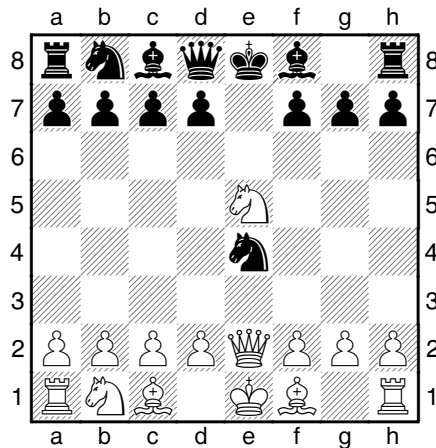


White attacks the e5 Pawn. Black now could defend it with 2...Nc6 or 2...d6 but decided to counter attack with **2...Nf6**, which is not a mistake yet. White captured the Pawn **3.Nxe5**.



Now Black should play 3...d6, chasing back White's Knight first before capturing White's Pawn on e4. However, let's see what is wrong with **3...Nxe4?**

White will answer with **4.Qe2** attacking Black's Knight on e4.



Now Black is in trouble. If the Knight moves away from e4, for example **4...Nf6**, then White has a discovered check to win Black's Queen with **5.Nc6+**.

Let's go back a little to the position after White's fourth move (see the above diagram).

At the above diagram position, a better defense is (instead of 4...Nf6) 4...d5 protecting the Knight. Then White attacks the Knight again, (with the Pawn, this time) with 5.d3.

Here the same idea is renewed: if the Black Knight leaves the e4 square then 6.Nc6+ wins the Black Queen. The best Black can do is play 5...Qe7 and lose only a Pawn after 6.dxe4 Qxe5 7.exd5. Here Black cannot capture the d5 Pawn because the Black Queen is pinned on the e file.

White is also ends up a Pawn ahead if in the above diagram position, Black tries to counter attack with 4...Qe7. Then, White captures the Black Knight with 5.Qxe4 and after 5...d6 plays 6.d4 dxe5 7.dxe5.



Lesson 24

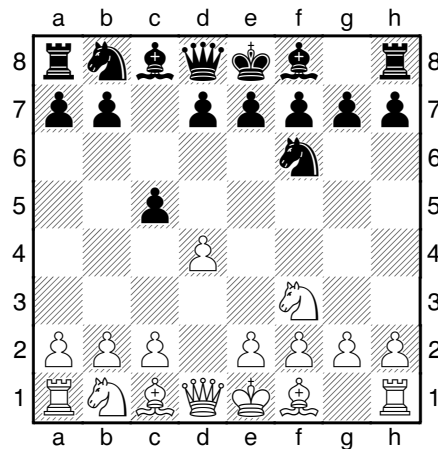
Lesson goals:

- Opening trap – fork
- Smothered mate

Here is another opening trap you should avoid as White:

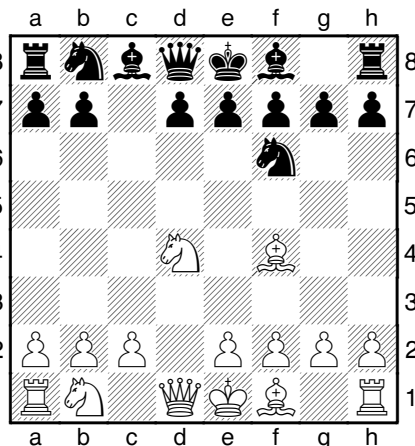
Queen's Pawn opening

1.d4 Nf6 2.Nf3 c5



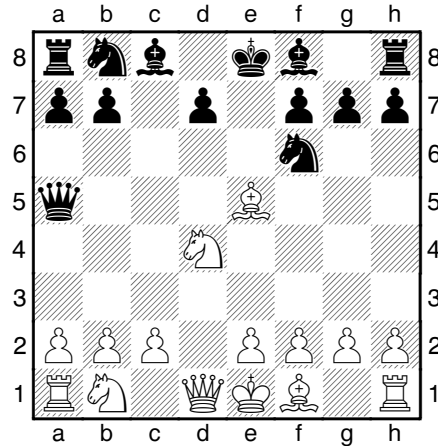
In this position, White could capture the Pawn on c5 with 3.dxc5. However, Black's plan is to check with 3...Qa5+ and win the Pawn back.

3.Bf4 cxd4 4.Nxd4 This is already a mistake. Recapturing with the Queen (4.Qxd4) was better.



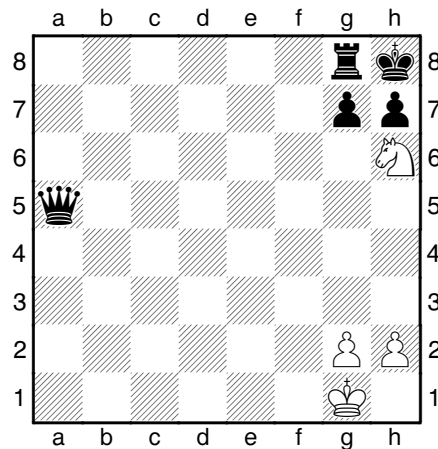
Now, Black has an unexpected combination to win material. First, Black sacrifices a Pawn with 4...e5. This is a fork. If either piece (Bishop or Knight) just moves away, the other would be captured. But, what happens if White just takes the Pawn with 5.Bxe5?

Then comes a second fork: 5...Qa5+

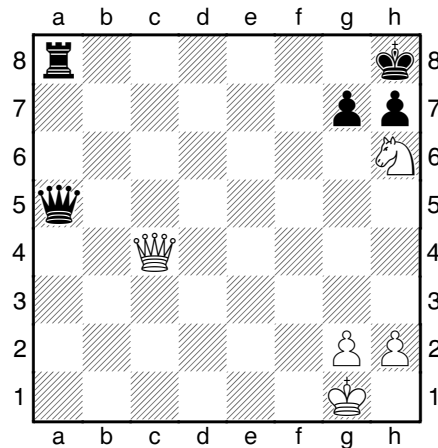


Now, White is in check and after White blocks the check, Black can capture the Bishop on e5 with 6...Qxe5 and win a Bishop for only a Pawn.

What is smothered mate? It is a special kind of checkmate, where the King has no escape because his own pieces surround him.



In this position, the Black King has no room to “breathe”. White can checkmate with 1.Nf7. Now that you know the pattern of the “smothered mate”, can you find how White checkmates in two moves with the same idea?



Solution: 1.Qg8! sacrificing the Queen, forcing the Black Rook to take the Queen on g8 and then 2.Nf7 checkmate.

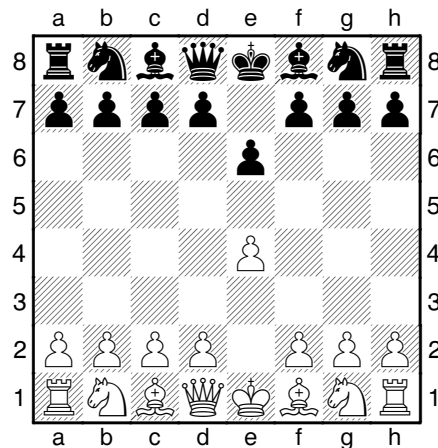
Lesson 25

Lesson goals:

- Opening trap – discovery
- French defense
- Removing the guard

French defense

1.e4 e6 These are the starting moves of the French defense.

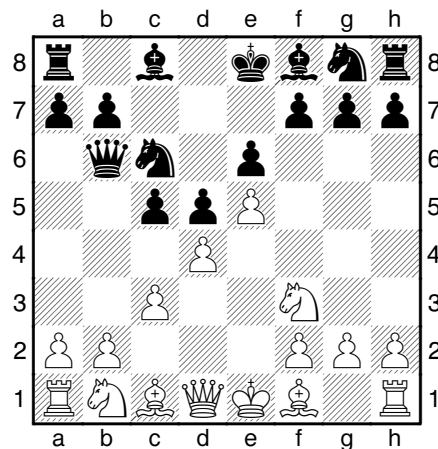


2.d4 d5 Both sides are occupying the center so far. Now the White's Pawn on e4 is under attack. White can protect it in various ways such as 3.Nc3 or 3.Nd2 or simply move it away from the danger.

3.e5 c5 Black is trying to put pressure on White's d4 Pawn starting with this move.

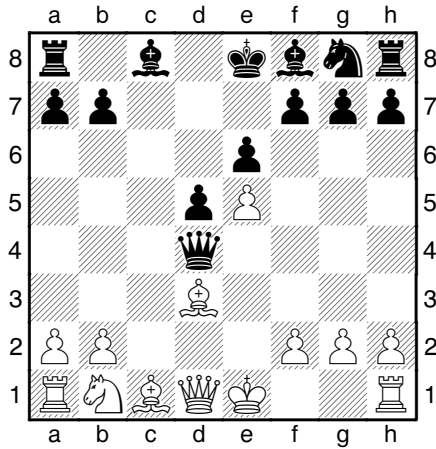
4.c3 White protects the d4 Pawn.

4...Nc6 5.Nf3 Qb6 Now Black is pressuring the d4 Pawn with the Pawn on c5, Knight on c6 and from behind with the Queen on b6. White is also protecting it three times. So for now, White is safe.



6.Bd3 Did White just make a mistake? Let's see...now the White's Queen on d1 is no longer protecting the d4 Pawn.

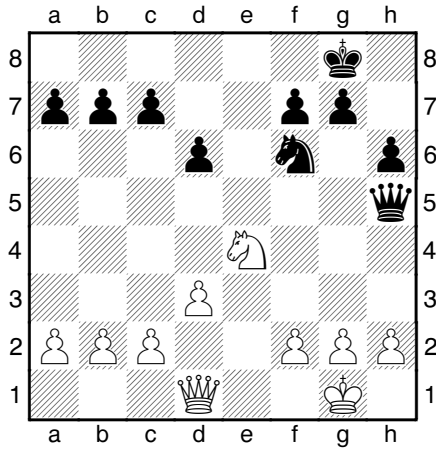
6...cxd4 7.cxd4 Nxd4 8.Nxd4 Qxd4 Black has just won a Pawn right? Right, but it only brings very temporary.



9.Bb5+ and with this discovery, White wins Black's Queen.

Sometimes, we would like to move a piece to a certain square on the board but we cannot because one of the opponent's pieces is guarding it. Let's see how to remove the guard.

In the position below, White could capture Black's Queen, right away but that would only be an equal trade as Black could then recapture with 12...Nxb5.



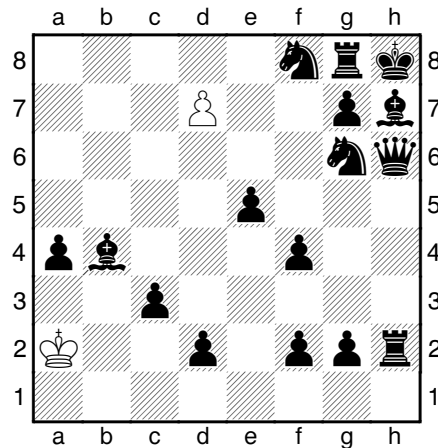
But after the correct 1.Nxf6+ exchanging the Knight first, White removes the guard of the Queen and after 1...gxf6, White can capture the Black Queen with 2. Qxh5.

Lesson 26

Lesson goals:

- Chess for fun!
- David versus Goliath
- Under promotion

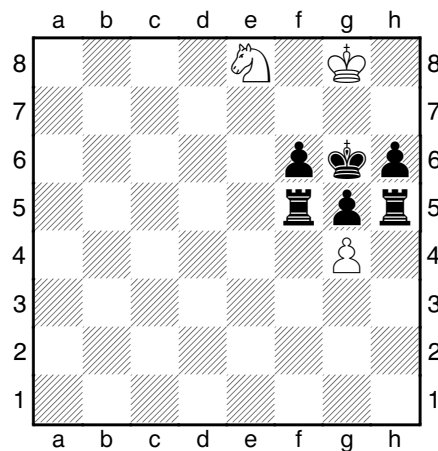
Chess has its own beauty. In this lesson, we shall see some of the most curious situations!



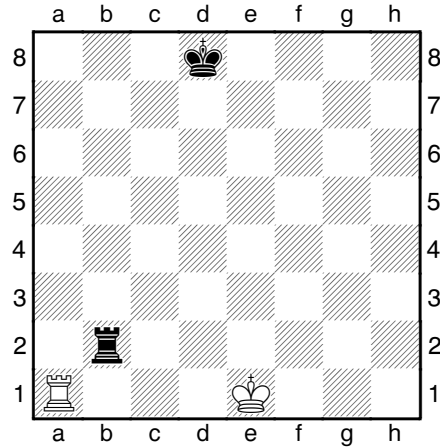
Look at this position! Black has its entire army, all of their 16 pieces still on the board. Can you imagine that White will checkmate Black in just two moves?

Usually when we have a chance to promote one of our Pawns to another piece, we choose the Queen because it is the most valuable piece. However, there are exceptions to that once in a while. In this case, the correct first move is 1.d8(N) (promoting to a Knight and not Queen!). After that, Black has no defense against the coming smothered mate with 2.Nf7.

In the next position, White could capture either Black Rook, but Black would be still ahead after that.

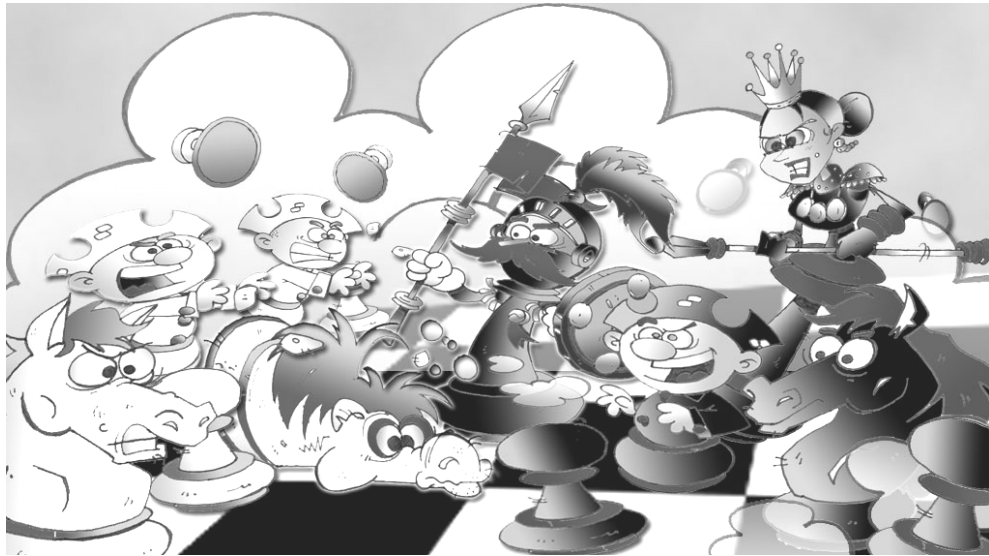


Amazingly after 1.Ng7, White not only achieves an esthetically perfect position but Black cannot avoid checkmate on the following move. Whichever Rook runs away, the other one will be captured with checkmate.



In this endgame, (as we refer to positions which have only very few pieces left on the chessboard) each side has only a King and a Rook. In most cases, that is a draw unless either side makes a big mistake.

In this case, there is something unusual. White hasn't yet lost his right to castle yet! Therefore, by castling to the Queenside (0-0-0), White can make a check and attack the Rook at the same time. In other words, this makes a very rare type of fork.



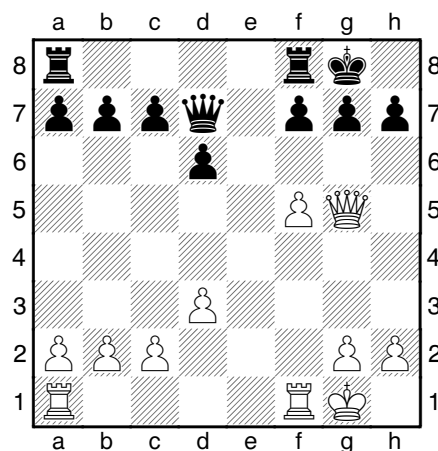
Lesson 27

Lesson Goals:

- How to create an attack?

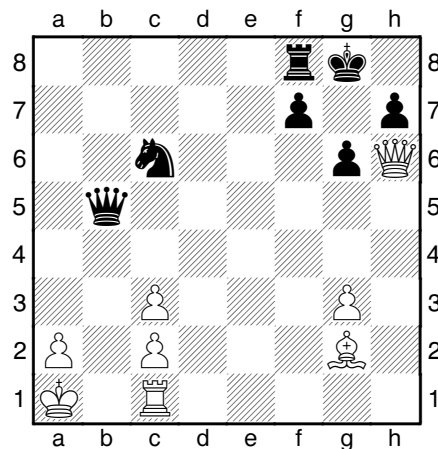
How and when to attack in chess? It is usually not the right time to attack early in the game. In the opening, we develop our pieces, getting them ready for the big fight in the middlegame. In the endgame, it is usually too late as there aren't enough pieces left on the board. Therefore, most attacks develop in the middlegame (typically between move 12 and 30 into the game). One of the most important ingredients for a successful attack is to still have your Queen on the board.

Let's examine the following position:

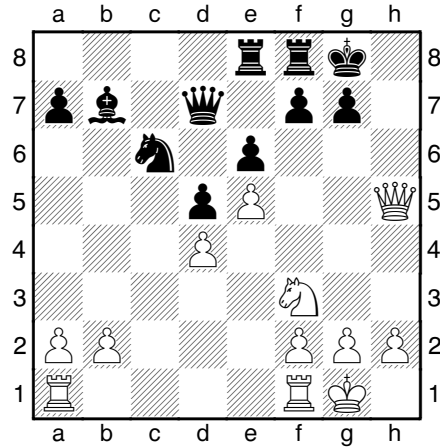


In this position, many of the pieces are already gone but the Queens are still there. White can use the pin along the g file by playing 1.f6. That threatens an immediate checkmate with 2.Qxg7. As Black has trouble defending the g7 square, the most natural response is 1...g6. But then White plays 2.Qh6, renewing the threat to checkmate with Qg7. This time Black is helpless.

In the next position, it is Black's turn to move.



White has weakened the position of the King by no longer having a Pawn on b2. Therefore, the weak link in White's camp is the b file. After 1...Rb8, White cannot defend against the mating attack on the b file (on b2).



White has given up a Bishop to get rid of Black's h7 Pawn and to weaken the defense in front of the Black King. The White Queen is near the enemy King, ready for action. But she needs help...and it comes with 1.Ng5. Now Black cannot stop the checkmate with 2.Qh7.



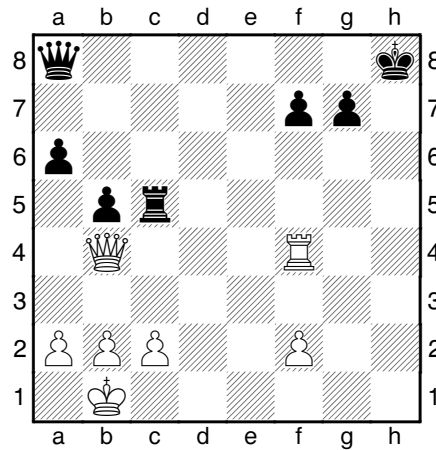
Lesson 28

Lesson goals:

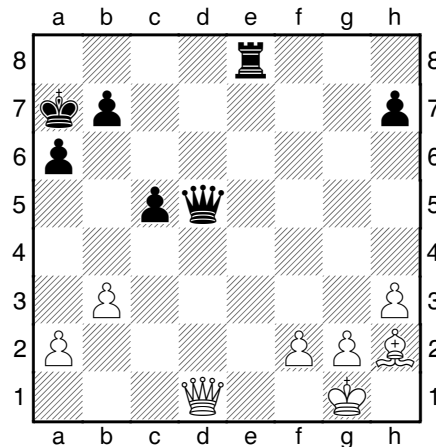
- Intermediate moves
- German connection

What are intermediate moves? We also call them in-between moves or by their original German name “Zwischenzug”. What we mean by it is that sometimes we can and should delay a very obvious looking move, such as for example capturing a Bishop or even a Queen.

Let’s see some examples:

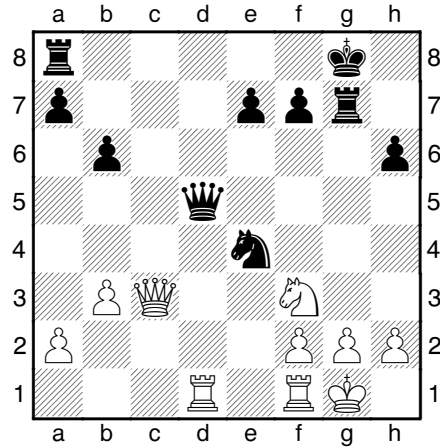


Can White simply capture the Rook on c5? I’m afraid not. Black has set up a trap: after 1.Qxc5, Qh1 checkmates! However, if White first gives an intermediate check with 1.Rh4+ and only after 1...Kg8, captures the Rook on c5, then White’s Rook from h4 protects the h1 square.



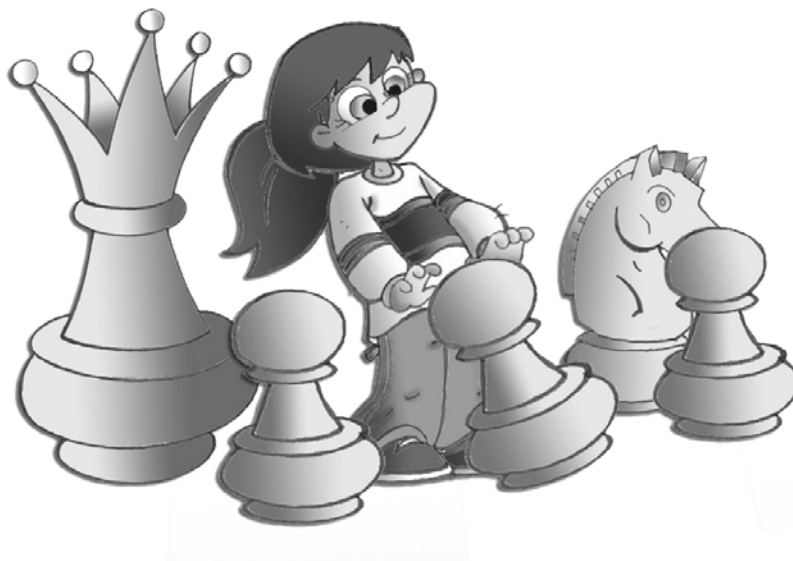
Can White capture Black’s Queen with 1.Qxd5?

No, because of the back rank problem (1.Qxd5? Re1 checkmate). However, White can sacrifice the Bishop first by playing 1.Bb8+! opening up the escape square (h2) and after 1...Kxb8 2.Qxd5 with clear material gain.



Both Queens are “hanging”. If White captures Black’s Queen (1.Rxd5), Black captures White’s Queen (1...Nxc3). But White can gain a Rook in this exchange by first sacrificing the Queen with 1.Qxg7+! After 1...Kxg7, White will capture the Queen with 2.Rxd5, leaving White with an extra Rook.

Advice: Think *before* you move or even before you touch a piece that you may (or may not) want to move! Sometimes the most obvious is not the best choice!



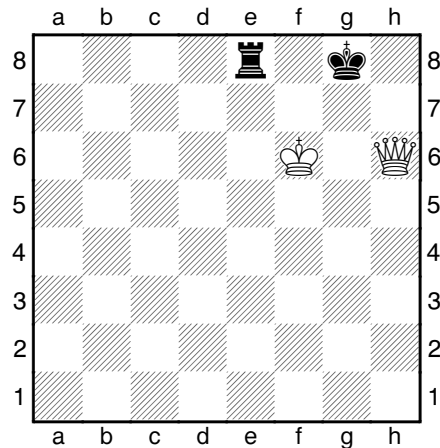
Lesson 29

Lesson goals:

- Draw by stalemate
- Draw by Perpetual checks

In some of the earlier lessons, we have already learned what a stalemate is. It is something very important to avoid when you are in a winning position.

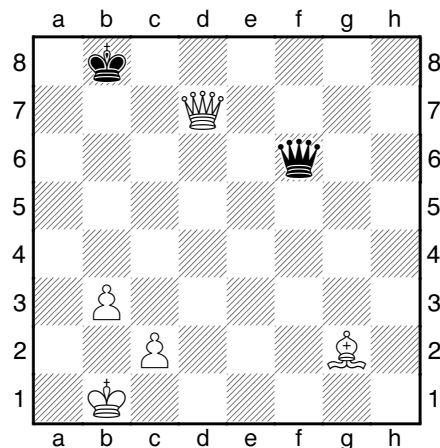
Let's see some stalemate "accidents" that should be avoided.



White's last move was Kf5-f6, threatening to checkmate (Qg7). But that was a big mistake! Now Black is able to give up its last piece which can move by 1...Re6+!

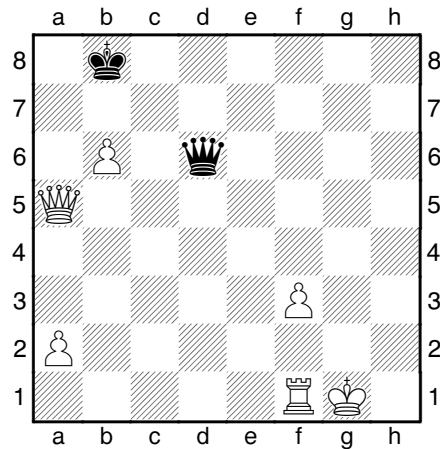
After White captures the Rook with 2.Kxe6 the game is over by stalemate (draw). If the King does not capture the Rook then the Rook will capture the White Queen and White does not win either.

In the next position, White again has huge material advantage.



One thing we need to notice is that the Black King has no legal moves. Therefore, if Black is able to give up his last piece (the Queen) which can move, Black can escape a lost game with the help of stalemate. There are two perfect solutions: 1...Qa1+ or 1...Qb2+!

Besides escaping an almost lost game by stalemate, another hope could be perpetual check. What that means is that if the very same position repeats three times the game is over: draw!



In the above position, White has an extra Rook and three Pawns. Normally this is a winning advantage. However, Black can save the game with 1...Qg3+ in this position. White has no choice but to play 2.Kh1, then 2...Qh3+ and again White has no choice but go back to g1 (3.Kg1). Then again 3...Qg3+ and back and forth until there will be the same position three times. This is called draw by perpetual check.

Lesson 30

Lesson Goals:

- What have we learned this year?
- Overview

The History of chess

The Chess Board

The language of chess – chess notation

The pieces and how they move

How to check and checkmate

Opening principles

Different chess tactics to gain material and checkmate

Chess etiquette and sportsmanship

