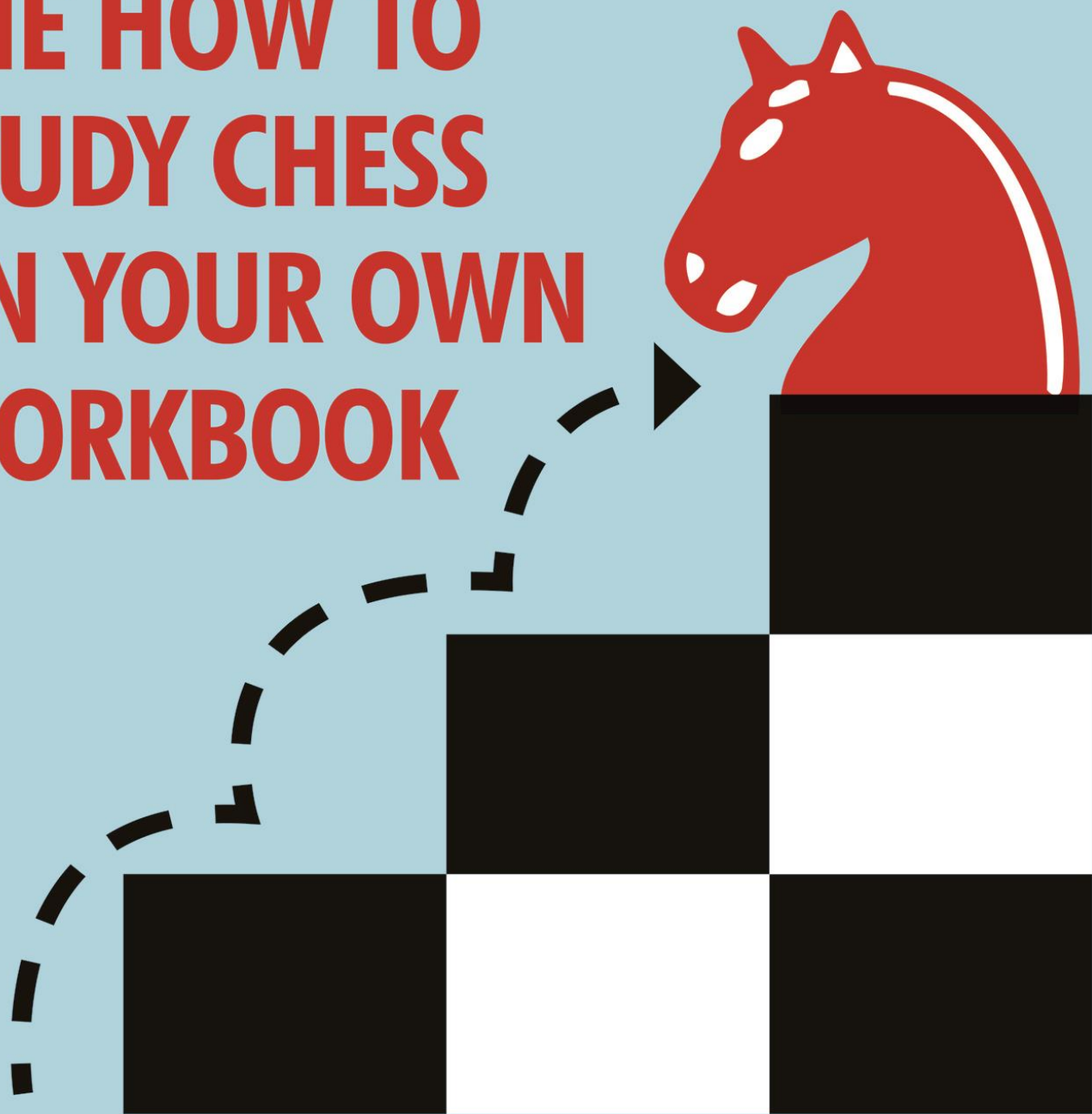


Davorin Kuljasevic

Volume 3:
Exercises and Training
for Ambitious Chess
Players (2100+ Elo)

**THE HOW TO
STUDY CHESS
ON YOUR OWN
WORKBOOK**



Contents

Introduction

Chapter 1 - Typical Mistakes of Ambitious Tournament Players

Chapter 2 - Visualization Bootcamp

Chapter 3 - Tactics Training

Chapter 4 - Middlegame Training

Chapter 5 - Endgame Training

Introduction

This is the third and final volume of a series of workbooks accompanying my 2021 book *How to Study Chess on Your Own*. As the title suggests, self-training in chess is not as straightforward as one might think, especially if you don't have a dedicated coach or a mentor to guide your efforts. I understand the challenges chess improvers face at different levels. Therefore, I decided to provide advice, study schedules, and fresh, unconventional exercises in these books to aid the reader with their chess studies. The first two workbook volumes were aimed at club players in the approximate 1500-2100 Elo range combined. This one, however, is specifically tailored for the slightly advanced 2100-2400 Elo group, or what we could call **ambitious tournament players**.

In *How to Study Chess on Your Own*, I used the term 'master-level' to describe this broad and dynamic echelon of chess players. In hindsight, the 'ambitious tournament player' seems a more befitting description because not all players in this group have 'master' strength or understanding. However, most have at least some (and usually a lot of) ambition to prepare and perform well in strong, often international, tournaments. Here is what I wrote about their typical strengths and weaknesses in *How to Study Chess on Your Own*:

Master-level/Ambitious tournament player (2100-2400 Elo)

Typical strengths

- Ability to recognize well-known tactical and positional patterns and apply 'textbook' methods of play
- Playing positionally sound chess overall (paying attention to positional weaknesses, king safety, and piece coordination)

- Ability to find and execute straightforward ideas (e.g. if they need to find a winning combination or a plan to convert the advantage, they will usually manage it)
- Feeling comfortable in familiar opening/middlegame schemes and strategically simple positions
- Solid overall general knowledge

Typical weaknesses

- Lack of strategic depth (short-sighted plans, not proficient with pawnstructures and their transformations, simplifying positions to their detriment, not using prophylactic thinking enough, etc.)
- Unconvincing endgame technique
- Rarely finding strong counter-intuitive resources (backward moves, counter-intuitive piece exchanges, atypical tactical ideas, etc.) due to a relatively high reliance on the known ideas and patterns
- Missing tactical subtleties and complex combinations
- Having trouble evaluating imbalanced positions correctly

Years of coaching chess players who have played at this level haven't changed my opinion about the list above; if anything, I have become more convinced. Therefore, this workbook's primary goal is to provide a set of exercises that address most of these issues. That is not to say that an ambitious 1900 or 2000-rated player couldn't work with this book – as long as they don't mind the few potentially very challenging exercises at the end of each section, I'd be more than happy if such a player gave this workbook a shot. Likewise, a curious IM or a GM will probably find a fair share of assignments in the book engaging and helpful in their chess training. Whatever your level, I would like to give you a glimpse into the types and schedule of the **160 exercises** you will tackle in this workbook, which include

‘find the best move’ puzzles, positional understanding tasks, endgame analysis, and more.

Training schedule breakdown

{insert table}

Training module/Training method Chapter 2: Visualization

Bootcamp

(20 exercises) Chapter 3: Tactics

(35 exercises) Chapter 4: Middlegame

(60 exercises) Chapter 5: Endgame

(45 exercises) Blindfold Chess Deep Visualization

(20 exercises) Find the best move Find a Hidden Tactic

(15 exercises) Find a Mini-plan

(30 exercises) Deep Analysis Tactical Analysis

(12 exercises) Endgame Analysis

(15 exercises) Simulation Middlegame Simulation

(30 exercises) Endgame Simulation

(30 exercises) Playing out Tactical Training Position

(8 exercises)

If you’ve delved into my previous works in the How to Study Chess on Your Own series, you will have a grasp of training methods like ‘Deep Analysis’ and ‘Simulation’. If not, worry not; I will provide a comprehensive explanation with practical examples in their respective chapters. The value of these methods lies in the fact that they demand a higher level of **analytical effort** than your typical chess puzzles, aiming to enrich your chess arsenal and make you a better player.

Let’s run a quick overview of the book’s chapters.

In Chapter 1, we will discuss typical mistakes of ambitious tournament players. I will show how they can keep one from progressing, offer remedies, and explain how exercises in this workbook can help address them.

Chapter 2 features the traditional ‘Visualization Bootcamp’, a set of blindfold-mode exercises to warm you up for the upcoming training material and check your proficiency with this essential chess skill. I will introduce a new type of exercise I have not used in the previous two volumes: ‘Deep Visualization’.

Chapter 3 offers three study activities for your Tactics Training. In addition to solving ‘Find a Hidden Tactic’ (we will use the abbreviation ‘FHT’ throughout the text) and ‘Tactical Analysis’ puzzles, you will have a chance to play out complicated ‘Tactical Training Positions’ with a training partner or a coach. These exercises allow you to practice your tactical skills in more dynamic and realistic settings, enhancing your ability to spot and execute tactics during a game.

In Chapter 4, we slow down and focus on positional play in the middlegame: planning, maneuvering, exploiting the opponent’s weaknesses, etc. ‘Find a Mini-plan’ (we will use the abbreviation ‘FMP’ throughout the text) is an excellent way to practice your short-term planning skills, whereas ‘Middlegame Simulations’ will require you to employ a broader set of middlegame skills in what is probably the most comprehensive self-training method.

Finally, Chapter 5 focuses on an often neglected area of chess improvement: the endgame. The two study activities in this chapter, ‘Endgame Analysis’ and ‘Endgame Simulation’, are based on training methods already featured in previous chapters and will help you enhance your endgame skills.

Scoring and grading

Just like in the previous two workbook volumes, I offer a fair and transparent scoring and grading system for your work. To make it easier for you, I've provided a breakdown of the possible scores you can achieve for particular exercise moves (marked in italics for your convenience):

One point = 1 point; *Two points* = 2 points, etc.

No credit = 0 points.

Extra credit = you get additional points (one or two) if you find a specific, usually difficult, move or line.

Once you have completed the exercise, you can add up all regular points and any extra credit points you earned and insert this total number in the blank space, such as the one below (the number of points after the '/' denotes the maximum score for the exercise).

Your score = /5 points + extra credit points

If you'd like to find out how you did in the whole section or chapter, all you need to do is accumulate the individual scores for each exercise to get the total score for that section. Then, compare it to the Grading scale at the end of the chapter to obtain a grade in the form of an approximate rating performance level. This quantitative analysis aims to give you meaningful feedback about your overall work and to motivate you to improve. I will provide more information about scoring and grading in Chapter 2.

Purpose of this workbook

Getting to a level above 2100 Elo FIDE already shows that you are a successful chess player, better than 90-95% of all who play this game. However, most of us strive for more, and it's only natural to want to improve further after reaching a certain level.

Fortunately, we live in times when resources that help you achieve your chess goals are plentiful. This Workbook is a small but

valuable contribution to this aim. The exercises you are about to solve are relatively unique in chess literature. I have used my experience and imagination to create a training schedule that will challenge you in ways different from what you are probably used to. Some of its most important goals are:

- Emphasis on developing analytical skills
- Teaching through instructive explanations of examples and solutions
- Challenging you with complex exercises

The ultimate goal of this workbook is to enhance your practical skills and knowledge in the crucial areas of the game so that you can make that next step in your chess improvement. I would be delighted if this training helped you identify and rectify some common mistakes, or even just increased your awareness of them. Feel free to reach out to me at dkuljasevic@gmail.com with any questions or comments.

Davorin Kuljasevic

Plovdiv, October 2024

Chapter 1

Typical Mistakes of Ambitious Tournament Players

In this chapter, I will outline some typical mistakes of players who aim for the highest chess titles. While everyone is different, and the magnitude and type of errors can vary, I have found that several common mistakes often hinder players at this level from achieving further progress. I have classified them in the following way:

- 1) Typical calculation and tactical mistakes
 - Underestimating or missing the opponent's resources
 - Hazy calculation
 - Failing to overcome resistance
 - Emotional calculation
 - Tunnel vision
 - Failure to recycle tactical ideas

- 2) Typical middlegame mistakes
 - Lack of strategic thinking
 - Lack of schematic thinking (this also translates to the endgame)
 - Struggling to evaluate positional transformations

3) Typical endgame mistakes

- Lack of ‘endgame mindset’
- Subpar endgame technique

Many of the mistakes listed above, regardless of the phase of the game, share a couple of common threads:

1. Being too focused on one’s ideas and plans and not looking sufficiently at the position from the opponent’s perspective. This tendency can also appear in opening preparation, although this is not the topic we cover in this workbook.

2. Lack of proper training in more technical and abstract aspects of chess, such as positional play and endgames. I sometimes get a feeling that games of players at the 2100-2400 level happen in the ‘fast and furious’ mode. This overreliance on concrete play in every position can limit their chess potential.

The mistakes we have discussed are best illustrated through examples. I have used my students’ recent games to provide tangible instances of these mistakes. These games will show practical scenarios that you can encounter in your own games, making your learning more relatable and effective.

1. Typical calculation and tactical mistakes

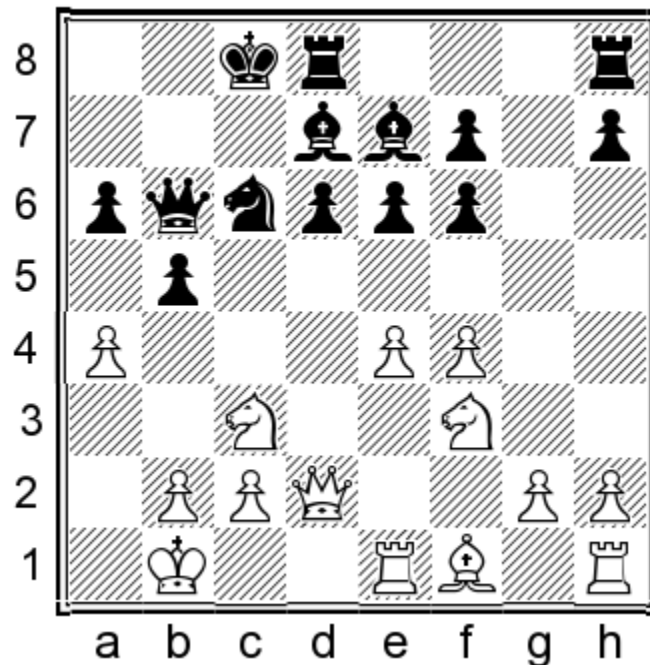
Let me preface this section by admitting that calculation is tough. Forcing yourself to ponder ‘what-ifs’ of this and that variation instead of just happily making a move you like is hard work. Our brains will resist this unpleasant feeling if we are not adequately trained to endure it. However, it is the number one skill to improve to become a successful chess player, so calculation training is always worthwhile.

Now, let's turn our attention to a common pitfall in chess: overlooking the opponent's resources. We will explore several examples to understand how this can happen and how we can avoid it.

Singh Sahib (2290)

Tripathi Adarsh (2304)

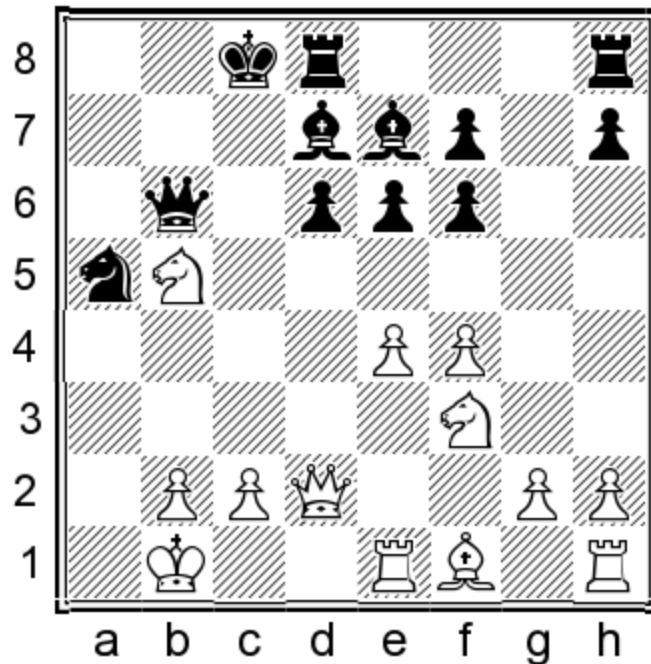
Piraeus 2024



White just played a2-a4 to undermine the pawn shield of the black king. Black had plenty of time to weigh his options carefully. Unfortunately, he played...

14...b4?

fairly quickly, allowing his opponent to take the initiative with a thematic Sicilian piece sacrifice on d5. Instead, he could have taken the initiative himself with 14...Na5!. Presumably, White planned to win a pawn with 15.axb5 axb5 16.Nxb5, counting on the fact that he gets his piece back with 16...Bxb5? 17.Qb4.



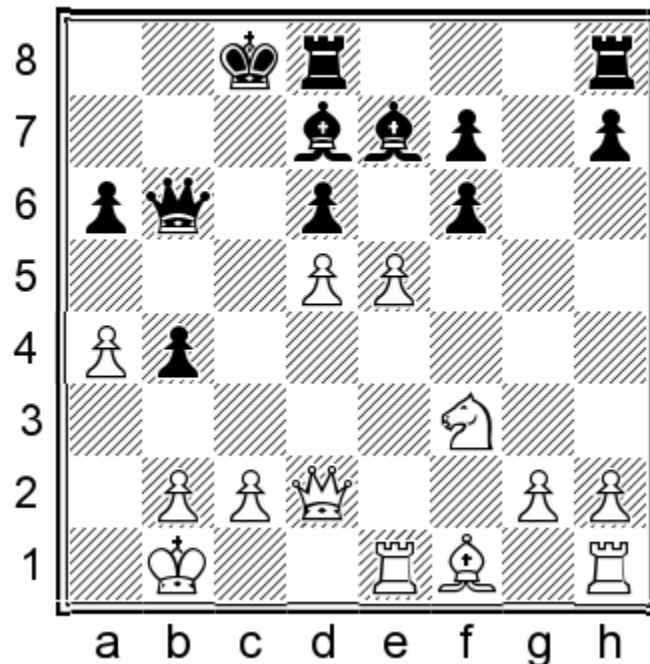
position after 16.Nxb5

Many people would stop their calculation here because losing the whole queenside in two moves doesn't seem too appealing. We can call this a **'resistance point'** in one's calculation. One of the typical mistakes of players at this level is not pushing through the resistance when they meet it in their games. When something becomes uncomfortable to calculate, they sometimes drop the whole line and look for a different solution earlier.

However, the potential for missed opportunities is significant. For instance, the move 16...d5! could have been a game-changer in this position. The thematic Sicilian pawn break is exceptionally potent here, opening the center at a highly inconvenient moment for White. 17.Qb4 is no longer an option, and his knight is under threat. The subsequent line vividly illustrates the peril this can pose for White: 17.Qd4 Bc5 18.Qa4 dxe4 19.Rxe4 Bc6, and the black bishops assert dominance. This is a good reminder of the risks of not persevering through resistance in your calculations.

I recently read an excellent piece of advice by American grandmaster Eugene Perelshteyn for overcoming resistance. When you encounter such situations in your games, **challenge yourself to calculate one move deeper than you usually would**. Perhaps Adarsh could have discovered the move 16...d5 if he had followed this rule. In the Workbook, I highly value your efforts in building this habit. That's why I award extra credit points for diligent, deep analysis. More on that in Chapters 2 and 3.

15.Nd5 exd5 16.exd5 Ne5 17.fxe5



Adarsh had a second chance to consolidate his queenside position, but he replied almost automatically:

17...fxe5??

This was a massive oversight of his opponent's intentions. He should have given more thought to 17...dxe5 when White does have a solid positional edge after 18.b3, but at least it's still a game.

18.a5!

Black missed this move. I am sure he would have seen it quickly if he were White. The problem is that he didn't ask himself seriously enough what his opponent would do after 17...fxe5. That is not an accident, as such things have previously happened in Adarsh's games. If you notice a similar pattern of missing the opponent's next move in your games, you should work on your calculation technique; otherwise, it will happen again.

18...Qxa5 19.Re4

The b4-pawn falls, and there will be no salvation for the black king.

19...Rdg8 20.Rxb4 Bd8 21.Qc3+ Bc7 22.Nxe5! dxe5 23.d6

White eventually converted his winning advantage.

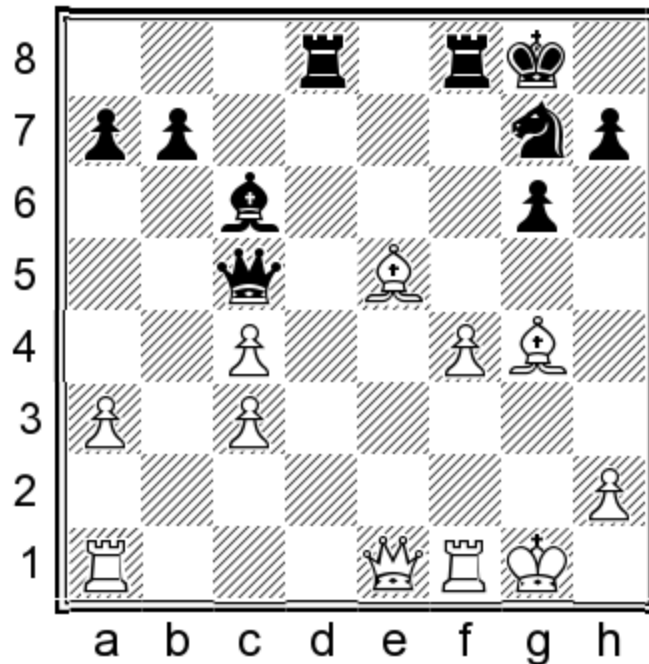
It's easy to underestimate our opponent's moves, focusing solely on our own ideas. This can lead to a narrow **tunnel vision** perspective, where we fail to see the full picture. In chess, it's crucial to maintain a balanced, 'color-blind' view, considering both our own moves and our opponent's potential actions. One of the critical pieces of advice I give my students to get into the habit of checking their opponent's resources is: **'If you see a good move for yourself, try to refute it.'** This slightly 'pessimistic' approach to finding the best move is vital to success at chess. It can help you avoid many dangers that hide underwater and become much more accurate at calculation.

Let's see another example of missing a critical resource for the opponent.

Zlatko Ilincic (2261)

Jianwen Wong (2254)

Budapest 2024



White played

21.Bd4

and after thinking for 13 minutes, Black decided to respond with

21...Rxd4??

.

This move was based on a miscalculation. Jianwen ('Jeremy') Wong said that 21...Qxc4 was his initial plan, but 'for some reason, [he] thought White was pressing after 22.Qe5 Rf7 23.Rae1 Re8 24.Qd6.' In reality, there is nothing to be afraid of here, and the position is roughly equal.

22.cxd4 Qxd4+ 23.Qf2 Qxc4

Black thought he was getting good compensation for the exchange here. His evaluation was way off because White is considerably better, even after a simple move like 24.Rac1. However, what's worse is that he completely missed...

24.Qa2!

.

Jeremy noted that ‘a sideway move’ escaped his attention in the initial position. That indicates visualization issues, something we will deal with in Chapter 2. After the forced queen trade...

24...Bd5 25.Qxc4 Bxc4 26.Rf2

White eventually converted his advantage in the endgame.

When analyzing this game, I identified another important issue with Jeremy’s critical decision on move 21 besides the apparent blindness to the opponent’s queen-trade resource. The wrong evaluation of the 21...Qxc4 line and his ultimate choice to sacrifice the exchange with 21...Rxd4 is a sign of what I call **emotional calculation**. Alexander Kotov excellently described this type of decision in the first chapter of Think Like a Grandmaster. It goes like this:

- 1) A chess player immediately calculates a line he likes (21...Qxc4 here), not making a list of all candidate moves.
- 2) After some time, he finds an issue with this line (resistance point after 24.Qd6).
- 3) He spends more time on it but cannot find a satisfactory answer, which frustrates him.
- 4) Suddenly, he notices another candidate move (21...Rxd4), which he calculates relatively briefly.
- 5) Using faulty logic that the first line doesn’t work, he makes a hasty decision to play the second line by process of elimination.
- 6) This can lead to blunders because he didn’t spend enough time calculating his move (21...Rxd4). Sometimes, a player realizes his mistake as soon as he drops the piece or presses the clock.

When I analyze games with my students, we often discuss what they calculated during the game or why they missed a particular idea. Sometimes, they will have no answer or concrete line to support their decision. ‘I have no idea why I played this’ is the last thing you

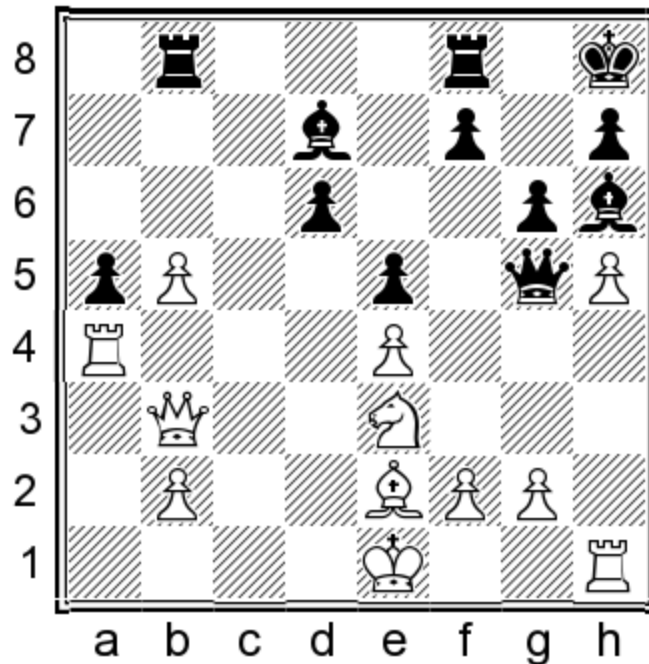
want to hear as a chess coach, but it's not uncommon. In those cases, we often talk about **hazy calculation**. It is similar to emotional calculation but different in that hazy calculation results from either a lack of focus or laziness in calculating lines concretely, move by move. In such cases, a player often chooses a move based on intuition or instinct. The precise moves and lines to support it are missing, and this can have a detrimental effect on the game.

Decisions based on incomplete information and an emotional rather than objective calculation process often result in mistakes. To avoid such situations, **make a list of candidate moves** first and allot some time to each one instead of plunging head-on into the first line you see. Giving due attention to all reasonable candidate moves is an excellent first step to better calculation because we all have biases toward or against certain moves. We will like some moves instantly, while others may look weird, wrong, anti-positional, etc. However useful, this spontaneous evaluation doesn't determine how good these moves actually are. You need to calculate and compare them to form an objective assessment. The analytical technique of listing the relevant candidate moves at every ply (half-move) in tactical and endgame positions, as explained in Chapters 3 and 5, is a crucial tool for your chess improvement.

Alexander Alexikov (2321)

Vladyslav Fishchuk (2326)

Lviv 2024



This sharp position arose from the Sveshnikov Variation of the Sicilian Defense after principled play by both players. Fishchuk decided to ‘go for it’:

22...f5??

However, this natural move is a huge mistake. Instead, 22...Rbc8, a move he had briefly looked at, would have forced White to commit some forces to defending the first rank. The position would have remained double-edged.

23.hxg6 f4 24.Nf5!

By his admission, Vlad completely missed this move before playing 22...f5. Once again, a visualization issue may have prevented him from seeing clearly that the f5-square is not attacked by the black g6-pawn anymore, but that’s not an excuse.

His main calculation was centered around 24.Nd5, with the plan to counter it with 24...f3! 25.gxf3 Bxb5 26.Bxb5 Qd2+ 27.Kf1 Qc1+ 28.Kg2 Qg5+ and a perpetual check. This type of ‘hope chess’ may yield results at club level, but in strong tournaments with titled players, it’s a strategy that invites punishment.

Now, Black has no choice but to play:

24...Bxf5 25.exf5

And White is completely winning, thanks to his domination on the light squares and the h-file. Fishchuk's original idea...

25...f3

didn't yield the desired return due to:

**26.gxf3 Qd2+ 27.Kf1 Rxf5 28.Rg4 Rc8 29.Qe6 Rc1+ 30.Kg2 Rf8
31.g7+ Bxg7 32.Rxh7+ 1-0**

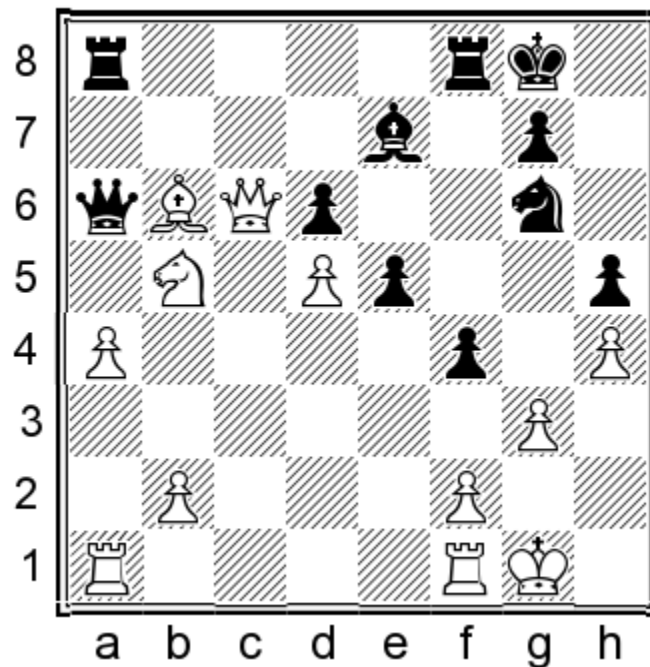
This example showed a typical case of tunnel vision, a phenomenon we have already briefly discussed. Fishchuk was too focused on making the pawn break ...f5 work to spot a fatal flaw. The idea of pushing the pawn to f3 seemed so tempting and straightforward that he never seriously considered possible roadblocks.

I believe these problems usually stem from relying too much on solving simple tactical puzzles in your chess training. While these puzzles are useful, they often lack the variety of defensive resources we encounter in real games. More often than not, your opponent has a way to match, neutralize, or counter your idea. As I mentioned earlier, the critical mindset switch that can remedy such game-deciding blunders is getting used to trying to refute your ideas. You have to be just as **vigilant in looking for how your move may be wrong** as convincing yourself that it is right. The Tactical Analysis exercises in Chapter 3 are a perfect testing ground for implementing this technique.

We will close this section with an example of an interesting calculation phenomenon I have noticed in many games and analysis sessions with my students.

Varshini Sahithi (2213)

Jianwen Wong (2254)



Black spent 35 minutes here to find the right solution on the kingside and failed. You can take some time and try it yourself. This is basically a tactical puzzle.

Wong considered seven different moves in this position and eventually played:

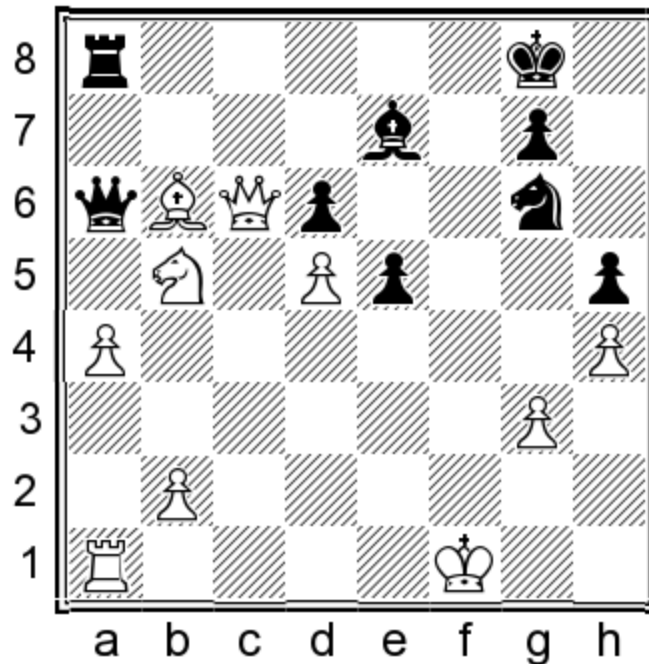
25...e4?

However, this allowed his opponent to win a tempo to centralize her bishop:

26.Bd4!

After some adventures, she won the game.

The right continuation was 25...fxg3! , with the main line going 26.fxg3? (White would have to play 26.Be3! instead, but it is clear that Black would achieve the kingside counterplay he had hoped for) 26...Rxf1+ 27.Kxf1, and we reach the critical moment.



analysis diagram

In the game, Wong calculated only 27...Rf8+ 28.Kg2, winning, and 27...Rc8! 28.Bc7, but here he missed the opportunity to ‘recycle’ 28...Rf8+! in a better version. After 29.Kg2, the key difference is the position of the white bishop, which allows Black to play 29...Qc8!, a move that was not available after 27...Rf8 28.Kg2. The 27...Rc8 intermezzo, forcing the bishop to move from b6 to c7, literally means a difference between winning and losing the game. So, Black had the right pieces of the puzzle but couldn’t put them together because he treated 27...Rf8+ and 27...Rc8 as two separate, non-compatible ideas. From a grandmaster’s point of view, **recycling ideas** in different versions is a routine tactical tool. However, lower-rated players can struggle with implementing it even if they are aware of the concept. Instead of comparing and contrasting their ideas in different move orders and positions, they often treat them as separate entities. In my view, the remedy is to **solve challenging puzzles** regularly. The more complex a puzzle is, the more likely it is that you will

need to employ a variety of ideas to find the right solution. Tackling more difficult puzzles means your solving rate will likely drop, and you will probably feel worse about your tactical and calculation skills for a while. But that's okay. You need such training to grow as a chess player. You will already have this opportunity in Chapter 3 of this workbook because some Tactical Analysis exercises and most Tactical Training Positions feature messy tactical affairs where you will probably need to work overtime to figure things out.

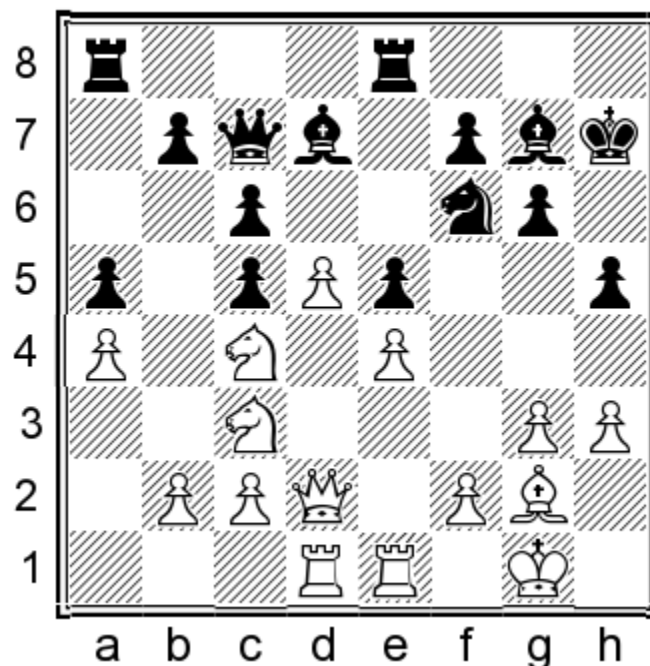
2. Typical middlegame mistakes

This section will show examples of typical mistakes in closed, static positions where opportunities for direct calculation and tactics are few. Instead, more sophisticated strategic tools are required to make the right decisions.

Mike Ivanov (2374)

Max Krämer (1980)

Bad Wörishofen 2024



White has a great position. His pieces are much more active than the opponent's, and the d5-pawn gives him leverage in the center. Nevertheless, this positional advantage has to be handled with care. White needs a good plan to capitalize on it.

However, would you believe it if I told you that White got a worse position in only three moves and, in five moves, a losing one? Black played...

17...Bh6

and already here, Ivanov began to struggle to find the right plan. He replied...

18.Qe2?!

but the queen is misplaced on the e-file because f2-f4 becomes more difficult to push while the black rook is on e8. Instead, it made more sense to put the queen on d3, 18.Qd3, from where it still controls the d-file and facilitates the crucial f4 break. If Black plays 18...h4 as he did in the game, then White could force a transition into a superior endgame with 19.dxc6 bxc6 20.Qd6 Qxd6 21.Rxd6. Alternatively, if Black tried to oppose him on the d-file with 18...Rad8, then 19.d6 Qb8 20.f4! would have been strong since 20...exf4 21.gxf4 Bxf4 loses a piece to 22.Rf1.

18...h4 19.d6?

Another sign that White is uncertain about what he should be doing in this middlegame. This impatient move throws away the advantage he had built up earlier. He should have recognized his mistake from the previous move and improved his queen with 19.Qf1, which supports the f4 break.

I know that moving your queen twice in a row, and backward at that, doesn't look like an 'improvement', but that's precisely what **strategic thinking** is about. You often have to consider unattractive moves to achieve a greater long-term goal. A good way to think about it is that you are delivering a **one-two punch**, as in boxing,

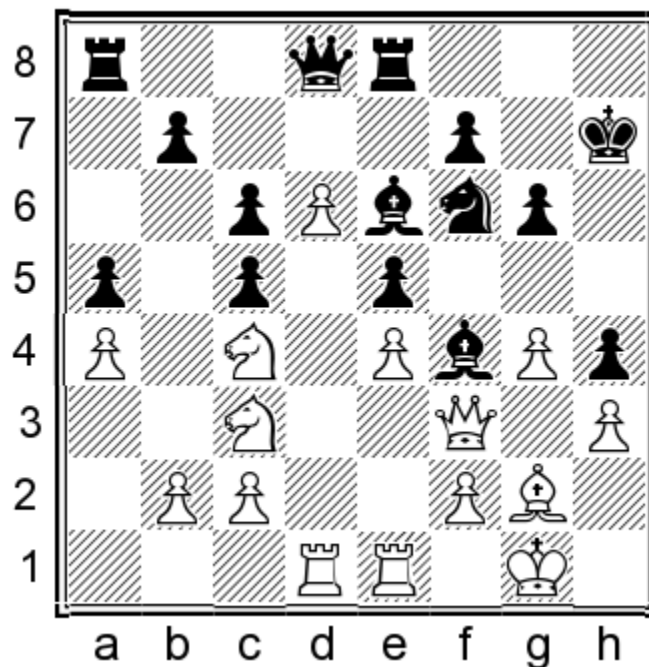
where the first punch usually serves as preparation for the more serious second blow.

For example, in the event of 19...K_{g7}, we can see how the ‘awkward’ 19.Q_{f1} has set up the second punch 20.f₄!. White gets a serious initiative in the center after 20...N_{h5} (or 20...e_xf₄ 21.e₅) 21.f_xe₅ h_xg₃ 22.Q_{f3}.

19...Q_{d8} 20.g₄?!

Another planless move. White’s last three moves feel completely disconnected due to the lack of strategic thinking. As a result, his position has deteriorated significantly. Unfortunately, 20.f₄ doesn’t work well now because White doesn’t have the required pressure on the f-file after 20...h_xg₃ 21.f_xe₅, so Black can play 21...N_{h5}.

20...B_{f4} 21.Q_{f3} B_{e6}



Suddenly, the black bishops are very active, and he has a more pleasant position. White tried to muddy the waters with an incorrect piece sacrifice:

22.N_{e2}?!

22.Bf1 would have held things together passively, but White felt he had to change the scenery.

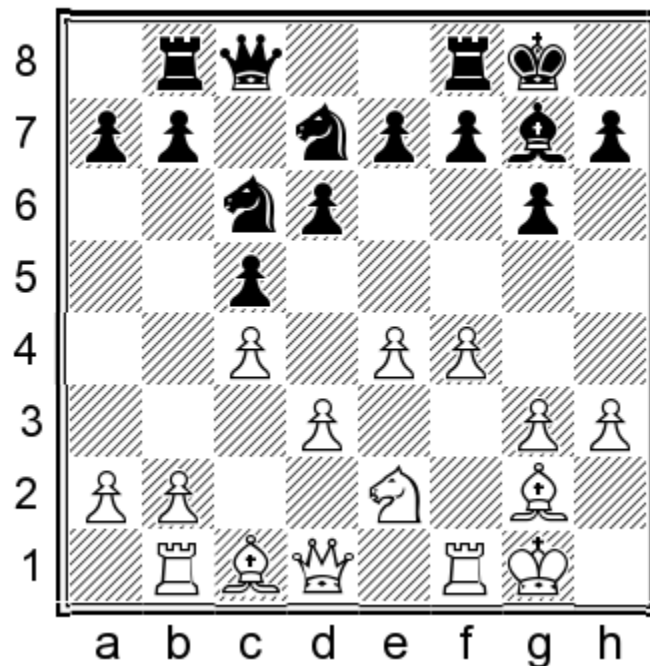
22...Bxc4 23.Nxf4 exf4 24.Qxf4 Nd7

Black has a winning advantage, objectively speaking. Mike somehow managed to complicate matters and won nicely in the endgame. However, such suspicious, move-by-move middlegame play is not sustainable in the long run. While it may sometimes work against lower-rated opponents, it will usually backfire against the stronger ones (see Examples 6 & 8). It is essential to have fundamentally sound strategic skills to be successful against them. In quiet middlegames, a systematic approach is crucial. This involves planning your **actions at least 2-4 moves ahead**. That is precisely why I created the ‘Find a Mini-plan’ exercises in Chapter 4 to help you work on this skill.

Jianwen Wong (2273)

Teja Ravi (2453)

Singapore 2023



We have a typical middlegame from the English Opening on the board. The modest but solid 'Botvinnik' structure (c4/d3/e4) gives White reasonable attacking chances on the kingside. Meanwhile, Black is getting ready to push ...b5 and play on the queenside. White needs to devise a plan to meet this advance and prepare his kingside play.

13.Nc3?!

This move starts the wrong plan of trying to control the b5-square. This knight was needed on e2 to cover the weak d4-square. Instead, White should have remained solid on the queenside with 13.b3, and after 13...b5, he could have traded the opponent's bishop with 14.Bb2. This trade would weaken the defense around the black king, facilitating the White's attack in the long run. For example, 14...a5 15.Bxg7 Kxg7 16.Qd2 Qa6 17.Rbe1 with a balanced but double-edged position, as both sides want to push the pawns on opposite flanks.

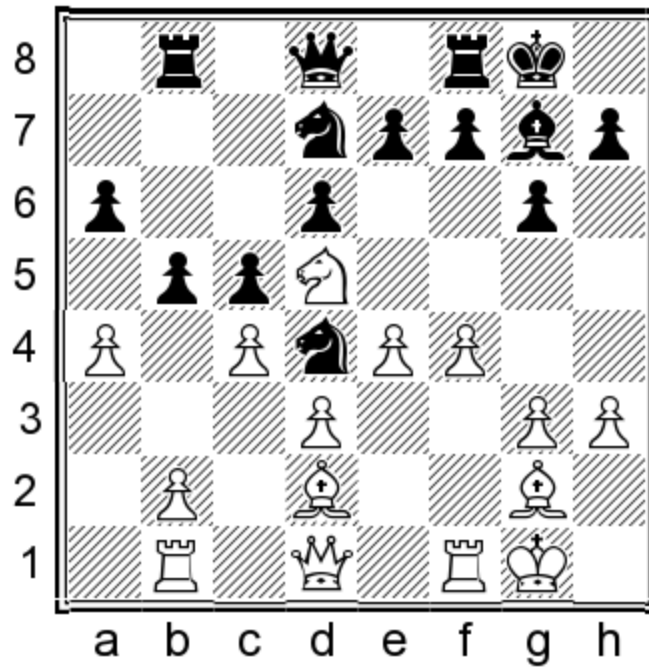
13...a6 14.a4?

Continuing an ineffective strategy. The adage of not moving pawns on the side where you are at a disadvantage holds true. White should have redirected his focus to his kingside play with 14.g4 b5 15.Bd2, making it more challenging for Black to find targets on the queenside.

14...Nd4 15.Nd5?!

A purposeless move. Similarly to the previous example, White makes empty one-move threats without a good plan.

15...Qd8 16.Bd2 b5

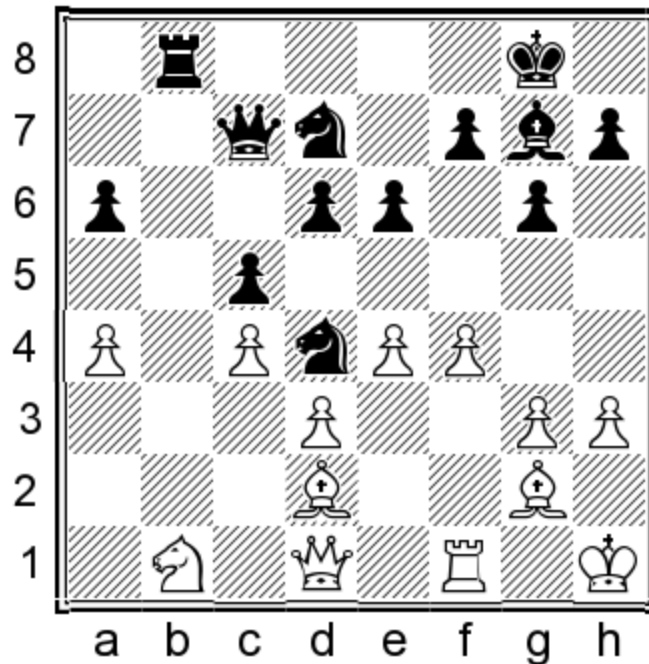


Wong misplayed the early part of the middlegame, but things still aren't dire. Now, he had to accept the reality of being worse and tried to play for equality with 17.axb5 axb5 18.cxb5 Rxb5 19.Bc3. However, he wanted to preserve his queenside's structural integrity:

17.b3??

Unfortunately, this automatically gives him a strategically losing position.

17...bxa4 18.bxa4 e6 19.Nc3 Qc7 20.Kh1 Rxb1 21.Nxb1 Rb8



Black controls the b-file and the d4-outpost. The unnecessary a2-a4 push also created weaknesses on the queenside that Black could exploit. At the same time, White has made no progress with his kingside play. Of his last eight moves, virtually half were made by the knight, only for it to finish on the miserable b1-square. This shows a lack of strategic direction. Black eventually converted his big positional advantage by breaking in on the b-file and winning the a-pawn in the endgame.

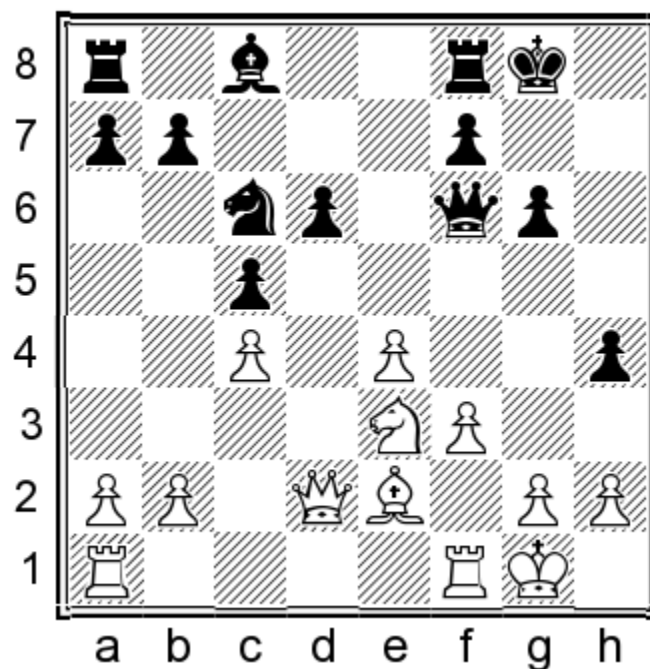
Games like these serve as a reminder that even if you excel in tactical play, you won't always be able to force a tactical position against a strong opponent. In slow-paced, schematic games like the ones we are discussing in this section, the key is to demonstrate adept maneuvering and planning skills. A sound strategic approach is a precursor for eventually reaching a position where the game becomes more tactical and concrete. As they say, tactics are in service of strategy.

In the next game, we will see another instance of losing a game without a chance after making only one positional mistake against a strong opponent. Instead of planning several moves ahead in the middlegame, Black didn't look past his next move and was duly punished.

Teimur Toktomushev (2295)

Johannes Rappazzo (2130)

Glarus, Swiss Junior Championship 2024



Both sides played the opening confidently, but White took some time on his last move (18. 0-0), a novelty. Rappazzo was familiar only with the previously played 18. 0-0-0. However, he failed to grasp the differences between these two moves in a new situation and played an 'automatic' move:

18...Nd4?!

This shows that he didn't understand the main idea behind White's kingside castling. Instead of fighting for the d-file, as in the 18. 0-0-0 line, here White wants to push the f-pawn and attack the weakened black kingside. Had he realized that in time, he might have found

the strong prophylactic move 18...Qf4!, putting up a physical barrier on f4. The game could have continued 19.Rad1 Be6 (19...Nd4!?) 20.Nc2 g5! 21.Qxf4 gxf4 22.Rxd6 Rfd8 with full compensation for the pawn in the endgame due to the powerful blockade on the dark squares.

Alternatively, Black could at least force a transition into a safe endgame with 18...Qd4!? 19.Rad1 Qxd2 20.Rxd2 Nd4, where he should eventually equalize despite the backward d-pawn, thanks to a favorable pawn structure.

19.Rad1

White could have launched the f-pawn already: 19.f4!?

19...Be6?

The superficial play continues. Presumably, Rappazzo played 19...Be6 to protect the d5-square, but there was no reason to fear 20.Nd5 because Black can simply retreat, 20...Qg7, and prepare to push ...f5. Black's last two moves lack strategic depth, and he seems alarmingly unaware of the opponent's resources. While it may not be the end of the world to allow White to push the pawn to f4, helping it reach f5 with a tempo is equal to signing a death sentence in this sensitive position.

Apart from the already mentioned 18...Qf4, he could have also gotten reasonable counterplay with 19...h3 20.g3 Bd7!. The bishop belongs on c6, not e6. From there, it puts pressure on the e4-pawn and leaves the e-file open for the rooks. That is proper **schematic thinking**, i.e., finding the best squares for your pieces under the given circumstances. For example, 21.f4 Rae8 22.Bd3 Bc6 with an unclear position.

20.f4

White attacks for free now because Black is too slow to generate counterplay in the center. Toktomushev converted his advantage skillfully:

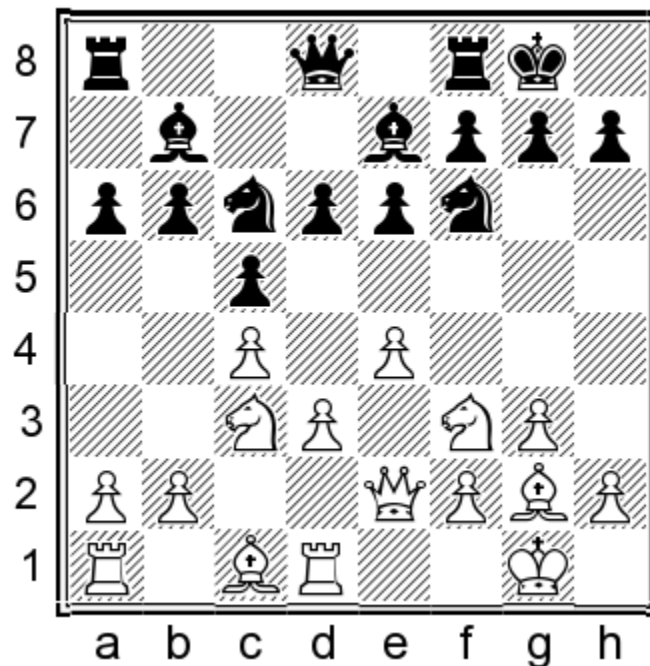
20...Rfe8 21.Bd3 h3 22.f5 gxf5 23.exf5 Qg5 24.fxe6 Rxe6 25.Rde1
 Rae8 26.Qf2 f5 27.Nc2 f4 28.Rxe6 Rxe6 29.Nxd4 cxd4 30.Kh1
 Re3 31.gxh3 Kf8 32.Qxf4+ 1-0

Finally, let's examine an example of **misevaluating a positional transformation**. This mistake often appears in the games of ambitious tournament players.

Mike Ivanov (2374)

Vitaly Kunin (2521)

Bad Wörishofen 2024



We have a closed center structure similar to the one from Example 6. However, a kingside attack is not realistic for White here. That means he should focus on central play as soon as possible. Ivanov decided to prepare it with...

11.h3?!

,
 planning to go 12. Be3 and only then push the pawn to d4.
 However, this was too slow. 11.d4 was begging to be played,
 transposing into a reasonable version of the Hedgehog for both

sides: 11...cxd4 12.Nxd4 Nxd4 13.Rxd4 Qc7 14.Be3, with a very slight edge to White due to his space advantage. Grandmaster Kunin exploited White's hesitation with...

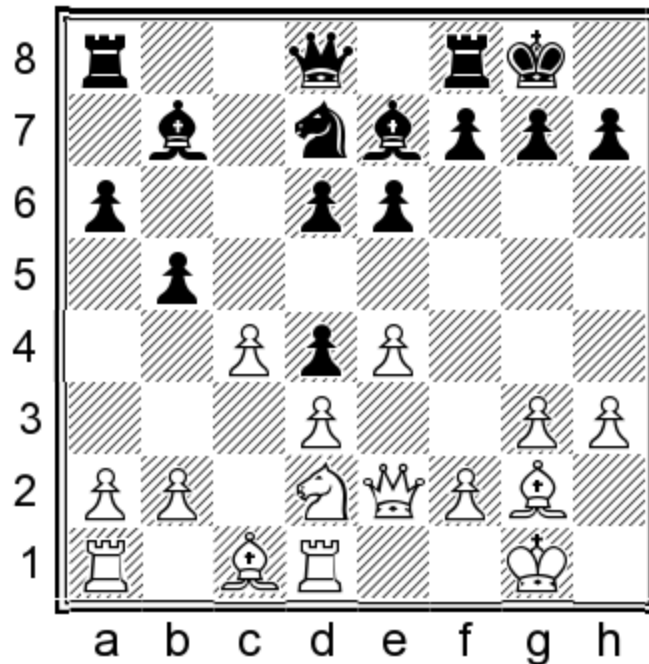
11...Nd4!

,
a move Ivanov thought wasn't good for Black because it created double pawns for him after...

12.Nxd4 cxd4

.
However, the implications of this positional transformation were not as straightforward as they seemed. While it's true that Black ended up with doubled pawns, this structure actually enhanced his central control and provided him with additional space. The c5-square and the semi-open c-file, previously inaccessible, now become available for his pieces, while the c3- and e3-squares are no longer accessible for White's pieces. This change in the game's dynamics also necessitates White to spend a few tempi to regroup the knight, allowing his opponent to initiate his queenside counterplay.

13.Nb1 Nd7 14.Nd2 b5



White needs to conceive a mini-plan to contain the opponent's aggression on the queenside. Ivanov made a wrong choice:

15.Nb3?!

The right mini-plan was 15.b4, followed by Nd2-b3-a5. For example, 15...Nb6 (there is no need to worry about 15...a5 because White can secure the c4-outpost for his knight with 16.cxb5 axb4 17.Nc4) 16.Nb3 e5 17.Na5 Bc8 18.Bd2 and Black's advantage is minimal at best.

15...e5 16.Bd2

Black had an excellent opportunity to gain a significant advantage with 16...a5!, which would have stopped Na5 and prepared further pawn advancement. In case of 17.cxb5, Black would have regained the pawn after 17...a4 18.Nc1 Qb6, leading to a nearly winning positional advantage. However, Kunin chose a different move, maintaining his positional edge. He ultimately won the game after 53 moves, never losing his grip on the white position.

Returning to the positional transformation issue on moves 11-12, after discussing this with Mike, it became clear that he had an

incomplete understanding of the structure with doubled pawns arising after ...cxd4. His assessment of this structure was favorable for White because he mainly had seen examples where that was the case. He wasn't aware of the little differences in pawn and piece placement that gave Black the upper hand in the game. On the other hand, it is reasonable to assume that a seasoned grandmaster like Kunin had a more nuanced view, enabling him to alter the structure with 11...Nd4 confidently.

Studying **well-annotated grandmaster games with a color-blind approach** is crucial in enhancing your positional understanding. One of the most significant differences between IMs and GMs and those that never become one is that the first group has a much greater base of model games (and, consequently, middlegame ideas) to draw from when making a strategic over-the-board decision. Studying games with detailed explanations of the players' thought processes and strategic decisions is one of the essential aspects of chess training. This study method provides a deeper insight into the game, helping us better understand how to handle various typical middlegame scenarios, create an advantage, convert it, attack, defend, etc. For that purpose, you can study five instructive games in the 'Middlegame Simulation' section in Chapter 4.

3. Typical endgame mistakes

One of the most common shortcomings of ambitious tournament players is not playing the endgame with the right mindset. However, this area is where significant growth and improvement can be achieved. To paraphrase what Mikhail Shereshevsky said in his famous book Endgame Strategy, once the queens get off the board, the first order of business is to calm yourself down. Take a few

minutes to clear your thoughts and switch from the middlegame to the **endgame mindset**. This includes understanding that:

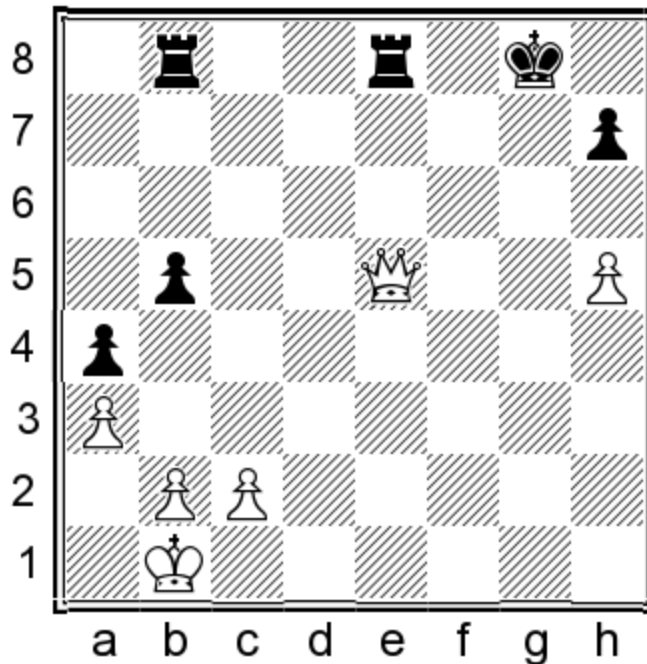
- The ‘price’ of each move in the endgame increases, and the margins of error become much smaller than in the middlegame
- You will probably not win a game in an attractive way, but rather a boring, technical one
- Many endgames have drawish tendencies due to a possible theoretical draw, insufficient mating material, stalemate, 50-move rule, etc.
- Endgames usually require a strategic, schematic approach before you start calculating concrete variations
- The king has a much more active role in the endgame than in the middlegame.
- The pawns, particularly passed ones, increase in value in endgames.
- Zugzwang can be a powerful tool in the endgame. Magnus Carlsen does not believe in fortresses for a good reason.
- and more...

Our first two examples will show how a lack of an ‘endgame mindset’ can hurt one’s chances as the game approaches its final phase.

Johannes Rappazzo (2130)

Matthias Mattenberger (2276)

Glarus, Swiss Junior Championship 2024



After an exciting middlegame, White obtained a much better endgame. The black rooks are no match for his powerful queen because they cannot coordinate well to protect the b5- and h7-pawns, under permanent danger of being captured after some double attack. You can take a couple of minutes here as an exercise to figure out what you would do as White before looking at the text. In the game, Johannes played:

36.Qd5+?

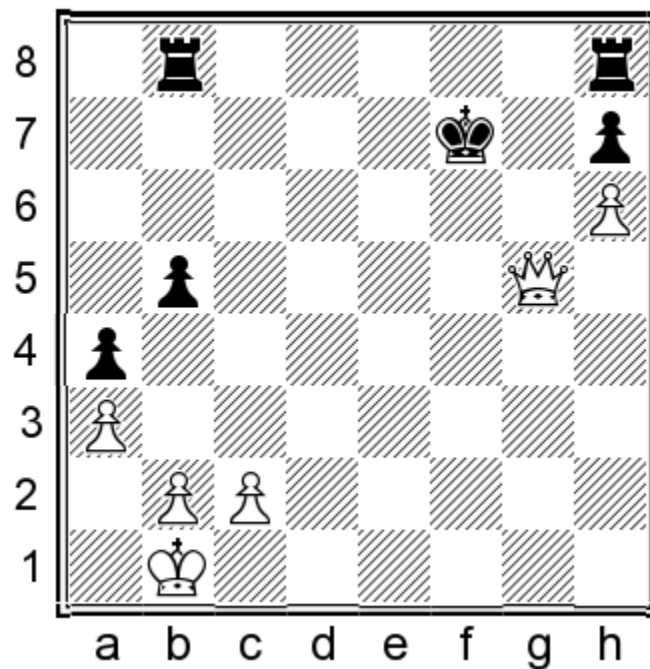
A move that does not correspond to the needs of the position. White still hasn't switched from the middlegame mode where he attacked the opponent's king and every tempo and check mattered (the black king was under fire on f6 at some point in a sharp Sicilian middlegame). In this endgame, though, queen checks are bound to do more harm than good because Black wants to move his king toward the center.

Instead of the ill-advised 36.Qd5+, White could have played the much stronger 36.Qf6! or 36.Qc7!. Either one of these quiet queen moves would have kept the black king locked in on the eighth rank.

The h6-Qg7# threat would have forced Black to abandon the h-pawn, giving White very good winning chances with a queen and 4 pawns vs 2 rooks and 2 pawns.

In other words, White should have adopted a more strategic approach of **provoking gradual concessions** from his opponent rather than going for a direct knockout. This mindset is crucial in ‘technical’ endgames.

36...Kg7 37.Qg5+ Kf7 38.h6 Rh8



Black has activated his king, planning to move it toward the center and the b5-pawn. His rooks may seem ridiculously passive, but they are perfect at what they do, and this might just be a fortress if White doesn't find a good plan to break it.

39.c3?

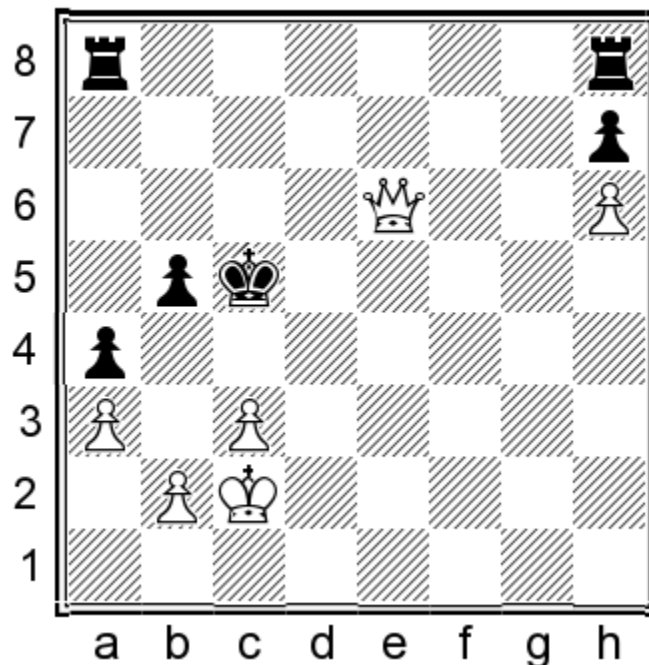
This move is alright in itself, but the plan behind it is not. White wants to bring his king up to c2 to support the c4 break. However, the white king has no business on the c-file, where it can get under fire from the rooks.

Instead, the king is best placed out of harm's way on a2 (schematic thinking!) while the queen will do the 'dirty work': 39.Ka2 Ke6 40.Qf4 Kd7 41.Qf6! Kc7 42.Qe6!. As mentioned earlier, quiet queen moves are the best policy in similar endgames, forcing Black to make new concessions. The ultimate plan is to push c2-c4 to undermine and capture the a4-pawn, but White is in no rush and wants to displace the black king first: 42...Kb7 (as soon as one of the black rooks moves, one of his pawns gets weakened; for example, 42...Ra8 43.Qd5 Kb6 44.Qd6+ Kb7 45.Qc5! Ka6 46.Qc6+ Ka5 47.b4+! and White wins) 43.Qd7+ Kb6 44.Qd6+ Ka7 45.Qb4!. This is the best way to prepare the c4 break. Both black pawns will fall now, thanks to the exposed position of the black king: 45...Rb6 46.c4 bxc4 47.Qxa4+ Kb7 48.Qxc4, winning.

39...Ke6! 40.Qf4 Kd7 41.Kc2 Ra8 42.Qf5+ Kc6 43.Qe6+

White continues giving fleeting queen checks instead of formulating a solid plan for this endgame.

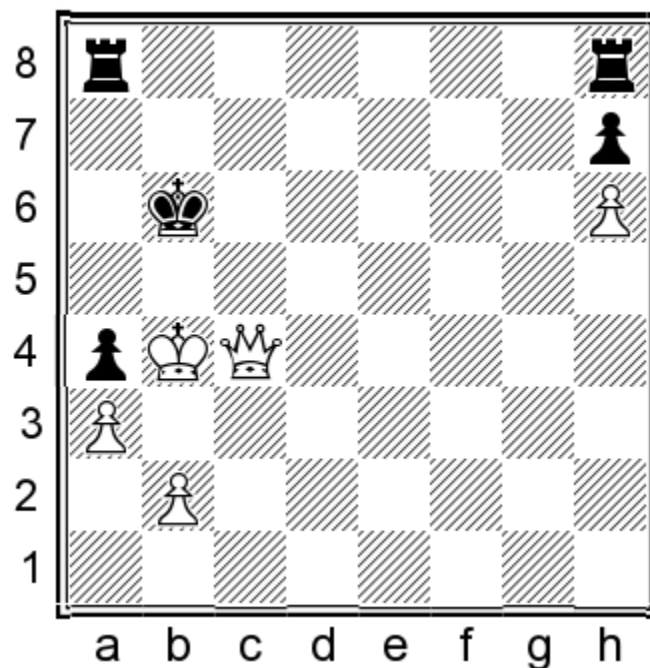
43...Kc5



44.c4?!

Rappazzo keeps playing this endgame in ‘fast and furious’ mode as if useful semi-waiting moves don’t exist. This is possibly the worst timing for the pawn break since Black defends both a4- and h7-pawns, and the white king will get exposed on the c-file. Once again, a quiet queen move like 44.Qd7 would have been the correct approach, sending the ball into the opponent’s court before regrouping for the c4 break.

44...bxc4 45.Kc3 Kb5 46.Qxc4+ Kb6 47.Kb4?!



It’s difficult to say whether this move is brave or reckless. It certainly isn’t the right way to play this endgame.

47...Rhb8! 48.Qc5+ Ka6+ 49.Kxa4

White had hoped to play 50.b4 next and hide his king on b3. By his admission, he had missed that his opponent could simply take the pawn:

49...Rxb2

And suddenly the white king almost gets caught in a mating net. Fortunately, he could bail out immediately:

50.Qb5+ Rxb5

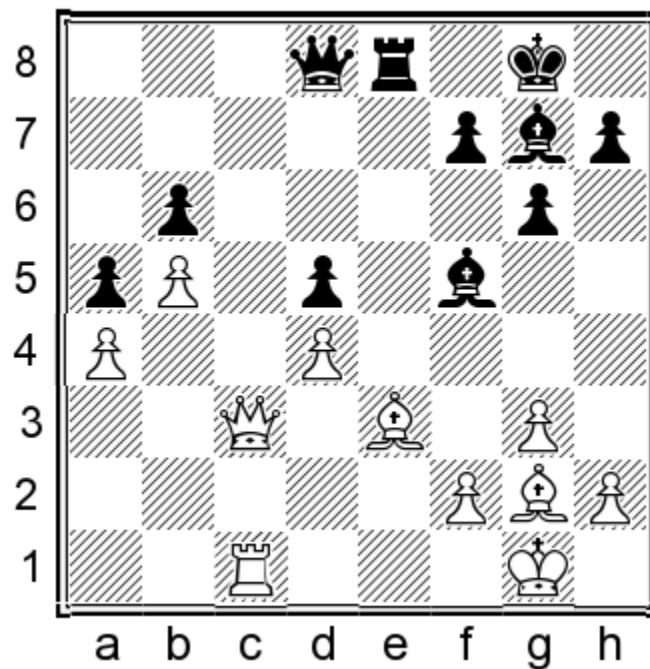
Draw agreed due to stalemate.

I think you will agree that having to give up his powerful queen to force a draw wasn't exactly the best outcome for White in this endgame, considering the position from which he started.

Jianwen Wong (2254)

Bank Szalay-Ocsak (2174)

Budapest 2024



White has achieved a significant advantage in the middlegame. His control over the c-file and the possibility of attacking the weak b6-pawn should give him excellent winning chances in the endgame. Black decided to look for counterplay:

22...h5

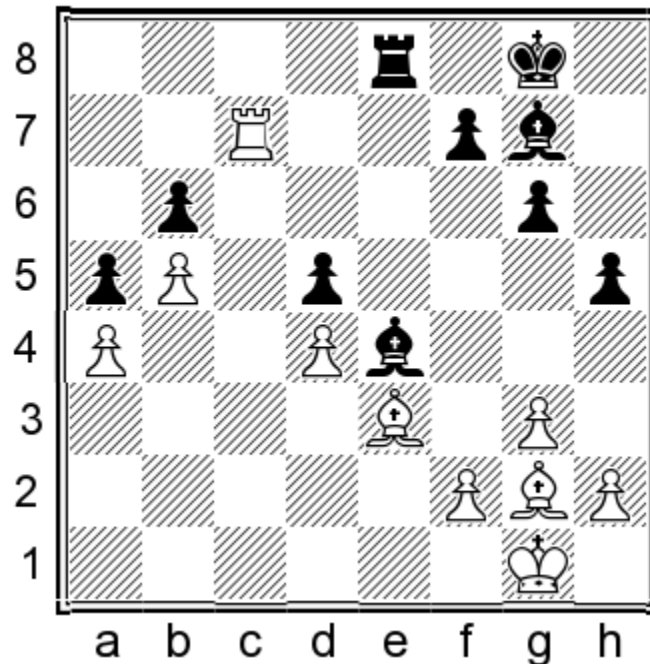
And here Wong rushed the queen trade:

23.Qc7?

Completely underestimating the opponent's counterplay in the endgame. Instead, the prophylactic 23.h4! would have stopped the

black h-pawn and given the white king some much-needed breathing space on h2. White should have been in no rush to trade the queens.

23...Qxc7 24.Rxc7 Be4



25.Bh3?

We just entered the endgame, and White immediately makes a sloppy move, underestimating the opponent's counterplay. As noted earlier, **the 'price' of each move in the endgame increases.** A single mistake can throw away everything you have built up for hours.

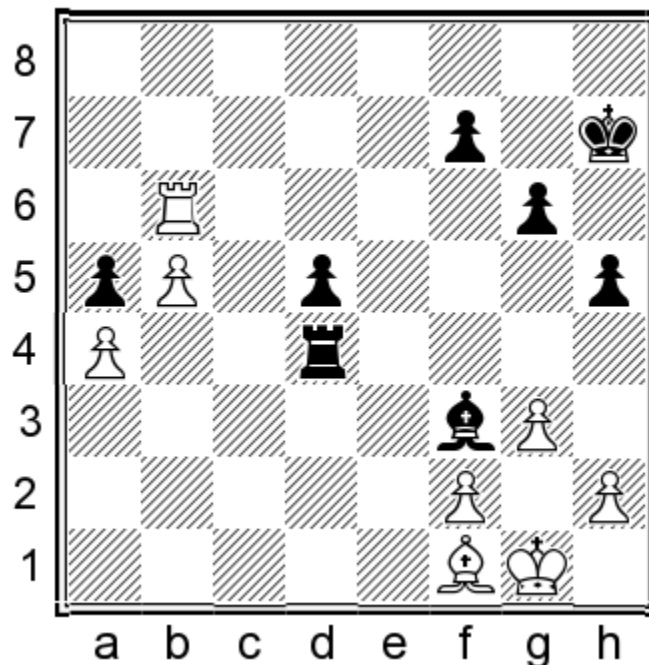
25.Rd7 would have still kept White in control. Jeremy said he rejected this move 'on account of some ...Rc8 counterplay, thinking it led to a probable draw.' However, in the line 25...Bxg2 26.Kxg2 Rc8 (26...Kf8! is the only reasonable defense for Black) 27.Rxd5 Rc4 he had in mind, he failed to overcome resistance. Had he calculated a few moves further, he would have realized that 28.Rd8+! Kh7 29.d5 is just winning for White.

25...Bf3!

White had missed this move, which clears the e4-square for the rook, threatening to win the d4-pawn. Black has sufficient counterplay to keep the balance now.

26.Rc6 Re4 27.Rc8+ Kh7 28.Rc7 Kg8 29.Rc8+ Kh7 30.Bf1 Re6
30...Bxd4 was also possible since 31.Bd3 Rxe3 32.fxe3 Bxe3+ 33.Kf1 Kg7 seems nearly impossible for White to win. But Black played it safely, and he wasn't wrong.

31.Rc6 Re4 32.Rxb6 Bxd4 33.Bxd4 Rxd4



The defender won back the pawn and activated his rook. There seems very little for White to play for now.

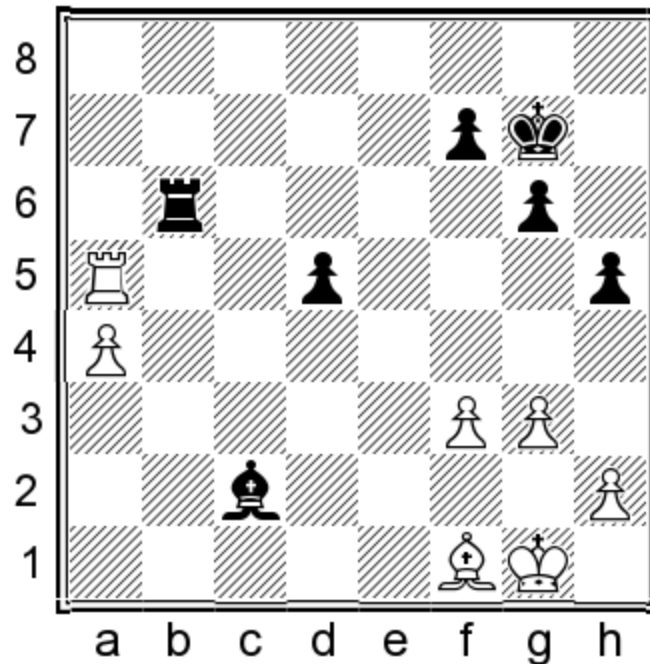
34.Rf6 Be4 35.f3

35.Rxf7+ yields nothing due to 35...Kh6! 36.b6 Rxa4.

35...Kg7 36.Ra6

36.Rf4?? even loses to 36...g5 37.b6 Rxa4!.

36...Bc2 37.b6 Rb4 38.Rxa5 Rxb6



The position has simplified considerably. Black has escaped from his passive position, and the game seems headed for a draw. White can simply take the pawn on d5; Black takes on a4, and the players can go home. But here, Wong makes a common psychological mistake: he **keeps playing for a win by inertia** in a drawish position.

39.Rb5?

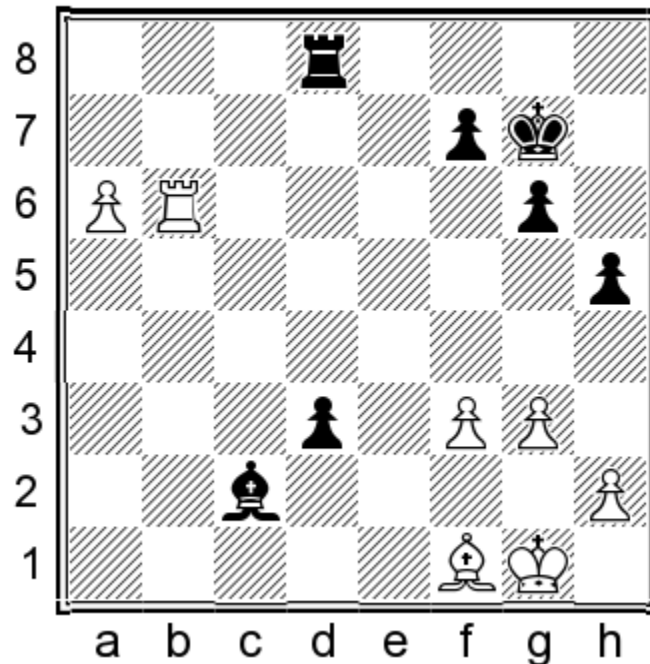
While it is often a reasonable strategy to test your opponent in drawish positions where possible mistakes are lurking, this is not one of them. It doesn't require deep calculation to realize that the black d-pawn is no less dangerous than the opponent's outside passer. Wong did not calculate and evaluate the position objectively but made an emotional decision to play on instead. This lack of objectivity backfired:

39...Rd6 40.a5??

White is still not accepting the reality, daydreaming about promoting the a-pawn. Unfortunately, his sense of danger abandoned him. It was possible to pull the brakes with 40.Kf2 and

after 40...Bxa4 41.Ra5, White would have preserved excellent drawing chances despite being down a pawn.

40...d4 41.Rb6 Rd8 42.a6 d3



Instead, the opponent's d-pawn proves to be quicker. An unbelievable turnaround!

43.a7

White would have had some chances to hold the endgame had he played 43.Kf2 d2 44.Be2 d1Q+ 45.Bxd1 Rxd1 46.Rb2 Bf5 47.Ra2 Rd8 48.a7 Ra8, but he already gave so many chances to his opponent that it's not surprising he missed this final opportunity to put up a fight.

43...d2 44.Be2 d1Q+ 45.Bxd1 Rxd1+ 46.Kf2 Ra1

Black eventually won on move 69.

I am convinced that White lost a better endgame because he played it with the wrong mindset and failed to readjust. He played too emotionally in critical moments, not appreciating:

- 1) His opponent's resources
- 2) Drawish tendencies in the endgame
- 3) The increased price of a move in the endgame.

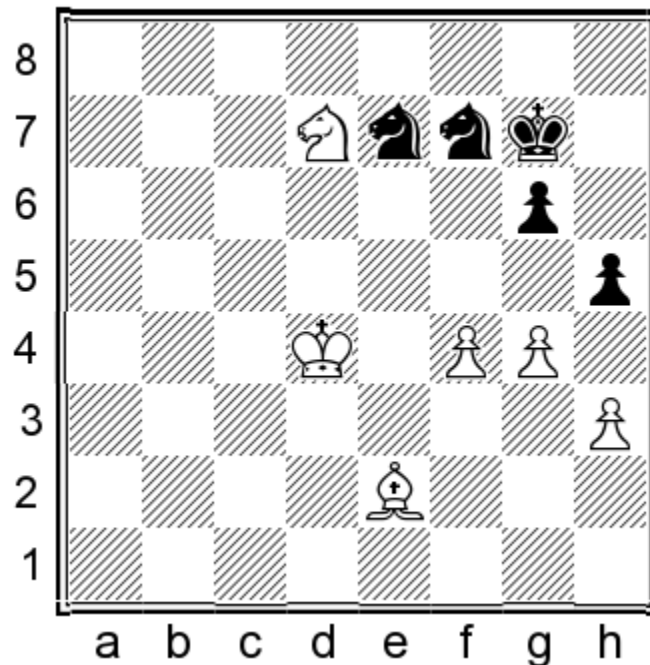
The other common shortcoming of players in the 2100-2400 range is **unconvincing endgame technique**. It can manifest in many forms, such as the inability to convert a winning endgame, trading the wrong pieces or pawns, defending a worse but drawn endgame poorly, and not applying basic endgame techniques like schematic thinking and playing for two weaknesses.

Let's take the following two examples to illustrate some of these issues.

Mike Ivanov (2374)

Ethan Song (2208)

Toronto, Canadian Championship 2024

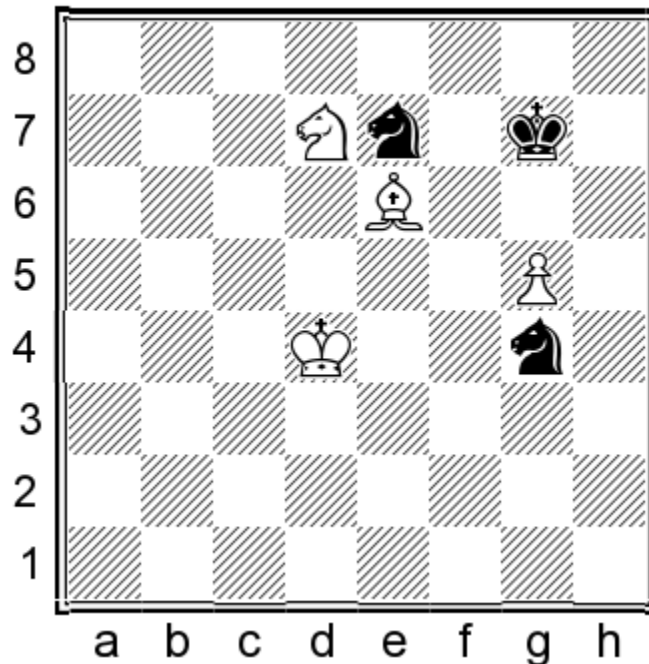


Black has just played 48... h5, hoping for a simplification into a drawn endgame after 49.gxh5 g5. How would you react to it?

49.Bc4?

Unfortunately, Ivanov allowed his opponent to achieve his simplification goal with this move. Instead, 49.g5 should have been a no-brainer because we want to keep as many pawns as possible on the board if we want to win. No matter what Black will do next, it's simply the right technical move in this position. Mike didn't like it because it gives the f5-square to the previously passive black knight. But that's a very superficial way to look at it. The f5-outpost is only temporary because White can squeeze the knights out of it. More importantly, we have preserved the g-pawn from the exchange and fixed both black pawns on light squares, where our bishop can attack them. White wins by gradually removing the blockade on f5, for example: 49...Nf5+ 50.Kc5 Nd8 51.Kd5! Ne3+ 52.Ke4 Nf5 53.Bd3! Nc6 54.Ne5 Nce7 55.Nf3 Nc6 56.Bb1! Nce7 57.Nd4 etc.

49...hxg4 50.hxg4 Nh6 51.Be6 g5! 52.fxg5 Nxg4



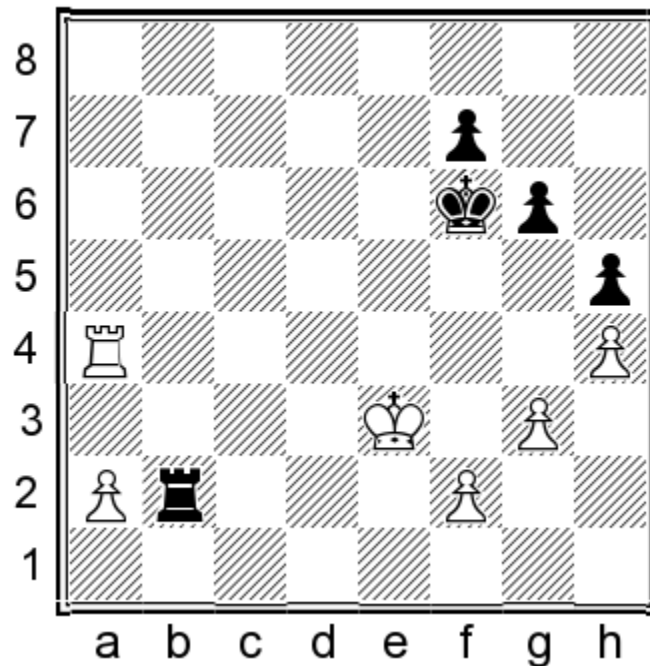
Black has forced a further liquidation of pawns, with an inevitable draw. The players split the point on move 70.

49.g5 is a move that, as my late coach used to say, you should play instantly if someone woke you up at 3 a.m. However, when I gave this position to a few other 2300+ players, it also didn't appear on their radar. Studying endgames gives confidence in what is technically correct and wrong. Therefore, you should not neglect your endgame training if you want to have good results.

Mike Ivanov (2355)

Zachary Dukic (2266)

Toronto, Canadian Championship 2024



As Mark Dvoretsky and many other endgame authors have established in their books, this common rook endgame is drawn with the best play. The game between Ivanov and Dukic eventually ended in a draw, but it was not a model example of how to play this endgame. Using it as one of the 'endgame tragicomedies' in Dvoretsky's Endgame Manual would be more appropriate due to both players' unconvincing rook endgame technique. Black immediately erred here:

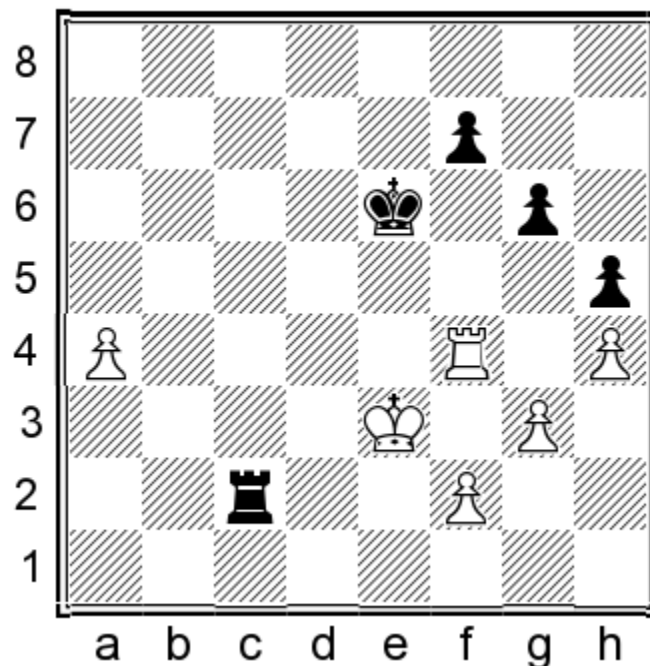
52...Rc2?

Missing a pretty simple endgame tactic. Instead, he should have moved the king from the f-file, 52...Ke6, and then White couldn't move his king toward the a-pawn without losing the f-pawn. For example, 53.f3 (or 53.Re4+ Kd5 54.Rd4+ Ke5 55.a4 Ra2=) and now 53...f6 54.Ra8 g5 is the textbook way to generate counterplay, which is usually enough to make a draw.

53.Rf4+?

White missed a golden opportunity to pick up two important tempi to transfer his king to the queenside with 53.Kd3! since 53...Rxf2 runs into 54.Rf4+, with a winning king-and-pawn endgame for White. Black would have to play 53...Rb2 54.Kc3 Re2 and then 55.Rf4+ Ke6 56.a4 wins easily for White since the white rook is placed perfectly on f4, and the white king supports the outside passer. For example: 56...Ra2 57.Kb3 Ra1 58.Kb2 Rd1 59.a5 etc.

53...Ke6 54.a4



54...Ra2?

This automatic move is inaccurate, which can make a difference between a win and a draw in this type of endgame. White was not threatening to push the a-pawn, so Black could have proceeded with his kingside plan: 54...f6 55.Kd3 followed by 55...Rc1!, winning the crucial tempo by cutting off the white king. After 56.Rc4 Ra1 57.Kc3 g5 58.Kb3 Rb1+, that extra tempo would matter (compare this line with 58.Re4+).

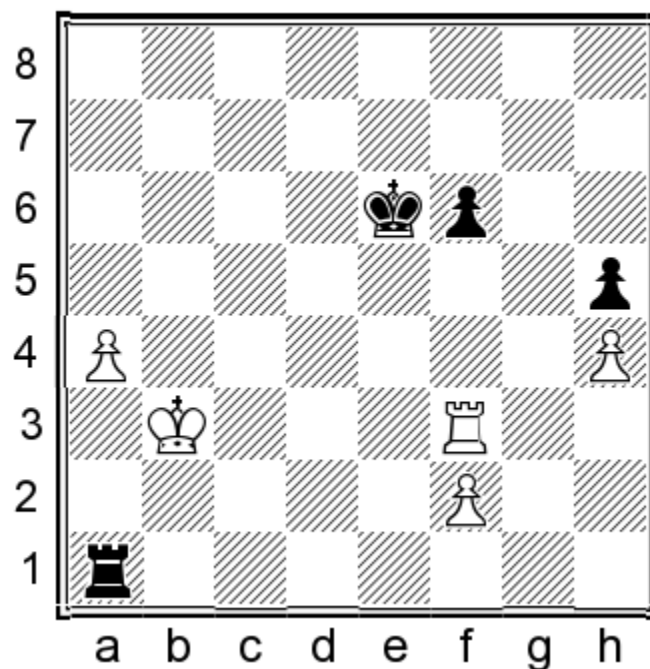
55.Kd3 f6 56.Kc3 g5 57.Kb3!

Ivanov takes the second opportunity to win a key tempo with this intermezzo. Unfortunately, he doesn't follow it up with the correct continuation.

57...Ra1 58.Rf3?

The rook should have remained on the fourth rank to protect the h-pawn. The f2-pawn can already be sacrificed because the a-pawn is dangerous enough. White would have had a fairly comfortable win had he played something like 58.Re4+ Kf5 59.Rb4 Ke6 60.Rb5 etc.

58...gxh4 59.gxh4



Here Dukic had the last opportunity to hold this rook endgame, but he chose the wrong path for his king:

59...Ke5?

He plans to attack the kingside pawns with the king, but this plan is too slow, as the game will show. He should have kept his king closer to the queenside. Therefore, 59...f5 was the right continuation, and if White goes 60.Kb4 Rb1+ 61.Rb3 (61.Kc5 Ra1 62.Kb5 Rb1+ 63.Ka5 Ke5 is also a draw because the king blocks his passed pawn), Black wins the h-pawn with 61...Rh1 62.a5 Rxh4+ and is in time to distract the white pieces from the b-file with 63.Kb5 Kd7!. White would need to play 64.Rc3 to prevent the black king from reaching the b-file, but then 64...Rh1 65.a6 Ra1 66.Kb6 Rb1+ 67.Ka7 h4 secures a draw for Black.

60.Kb4 f5

It's too late for 60...Rb1+ 61.Rb3 Rh1 because of 62.Kb5 Rxh4 63.a5 Kd6 64.Kb6!, shouldering the black king away from the a-pawn.

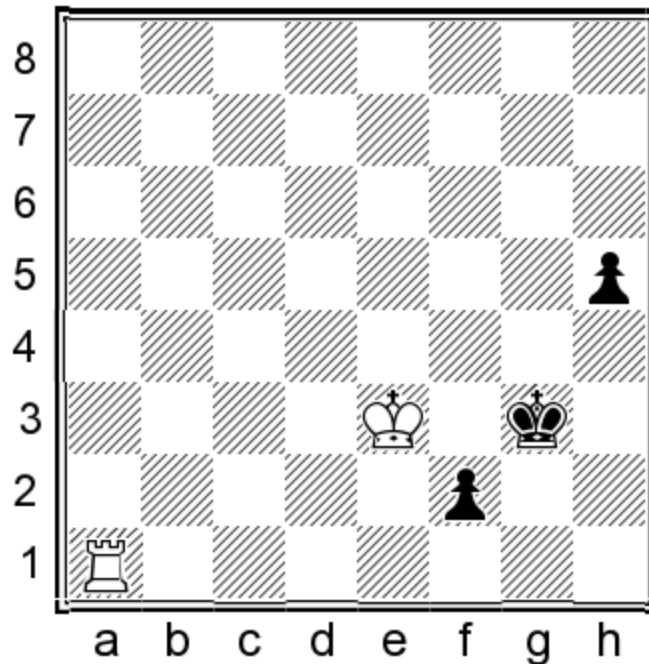
61.a5 Ra2 62.Ra3!

White puts his rook behind the pawn, forcing a typical scenario where his opponent will eventually have to give up his rook for the a-pawn and hope that his king and pawns will be quick enough on the other flank.

62...Rxf2 63.a6 Rb2+ 64.Kc5 Rb8 65.a7 Ra8 66.Kb6 Kf4 67.Kb7 Rxa7+ 68.Kxa7 Kg4 69.Kb6

The white king moves backwards very quickly along the g1-a7 diagonal.

69...f4 70.Kc5 f3 71.Kd4 f2 72.Ra1 Kxh4 73.Ke3 Kg3



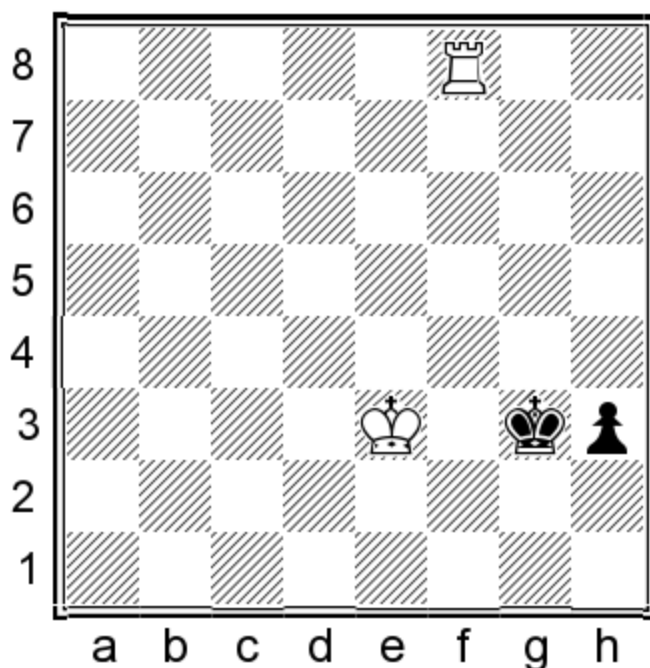
White is at the finish line. He did everything right after securing the safe passage for the a-pawn, and now he only needs to mop up the black pawns. However, now he makes a colossal mistake:

74.Rf1??

The main guiding principle in endgames with a rook vs pawn(s) is that the king tries to get in front of the pawn(s; to block them), and the rook belongs behind the pawn(s; to harass the opponent's king with checks from the back). Ivanov violates this principle, wasting precious tempi to win the f-pawn. As a result, he will not be able to coordinate with his king and rook to stop the other black pawn.

Instead, 74.Ke2, preparing to put the king on f1, should be one of those automatic, technical decisions, even if you were playing on increments. After 74...h4 75.Kf1, the pawns are safely blocked, and White can start picking them up: 75...h3 76.Ra3+ Kg4 77.Kxf2 etc. In case of 74...Kg2, White goes 75.Rf1 and picks up the crucial tempo compared to the game: 75...h4 76.Rxf2+ Kg3 (or 76...Kg1 77.Kf3) 77.Kf1.

74...h4 75.Rxf2 h3 76.Rf8



The rook is too slow to get behind the pawn, while the white king cannot outflank the opponent's counterpart. Dukic knew how to achieve a theoretical draw here:

76...Kg2!

76...h2? 77.Rg8+ Kh3 78.Kf2! h1N+ 79.Kf3 and White wins.

77.Rg8+ Kf1!

77...Kh1? 78.Kf2 h2 79.Kg3 Kg1 80.Kh3+ Kh1 81.Ra8, winning.

78.Rh8 Kg2 79.Rg8+ Kf1 80.Rf8+ Kg1 81.Kf3 h2 82.Rg8+ Kf1 83.Rh8 Kg1 84.Rxh2 Kxh2 85.Ke4 Kg3 86.Ke3 1/2-1/2

Both players displayed a decent understanding of this typical rook ending but didn't handle it accurately enough that we could call this good endgame technique. Remember, 'knowing' something is one thing, but applying it in a game is another. **Mastery comes when these techniques become instinctive to you.** Therefore, consistent study and practice are crucial to enhance your endgame skills and demonstrate better technique in endgames like these. I am confident

that the exercises in Chapter 5 will ignite your motivation to invest additional effort in this area of your game.

Chapter Summary

The table on the next page summarizes the links between the typical shortcomings we examined and the corresponding workbook exercises.

A recurring issue or type of mistake	Suggested remedy	Workbook exercise that addresses the issue	The chapter where you can find the corresponding exercise
Inaccurate visualization	Include various types of 'blindfold chess' in your training	Deep Visualization	Chapter 2
Lacking tactical vision	Improve your recognition of tactical triggers	Find a Hidden Tactic	Chapter 3
Failure to overcome the resistance	Force yourself to calculate one move deeper than you usually would	All exercises involving extra credit	Chapters 2, 3, and 5
Missing the opponent's resources	If you see a good move for yourself, try to refute it	Tactical Analysis, Tactical Training Positions, and Endgame Analysis	Chapters 3 and 5
Tunnel vision	Take a color-blind approach to your analysis	Tactical Analysis and Endgame Analysis	Chapters 3 and 5
Emotional calculation	Make a list of candidate moves before you start calculating, and give some attention to all candidate moves	Tactical Analysis, Tactical Training Positions, and Endgame Analysis	Chapters 3 and 5
Hazy calculation	Make a list of candidate moves before you start calculating, and give some attention to all candidate moves	Tactical Analysis, Tactical Training Positions, and Endgame Analysis	Chapters 3 and 5
Recycling tactical ideas	Solve challenging exercises regularly	Find a Hidden Tactic and Tactical Analysis	Chapter 3
Thinking move-to-move instead of using	Plan 2-4 moves ahead; use the one-two-punch	Find a Mini-plan	Chapter 4

strategic thinking in 'slow' positions	technique to set up the main strategic idea		
Lack of schematic thinking	Always look for the best squares for your pieces and pay attention to how they coordinate	Find a Mini-plan and Endgame Simulation	Chapters 4 and 5
Misevaluating a positional transformation	Study well-annotated model games with a color-blind approach	Middlegame Simulation	Chapter 4
Lack of endgame mindset	Learn the proper endgame mindset by studying good endgame examples	Endgame Analysis and Endgame Simulation	Chapter 5
Subpar endgame technique	Study well-annotated model endgames and practice/play out typical endgame positions	Endgame Analysis and Endgame Simulation	Chapter 5

Chapter 2

Visualization

Bootcamp

Accurate visualization of potential game positions is one of the most fundamental pillars of success in chess. It is the backbone of good calculation and evaluation. Mistakes in this area can be fatal, so working on your visualization skills is essential if you sometimes struggle to envision positions clearly in your mind.

In *How to Study Chess on Your Own* and the two preceding Workbook volumes, I listed ‘blindfold chess’ techniques (not looking at the chessboard) and study resources to help sharpen one’s visualization. To summarize, these are:

- Playing through games from chess books in blindfold mode
- Solving chess puzzles in blindfold mode
- Blindfold analysis
- Playing blindfold chess games
- Static Visualization exercises (see Volumes 1 and 2)
- Dynamic Visualization exercises (see Volume 2)

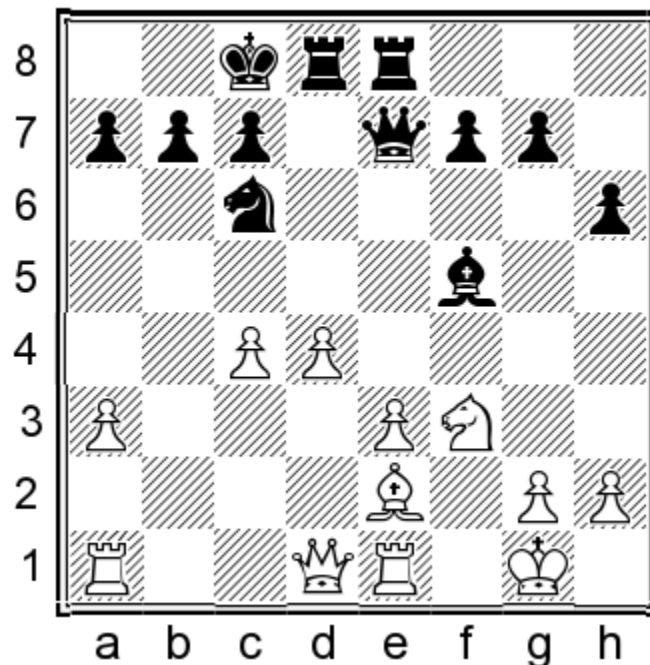
In this volume, I would like to introduce a new type of blindfold chess exercise called ‘Deep Visualization’. This format is a hybrid of Dynamic Visualization exercises, which involve mentally picturing a chess position and its features, and a typical tactical puzzle, which requires you to solve a given position. Your task in

the twenty Deep Visualization exercises that follow is to visualize positions before solving them in ‘blindfold mode’.

The inspiration for creating this type of puzzle came from my student FM Mike Ivanov, who shared his struggle of often missing crucial tactical details three or four moves deep. These calculation mistakes usually happened because he couldn’t visualize those ‘deeper’ positions with the same degree of accuracy and confidence as the one right before him. This led to the creation of Deep Visualization exercises, which I believe will resonate with many of you.

Let’s start by examining a simple illustrative example.

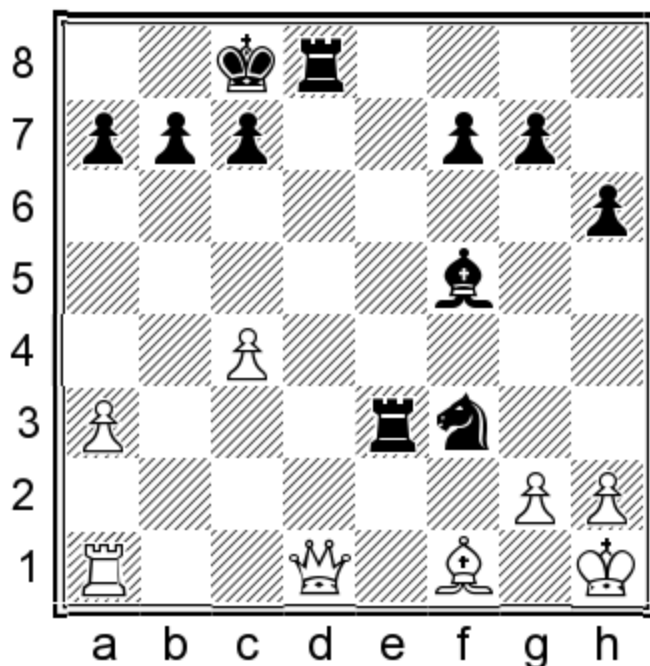
Deep Visualization – Example 1



First step: I would like you to visualize the following sequence of moves:

18...Qxe3+ 19.Kh1 Nxd4 20.Bf1 Nxf3 21.Rxe3 Rxe3

Second step: Once you have visualized the moves above accurately, you should see this position in your mind:



It's important to note that the second diagram will not be visible in the Exercises section. Instead, you will only see the first diagram and the move sequence. Your task is to visualize and memorize the final position. This is a crucial step in the exercise, highlighting the importance of accurate visualization. The second diagram is only included in the two examples of Deep Visualization as an exception to aid in explaining this puzzle format.

Third step: It is White to play in the position on the board. Thinking in blindfold mode, you will be asked to provide the best continuation. The correctness of your solution will depend to a large degree on your visualization accuracy.

It's important to understand that in every Deep Visualization puzzle, your goal is not necessarily to find a winning solution, but to identify the best continuation after the given move sequence. This could be a move that leads to a draw, or one that offers a slight or significant advantage. However, I would like you to **provide a full variation** that you calculated, not just the first move.

In this particular position, the correct solution is:

22.Qa4!Nd223.Qxa7Nxf124.Rxf1±

You would get one point for this solution.

On the other hand, you get no credit for 22.Qc1?. This is a mistake due to 22...Nd2! (22...Re1 23.Qb2 Rxa1 24.Qxa1 ³) 23.Qb2 f6! (23...Nb3? 24.Qf2! Re6 25.Re1 ³) 24.Rd1 Nxf1 25.Rxf1 Be4.

The same goes for 22.Qxd8+? (no credit) 22...Kxd8 23.gxf3. One solver suggested 23.Rxe3 here, thinking that his rook was still on e1. But the white rook left the board on move 21 when the opponent's rook on e3 captured it. The solver forgot about this detail, so the position in his mind was inaccurate, and consequently, the solution was not correct. This ' **retained image** ' mistake shows why visualization training is valuable.

This is the first instance where you can see how to record your exercise score. Assuming you find the correct line above, you will record it as:

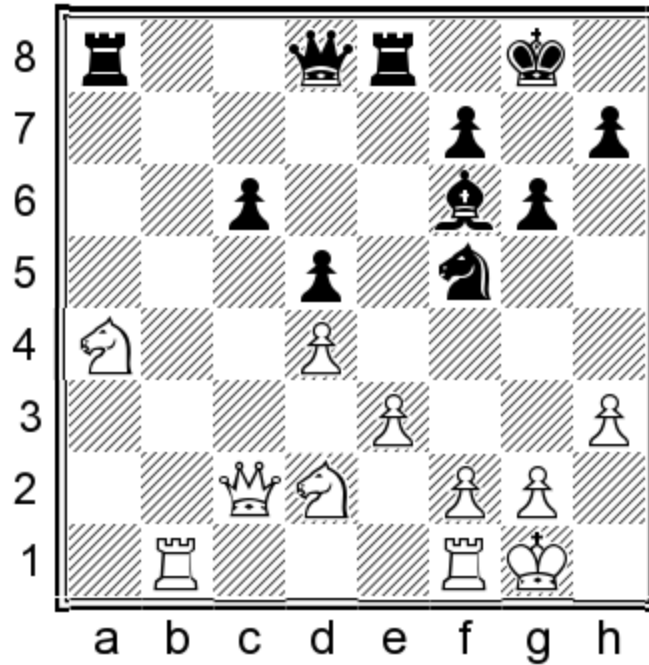
Your score = 1/1 point

Alternatively, an incorrect solution gets no points, so you would record it as:

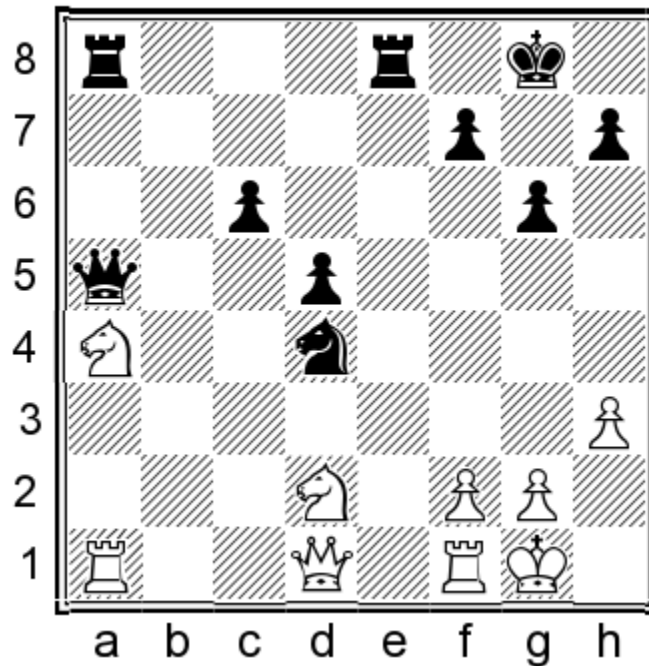
Your score = 0/1 point

If you make visualization mistakes in your chess training, you will likely repeat them in the heat of a chess battle. More visualization work, preferably with increasingly more challenging puzzles, is the 'cure'. Let's examine one such puzzle.

Deep Visualization – Example 2



23...Bxd4 24.exd4 Nxd4 25.Od1 Oa5 26.Ra1



Have you visualized the above diagram correctly? You can look at it once to confirm that it's correct and keep solving the puzzle in blindfold mode. It is Black to play. Please provide the best continuation.

26...Qb4!

One point. You would get no credit for calculating only one or more of the inferior options below:

- A) 26...Qb5 (no credit) 27.Nc3 Rxa1 28.Qxa1 Qd3 29.Ncb1!+-;
- B) 26...Ne2+ (no credit) 27.Kh2+-;
- C) 26...c5 (no credit) 27.Nb3 Nxb3 28.Qxb3+-;
- D) 26...Re2 (no credit) and 26...Reb8 (no credit) are refuted by 27.Nc4!.

27.Ra2!

One point. White is struggling to restore his piece coordination, and this is his best attempt as he prepares Qa1. You get an additional point for finding this move or its alternative 27.Nb1!? (one point), trying to connect the knights on c3: 27...Ne2+ (27...Nb3!? 28.Ra3 Reb8 29.Qg4! d4 30.Qg3!= Rb5? 31.Nac3!! Rxa3 32.Nxb5+-) 28.Kh2 d4³.

27.Nf3? (no credit) 27...Nxf3+ 28.gxf3 Re5!-+ Navara-S.Hansen, Reykjavik 2015 (0-1, 47).

27...Re2!

One extra credit point. I am more than happy to reward you with extra points for additional effort. Suppose you were able to visualize this strong move from the starting position. In that case, it shows that a) you already possess strong visualization and calculation skills, and b) you are willing to go the extra mile to find the truth in the position. Both qualities show that you are a promising chess player.

27...Ra5?! (no extra credit) 28.Qa1! Ne2+ 29.Kh1 Rxa4 30.Rxa4 Qxd2 31.Ra8!² .

The following line is not essential to visualize, but I provide it to show how Black still keeps an edge:

28.Rb2 Qxa4 29.Rb8+ Rxb8

29...Kg7? 30.Rxa8 Qxa8 31.Nb3! Nxb3 32.Qxe2±.

30.Qxa4Rxd2

You could earn more than one point by finding the key ideas in this example. For example, if you found all moves in the sequence 26...Qb4 27.Ra2 Re2, your final score would look like this:

Your score = 2/2 points + 1 extra credit

However, to keep your work honest, deduce half a point from your final score if:

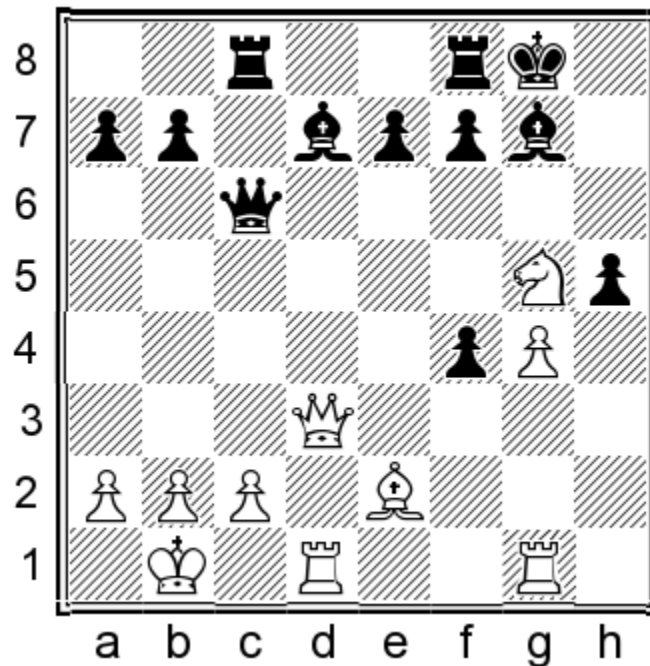
- you found the correct first move, but your line differs from the line given in the text significantly;
- you got the right solution but made a significant visualization error in one of the lines;
- your final evaluation differs significantly from the text.

This puzzle was more complex than the previous one. You had to calculate more abstract variations and find more challenging moves to receive full credit. It's definitely easier to find such moves when you have the position right before you than in your mind. And that is precisely the point of such exercises – to build your visualization 'muscles'. In the Exercises section, you will notice that the first few puzzles are easier, but they become more and more challenging as you approach the last five or so. I hope you will find this natural progression helpful.

The ultimate goal of this kind of training is that you don't need the chessboard in front of you to visualize the correct positions. Once you reach a point where you can accurately track most of the changes on the chessboard in your mind, you will no longer need to rely on the physical board that much to calculate variations. Instead of being your weakness, visualization can become a powerful tool. That is something that players with the highest chess titles have mastered to a great degree. If you have ever wondered why some of them look away from their boards while thinking about the position,

it is because the static physical board is almost a distraction. The main action happens on the virtual, imagined chessboard. You need to work hard to get to that level, so let's get to it! ☺

Exercises



Please visualize the following move sequence:

21...Rfd8 22.Qh7+ Kf8 23.gxh5 Qf6

White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 1-

21...Rfd8 22.Qh7+ Kf8 23.gxh5 Qf6

White wins with a thematic queen sacrifice:

24.Qh8+!

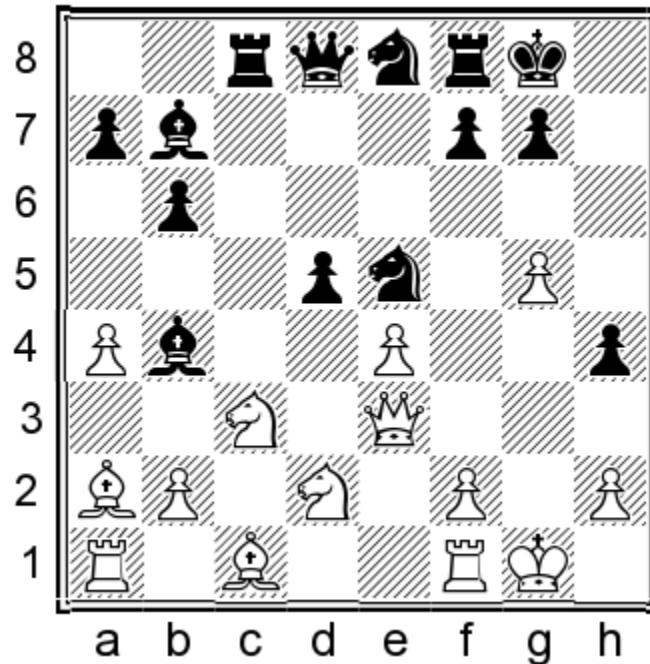
24.c3?? (no credit) loses to 24...Bf5+.

Black resigned in Ho-Almeida Saenz, New York 2024, not allowing his opponent to carry out the rest of the mating combination:

24...Bxh8 25.Nh7+ Ke8 26.Rg8#

One point. You get one extra credit point for solving this exercise within one minute.

Your score = /1 point + extra credit



Please visualize the following move sequence:

20.Nxd5 Rxc1 21.Nxb4 Rxa1 22.Rxa1

Black to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 2-

20.Nxd5 Rxc1 21.Nxb4 Rxa1 22.Rxa1

22...Qxd2!

Wins a piece on the spot due to the unfavorable geometry of the white king and queen. Other moves are poor choices: 22...Qd7?

23.Nd5 Qg4+ 24.Kh1± ; 22...Ng4?? 23.Qf4+–.

23.Qxd2 Nf3+ 24.Kg2 Nxd2–+

One point. You earn extra credit for calculating White's attempt to trap the knight and finding one of the acceptable solutions:

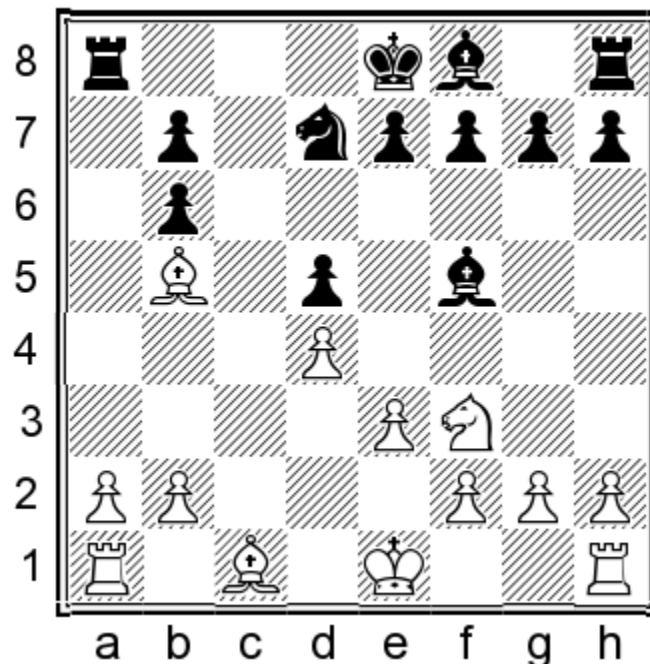
25.f3 a5!

Or 25...Nd6!? 26.Rd1 N6c4!? (26...N6xe4!?) and Black wins (one extra credit point).

26.Nd5 Bxd5 27.Bxd5 Nc7 28.Ba2 Ne6 29.g6 Rc8

Black saved his knight, and his opponent soon resigned in Gelfand-Erigaisi, Malmö 2023 (0-1, 41).

Your score = /1 point + extra credit



Please visualize the following move sequence:

12.Ne5 f6 13.e4 dxe4 14.Nc4 Kf7

White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 3-

12.Ne5 f6 13.e4 dxe4 14.Nc4 Kf7

15.Ne3!

(one point) is the only way to exploit Black's tactical problems.

Slower moves like 15.Bf4?! (no credit) or 15.0-0?! (no credit)

preserve some advantage but allow the opponent to untangle with 15...Rd8 or 15...Be6.

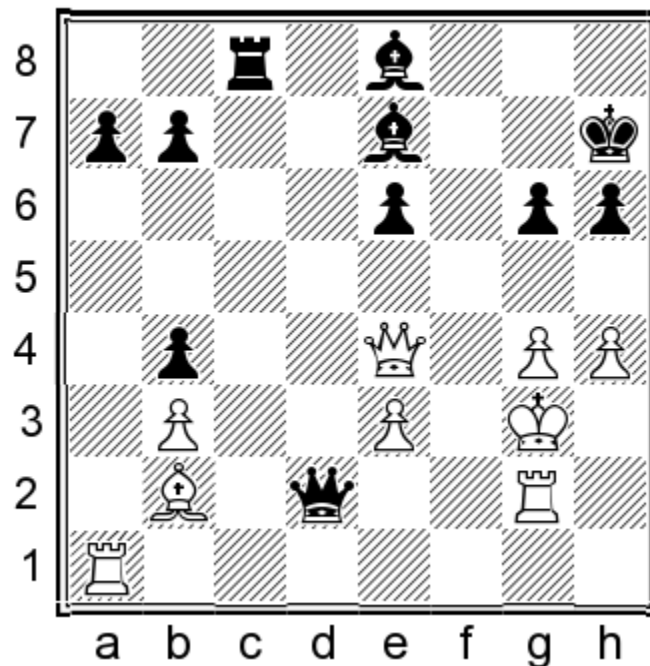
15...Ra5

15...Be6 16.d5 traps the bishop.

16.a4

Or 16.Bc4+ e6 17.Bd2 and Black loses too much material, either way. You get one extra credit point for solving this exercise within one minute.

Your score = /1 point + extra credit



Please visualize the following move sequence:

23...Qd6+ 24.Be5 Bc6 25.Qf4 Bxh4+ 26.Kxh4

Black to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 4-

23...Qd6+ 24.Be5 Bc6 25.Qf4 Bxh4+ 26.Kxh4

26...g5+

is the right follow-up for Black. 26...Qe7+? (no credit) is wrong because of 27.Kg3 Rf8 28.Bd6!.

27.Kh3 Bxg2+ 28.Kxg2

28.Kh2 gives Black a winning endgame after 28...gxf4 29.Bxd6 Bd5 30.exf4 Rc2+ 31.Kg1 a6.

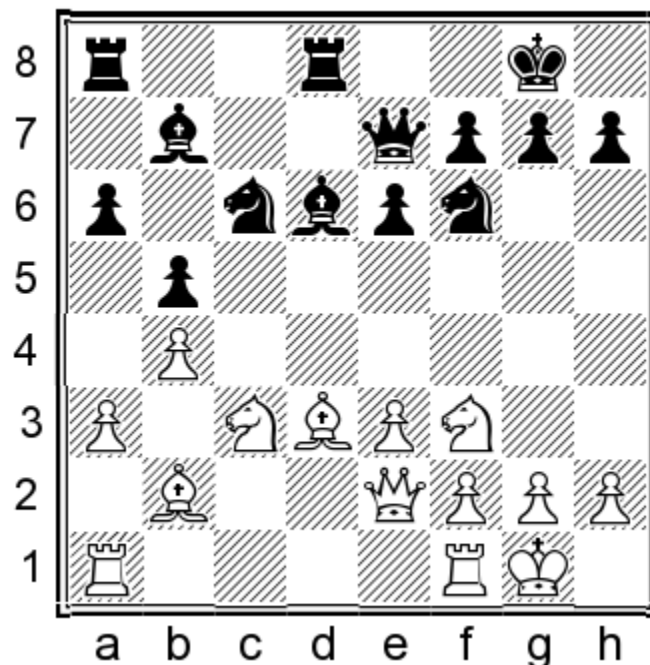
28...Qd2+!

This is much better than the other two checks: 28...Rc2+? (no credit) 29.Kh3 gxf4 30.Bxd6 fxe3 31.Bxb4 or 28...Qd5+?? (no credit) 29.e4! Rc2+ 30.Kh1!.

29.Qf2 Qd5+

One point. Black was winning but later did not manage to convert it in Keymer-Le Quang Liem, Biel rapid 2022 (1/2-1/2, 61). You get one extra credit point for solving this exercise within two minutes.

Your score = /1 point + extra credit



Please visualize the following move sequence:

17...Ne5 18.Nxe5 Bxe5 19.Rac1 Rxd3 20.Qxd3 Ng4 21.g3

Black to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 5-

17...Ne5 18.Nxe5 Bxe5 19.Rac1 Rxd3 20.Qxd3 Ng4 21.g3

Black forces checkmate with a classic queen-sacrifice combination:

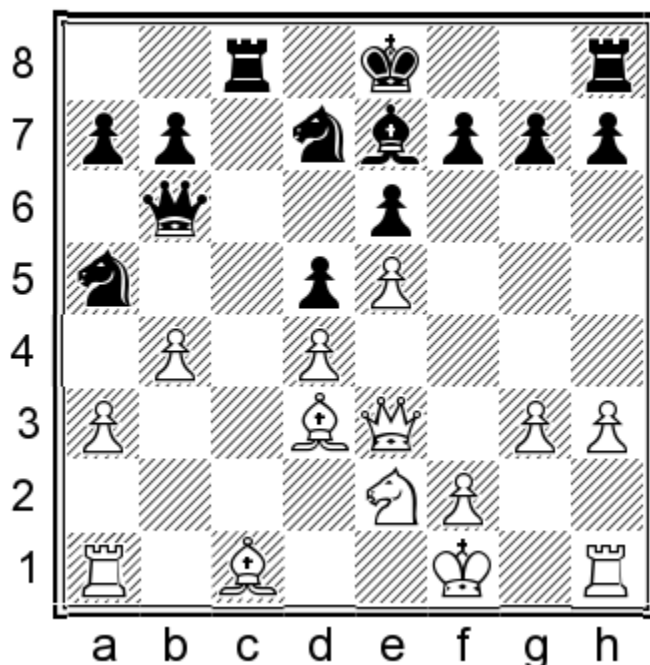
21...Qh4!

21...Nxe5? (one point) is not nearly as convincing due to 22.Rfd1! Nf3+ 23.Kf1. The same goes for 21...Rd8? (one point) 22.Qc2 Nxe5 (22...Qh4? 23.f4) 23.Rfd1 Nf3+ 24.Kf1.

22.gxh4 Bxh2#

Two points.

Your score = /2 points



Please visualize the following move sequence:

17...Nc4 18.Qf3 Ndx5 19.dxe5 Nxe5

White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 6-

17...Nc4 18.Qf3 Ndxе5 19.dxe5 Nxe5

The stakes are high here since White's winning move...

20.Qe3!

is also the only move that doesn't lose! 20.Be3 Nxf3 21.Bxb6 axb6 (no credit).

20...Qxe3 21.Bb5+!

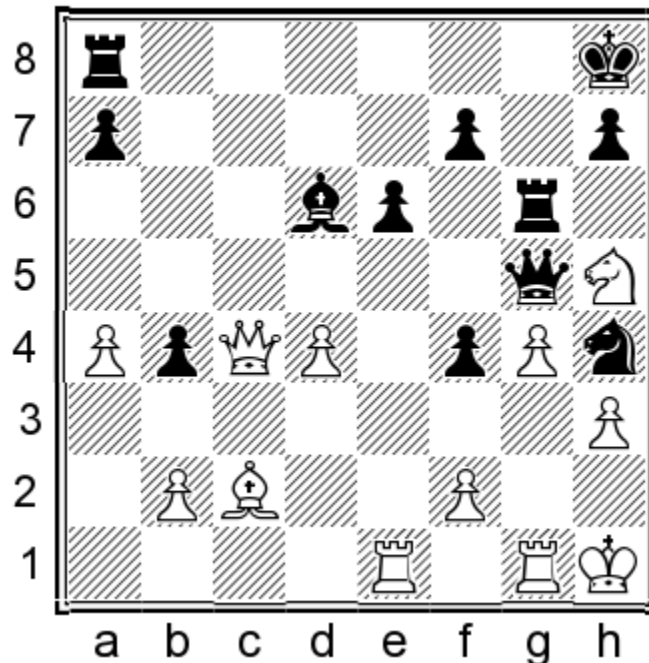
21.Bxe3 Nxd3 (no credit).

This intermezzo is the key to refuting Black's faulty combination a few moves earlier. Immediate resignation followed in Adarsh-Bures, Brno 2023.

21...Nc6 22.Bxe3

One point. You get one extra credit point for solving this exercise within two minutes.

Your score = /1 point + extra credit



Please visualize the following move sequence:

27...Nf3 28.Qc6 Nxe1 29.Qxa8+ Rg8 30.Qe4 Nxc2 31.Qxc2 Qh4
32.Qd3 f5 33.Qf3 fxg4 34.Rxg4 Rxg4 35.Qxg4 Qxg4 36.hxg4

Black to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 7-

**27...Nf3 28.Qc6 Nxe1 29.Qxa8+ Rg8 30.Qe4 Nxc2 31.Qxc2 Qh4
32.Qd3 f5 33.Qf3 fxg4 34.Rxg4 Rxg4 35.Qxg4 Qxg4 36.hxg4**

This exercise presents a visualization challenge since it was necessary to accurately visualize 10 moves ahead, keeping track of many ‘status changes’. If you envisioned the position in the diagram accurately, then it shouldn’t have been too difficult to find that...

36...b3!

(one point) gives Black a winning endgame, considering the unstoppable threat of 37... Ba3.

On the other hand, 36...f3 (no credit) allows 37.b3=.

36...e5 (no credit) also doesn’t work because White can save his skin with 37.d5! b3 (or 37...e4 38.b3 Be5 39.d6! Bxd6 40.Nf6 e3 41.fxe3 fxe3 42.Kg2=) 38.Nf6 Ba3 39.Ne4 Bxb2 40.Nd2.

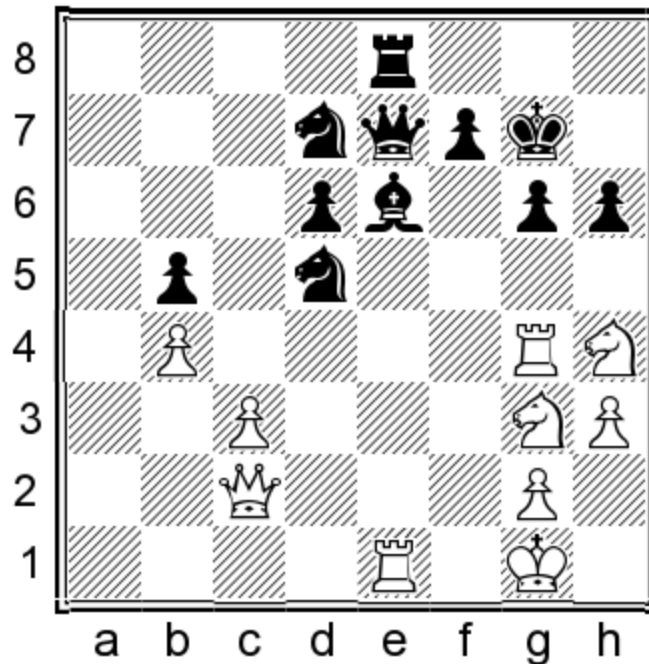
37.Nf6 Ba3

You can also earn extra credit for calculating further:

38.Ne4 Bxb2 39.Nd2 Bxd4 40.Nxb3 Bxf2

(one extra credit point) and two extra pawns will be decisive in the endgame.

Your score = /1 point + extra credit



Please visualize the following move sequence:

35...Kh8 36.Rxg6 Qxh4 37.Re4 Nf4

White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 8-

35...Kh8 36.Rxg6 Qxh4 37.Re4 Nf4

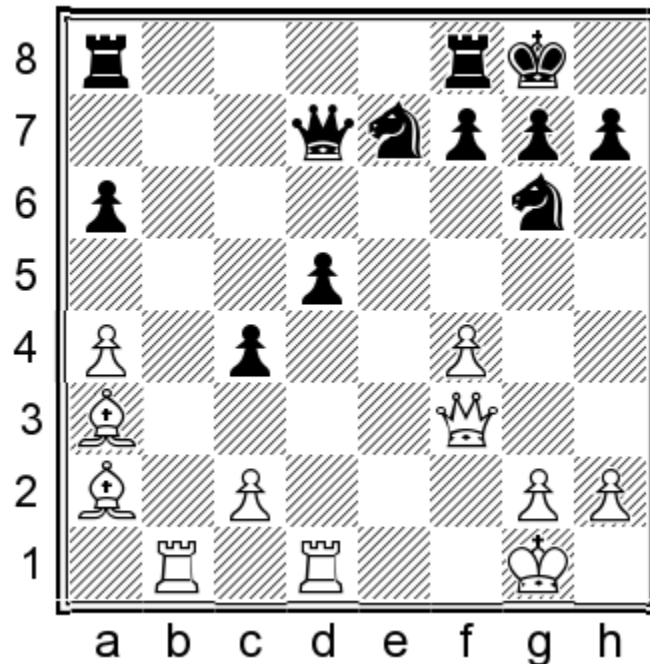
In this ‘high traffic’ position, White trumps Black’s threats with **38.Nf5!**

38.Rg4 (one point) is the only other reasonable alternative, but it runs into 38...Nxf3+! (38...Bxg4 39.Rxe8+ Kg7 40.Qf2!. This quiet move is the big point behind 38. Rg4, but Black doesn’t need to allow it in the first place: 40...Nxf3+ 41.gxh3 Qxh3 42.Re3, winning) 39.gxh3 Qxh3, and suddenly things are not so clear anymore with the white king exposed: 40.Qf2! Rg8 41.Rxg8+ Kxg8.

38...Bxf5 39.Rxe8+ Kh7 40.Qxf5

(two points) with an inevitable checkmate on f7.

Your score = /2 points



Please visualize the following move sequence:

21...Qxa4 22.f5 Nh4 23.Qh3 Nhx f5 24.g4

Black to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 9-

21...Qxa4 22.f5 Nh4 23.Qh3 Nhx f5 24.g4

24...c3!

Two points. Black unlocks the potential of his most powerful piece and cuts White's lines of communication with this nice counterstrike.

You get only partial credit for alternatives like 24...Nh6? (one point) 25.Bxe7 Rfe8 26.Bh4 Qxa2 27.g5 Qxc2 28.gxh6 and 24...Qxc2? (one point) 25.gxf5 Rfe8 26.Rf1! (26.Bb2!?) 26...Nc6 (26...Qxa2 27.Rb2+-), after which the position is unclear .

25.Rb3

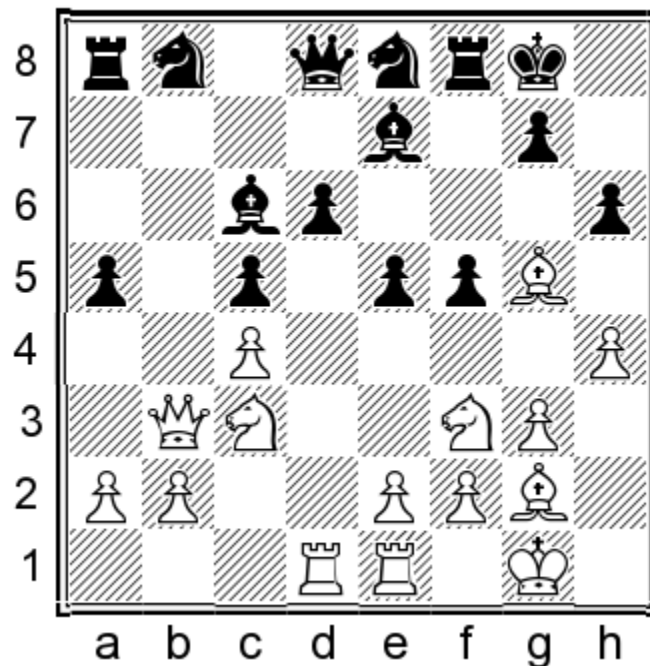
After both 25.gxf5 Qxa3 and 25.Qxc3 Qxg4+ Black has a decisive edge.

25...Ne3!

The most convincing continuation. 25...Nd4!? also works, as after 26.Bxe7 Rfe8 White loses one of the bishops: 27.Rb7 Ne2+ 28.Kf2 Qxa2.

26.Qxe3 Qxg4+-+

Your score = /2 points



Please visualize the following move sequence:

17.Nxe5 Bxg2 18.Kxg2 hxg5 19.Qb7 Nc7

White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 10-

17.Nxe5 Bxg2 18.Kxg2 hxg5 19.Qb7 Nc7

20.Nd5!

White closes the deal with this powerful move.

20.Ng6! (one point) is a reasonable alternative that leads to a strong attack, but Black can still resist after 20...Nba6 (20...Rf7 21.e4!) 21.hxg5! Bxg5 22.Rh1 Re8, etc.

On the other hand, White doesn't get the desired return after 20.Nb5?! Nba6 21.Nc6 Qd7 and Black is better.

20...Nxd5

Crucially, Black cannot play 20...Nba6 due to 21.Nc6.

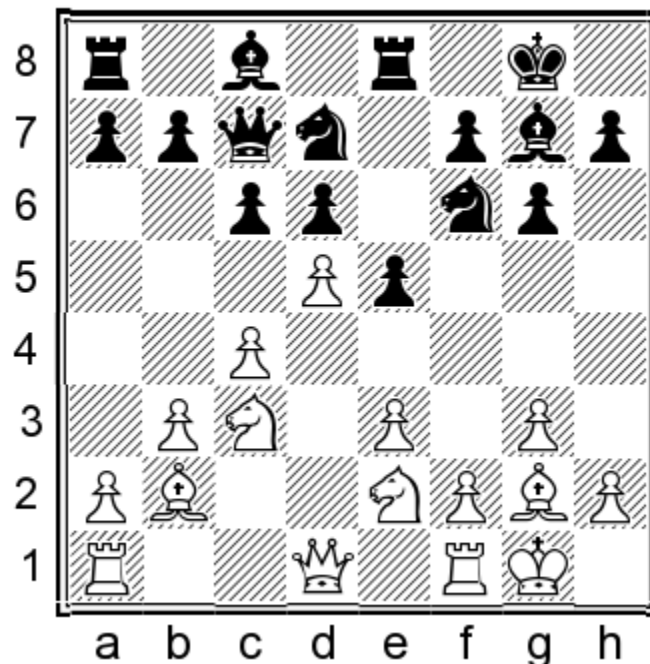
20...dxe5 loses to 21.Nxc7.

21.Qxd5+ Kh7 22.hxg5!

Two points. Introducing the mating threat is stronger than taking the rook, although 22.Qxa8!? also gets full credit.

22...dxe5 23.Rh1+ Kg6 24.Qe6+

Your score = /2 points



Please visualize the following move sequence:

11...Nc5 12.dxc6 bxc6 13.Nb5 cxb5 14.Bxa8 bxc4

White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 11-

11...Nc5 12.dxc6 bxc6 13.Nb5 cxb5 14.Bxa8 bxc4

White carried out a small combination to win an exchange for a pawn. However, now he must be careful to avoid ending up in a worse position.

15.Bg2!

The only move that keeps the dynamic balance.

A) 15.Nc3?! (one point) is a slightly worse alternative in view of 15...Nd3 (15...Bh3 16.Nd5! is less clear-cut because White establishes a blockade on d5: 16...Nxd5 17.Bxd5 Bxf1 18.Qxf1 with compensation) 16.Rb1 Bg4 17.Bf3 Bxf3 18.Qxf3 e4 and Black is slightly better;

B) The same goes for 15.Rc1?! (one point) 15...Bh3 16.Bg2 Bxg2 17.Kxg2 Nd3;

C) However, 15.bxc4?? (no credit) blunders material: 15...Qb8! 16.Bc6 Qxb2 17.Bxe8 Nxe8.

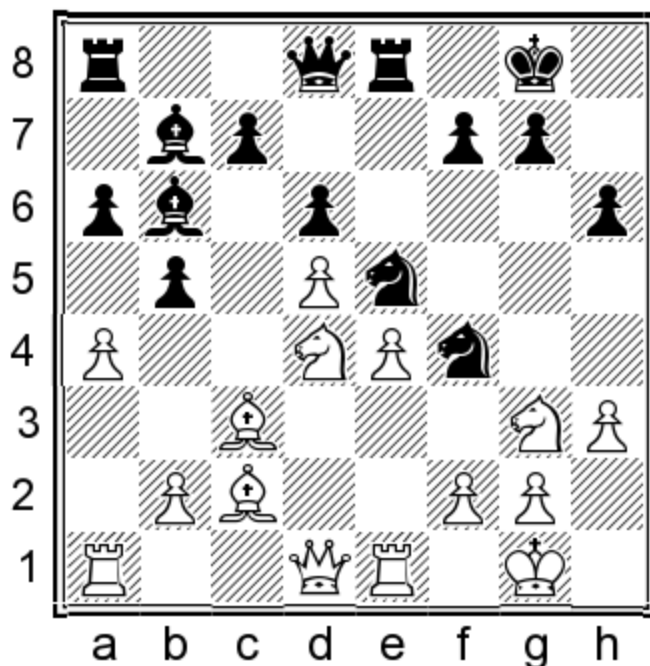
You get full credit (two points) for calculating and evaluating any of the following lines correctly:

15...Nd3

Black also gets enough compensation after 15...d5 16.bxc4 dxc4 17.Rc1 Be6 or 15...Bb7 16.Bxb7 Qxb7.

16.Rb1Ba6 17.bxc4 Bxc4

Your score = /2 points



Please visualize the following move sequence:

21...b4 22.Bxb4 Bxd4 23.Qxd4 Nxb3+ 24.Kf1

Black to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 12-

21...b4 22.Bxb4 Bxd4 23.Qxd4 Nxb3+ 24.Kf1

24...a5!

It takes good visualization to realize that the f1-a6 diagonal becomes crucial at the end of this sequence. The passive b7-bishop suddenly becomes Black's key attacking piece!

The alternatives are much less potent: 24...c5?! (one point) 25.dxc6 Nxc6 26.Qc3 a5 27.Nf5! Ba6+ 28.Bd3 Bxd3+ 29.Qxd3=;

24...Nf4?! (one point) 25.Bd2 Qh4 26.Bxf4 Qxf4=.

25.gxh3

25.Bc3 Ba6+ 26.Ne2 Nf4, winning.

25...axb4

Two points. Black has a significant positional advantage due to White's kingside weaknesses.

25...Nf3?? (no credit) fails to 26.Qe3! Ba6+ 27.Kg2 Nxe1+ 28.Bxe1. Several people who solved this puzzle as a test missed that the bishop could recapture on e1 at the end of this line.

You get extra credit for calculating further:

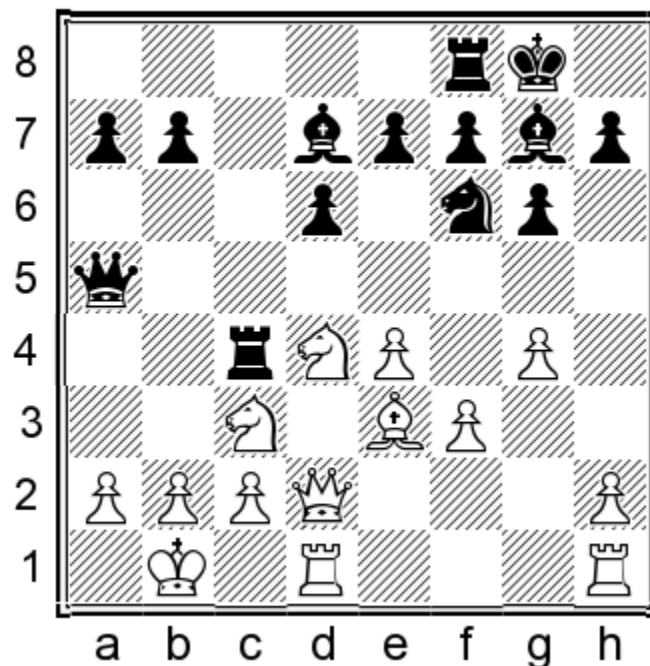
26.Qxb4?! Bc8!

(one extra credit point) But not 26...Ba6+?! 27.Kg2 Qf6 28.Re3=.

27.Kg2 Qh4 28.Rh1 f5!-+

One extra credit point.

Your score = /2 points + extra credit



Please visualize the following move sequence:

17.h4 Rfc8 18.h5 Rxc3 19.Nb3

Black to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 13-

17.h4 Rfc8 18.h5 Rxc3 19.Nb3

In this sharp Dragon Sicilian, Black can secure a winning advantage with a thematic piece sacrifice:

19...Nxe4!

You earn partial credit for the alternatives: 19...Qb5 20.bxc3 Bxg4! 21.e5! Nd5! (one point) or 19...Rxb3 20.Qxa5 Rxe3 (one point), which lead to unclear positions.

20.fxe4

20.Nxa5 Nxd2+ 21.Bxd2 Rxf3 with a decisive advantage.

20...Rxb3!

Two points.

21.axb3

The key point is that Black's queen is taboo because of 21.Qxa5 Rxb2+ 22.Ka1 (22.Kc1 Rcxc2#) 22...Rb5+.

21...Qxd2 22.Rxd2

You get extra credit for calculating the winning line until the end:

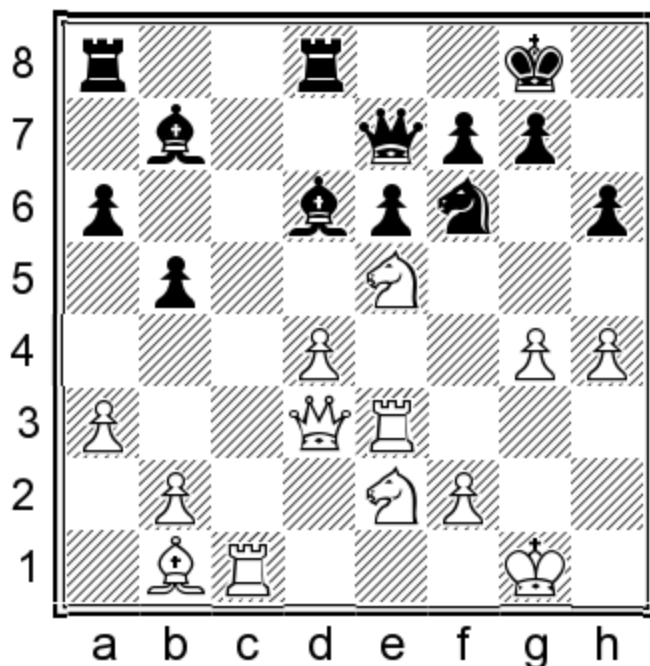
22...Bxg4 23.hxg6 fxg6!

23...hxg6 24.Bxa7μ (no extra credit).

24.Bxa7 Bf3 25.Re1 g5

One extra credit point.

Your score = /2 points + extra credit



Please visualize the following move sequence:

24.g5 hxg5 25.hxg5 Ne4 26.Rxe4 Bxe4 27.Qxe4 Qxg5+ 28.Kf1 Bxe5

White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 14-

24.g5 hxg5 25.hxg5 Ne4 26.Rxe4 Bxe4 27.Qxe4 Qxg5+ 28.Kf1 Bxe5

White has several ways to recapture on e5. But he needs to prevent Black from activating his rooks, so the best move is:

29.Rc5!

Two points. It is essential to keep the d-file closed to prevent the black rooks from activating.

29.Qh7+!? Kf8 30.Rc5! also gets full credit (30.dxe5?! Qxe5 is unclear), although Black can force an endgame with 30...Qh6!

31.Qxh6 gxh6 32.Rxe5, with a smaller advantage than in the main line since Black doesn't have to worry about his king's safety here.

29.dxe5?! (one point) is worse because Black gets the open d-file for counterplay in the middlegame after 29...g6, and the same goes for the endgame: 29.Qxe5?! (one point) 29...Qxe5 30.dxe5 Rd2.

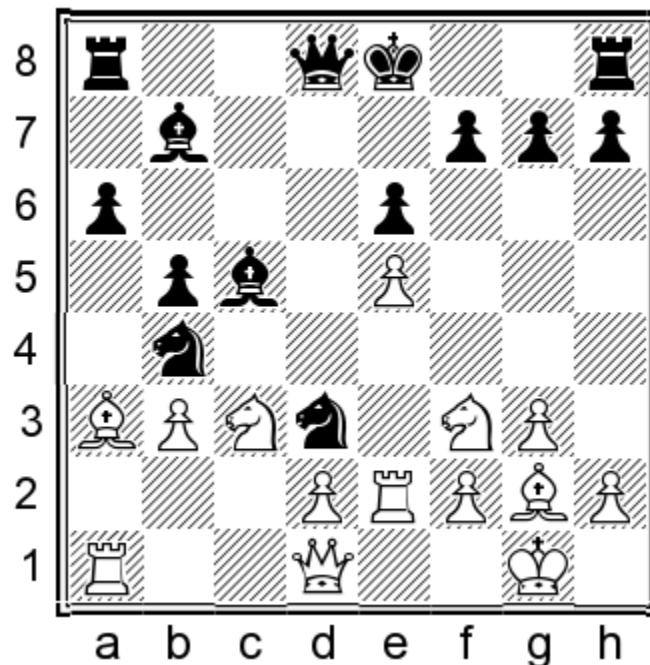
29...g6

You get one extra credit point for finding that 29...f6 is strongly met by 30.Ba2!.

30.Rxe5 Qh6 31.Kg2

White has a nearly winning position in the middlegame since the black king is still a target for attack.

Your score = /2 points + extra credit



Please visualize the following move sequence:

18...Bxf2+ 19.Rxf2 Qb6 20.Qf1 Nxf2 21.Qxf2 Qxf2+ 22.Kxf2 Nc2

White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 15-

18...Bxf2+ 19.Rxf2 Qb6 20.Qf1 Nxf2 21.Qxf2 Qxf2+ 22.Kxf2 Nc2

Black's combination seems to work at first. However, when you look at it more closely, you realize that the brilliant...

23.Nd4!!

(two points) refutes it. Alternatively,

A) 23.Ne1 (one point) contains a similar idea as 23.Nd4, but its downside is that the knight does not control the b3-square, so it's impossible to trap the knight on a1 in the following line: 23...Nxa1 24.Bxb7 Ra7 25.Bc6+ Kd8 26.b4 Nb3 27.Ke3 Ke7 and Black saves his knight;

B) 23.Bb2 (no credit) is not a good solution because of the imbalanced endgame after 23...Nxa1 24.Bxa1 0-0, which is in Black's favor. His rooks will find activity on the central files, whereas the white minor pieces don't have that much potential;

C) 23.Ra2 (no credit) loses to 23...Nxa3 24.Rxa3 b4.

You get extra credit for finding Black's best reply:

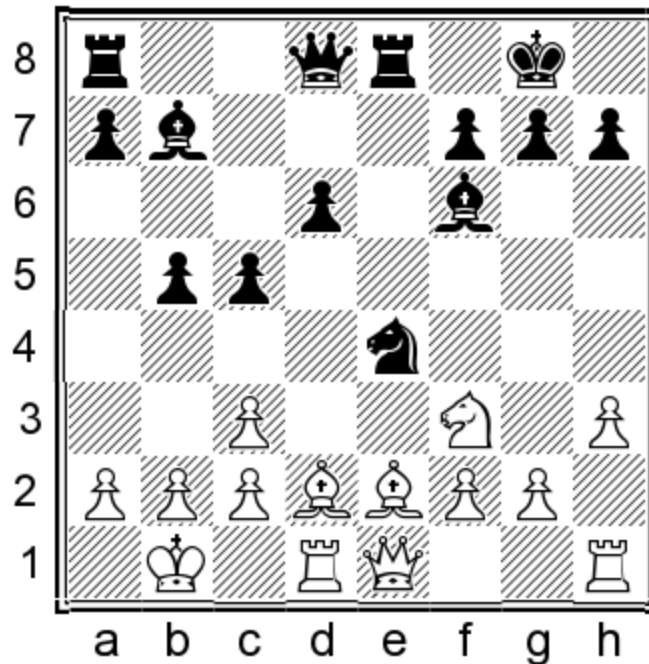
23...0-0-0!

We can appreciate the strength of White's 23rd knight-centralizing move from the following winning lines: 23...Nxa1 24.Bxb7 Rb8 25.Bc6+ Kd8 26.Bb2 and 23...Nxd4 24.Bxb7 Rb8 25.Ne4!.

24.Bxb7+Kxb7 25.Nxc2 Rxd2+ 26.Ke3 Rxc2 27.Ne4

One extra credit point. White has the better chances in the endgame because his minor pieces will get strong outposts in the center. From there, they can exploit weak pawns like a6 and f7.

Your score = /2 points + extra credit



Please visualize the following move sequence:

18.g4 Qa5 19.g5 Nxc3+ 20.bxc3

Black to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 16-

18.g4 Qa5 19.g5 Nxc3+ 20.bxc3

When you say A, you should usually say B. Black has already sacrificed a piece to open up the white king.

20...Rxe2!

Another sacrifice exposes the opponent's monarch completely.

A) The engine suggested the deep idea 20...Rab8!?. This is another way to prepare ...Bd5, anticipating the opening of the b-file after 21.gxf6 Bd5 22.Be3 (the main idea behind putting the rook on b8 can be seen in the line 22.c4 bxc4+ 23.Ka1 c3! with checkmate on a2 to follow) 22...Qxa2+ 23.Kc1 b4! (two points). Black has a winning attack. You get extra credit for calculating one of the following lines: 24.cxb4 Qa3+ 25.Kd2 Qxb4+ 26.Kc1 Qa3+

27.Kd2 Qa5+ 28.Kc1 Rb1+!! 29.Kxb1 Qa3 or 24.Rxd5 bxc3
25.Qxc3 Rb1+ 26.Kd2 Qxd5+ (two extra credit points);

B) The most direct attacking attempt, 20...Bd5? 21.c4 Qa3,
doesn't work as intended due to 22.gxf6 bxc4 (one point) 23.Bc1
Rab8+ 24.Ka1 Qa4, and White can save the game with 25.Be3 Qa3
26.Bc1 or 25.Qc3 Rxe2 26.Bd2.

22...Bxc4? (no credit) is a typical mistake, missing the opponent's
defensive resources: 23.Bxc4 bxc4 (23...Rxe1 loses to 24.Bxf7+!
Kxf7 25.Ng5+ Kxf6 26.Rhxe1) 24.Bc1! Rab8+ 25.Ka1 Qxf3
26.Be3 Qxf6+ 27.c3 and White finally consolidates.

21.Qxe2 Bd5 22.c4

22.Be1 loses to 22...Qxa2+ 23.Kc1 Qa1+ 24.Kd2 Qxc3+ 25.Kc1
Qa3+ 26.Kd2 Bxf3.

22...Qa3!

Two points. Now, to evade the mating threats, White must play:

23.c3

But this is only a temporary defense. You get extra credit for
visualizing the only winning move:

23...bxc4!

One extra credit point. Black continues attacking with full force as
his rook joins the party.

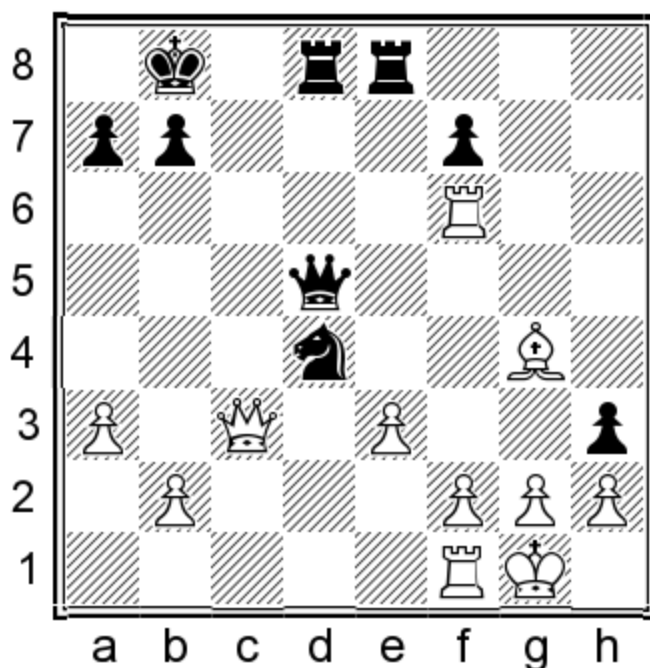
It looks like 23...Bxc4? (no extra credit) wins on the spot, but it
meets with the unpleasant defense 24.Bc1! Qxc1+ 25.Rxc1 Bxe2
26.gxf6 Bxf3.

24.Ka1 Rb8 25.Rb1

White manages to protect his king, but the rest of his position
collapses:

25...Bxc3+ 26.Bxc3 Qxc3+ 27.Rb2 Bxf3

Your score = /2 points + extra credit



Please visualize the following move sequence:

22.e4 Rxe4 23.Qxh3 Qg5 24.Qg3+ Ka8

White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 17-

22.e4 Rxe4 23.Qxh3 Qg5 24.Qg3+ Ka8

A single mistake can be very costly in this double-edged position. Fortunately, White can get out of the tricky situation with the help of a little back-rank tactic:

25.Rd6!

25.Qc7 Qxf6 26.Bc8 (one point) is a tempting alternative, but Black miraculously escapes with 26...Ne2+ 27.Kh1 Ng3+!! (27...Qb6 28.Bxb7+! Qxb7 29.Qxd8+±) 28.Kg1! (28.hxg3? Rh8+ 29.Kg1 Qxb2μ) 28...Ne2+ (one extra credit point) with an entertaining draw.

25...Rde8!

25...Rxd6 26.Qxd6 a6 27.Bd1+–.

26.Bd1!

You get full credit (two points) for calculating up to here. 26.Rxd4 Rxd4 27.Bf3 Qxg3 28.fxg3! (one point) is another way to secure an advantage, but it's doubtful whether White will be able to convert it against Black's best defense. You also get extra credit for calculating further:

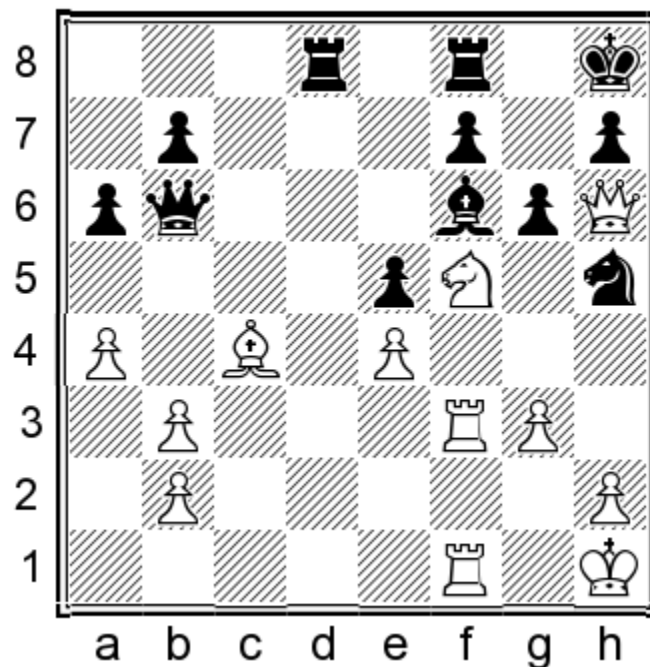
26...Qd2! 27.Qc3!

27.f3 Re2! or 27.h4 Re1 are unclear.

27...Ne2+28.Bxe2Qxd629.Bf3±

Two extra credit points.

Your score = /2 points + extra credit



Please visualize the following move sequence:

28.g4 Nf4 29.g5 gxf5 30.gxf6 Rg8 31.Bxf7 Qc6 32.Bxg8 Rg8
White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 18-

28.g4 Nf4 29.g5 gxf5 30.gxf6 Rg8 31.Bxf7 Qc6 32.Bxg8 Rg8

Despite being up an exchange, White still cannot take a breather to consolidate because Black has threats like 33...fxe4 and 33...Qc2. Thankfully, he can kill two birds with one stone:

33.Qh4!

Meanwhile, 33.Rxf4 exf4 34.Qxf4 (two points) isn't effective because of 34...fxe4! 35.f7 e3+ 36.Qf3 Rf8 and Black can still fight in a pawn-down rook endgame after 37.Qxc6 bxc6 38.Kg2 e2 39.Re1 Rxf7 40.Rxe2 etc.

33.exf5? (one point) allows Black to escape with a threefold repetition after 33...Qc2 34.R3f2 Qe4+ 35.Rf3 Qc2.

33...Qc2

The second dangerous threat, 33...fxe4, is neutralized with 34.f7! exf3 (34...Rf8 35.Qg5 Rxf7 36.Qxe5+-) 35.fxg8Q+ Kxg8 36.Qg4+ Kf7 37.Qxf3.

34.Qf2!

You get full credit (three points) if you calculated up to here, including the 33...fxe4 34.f7 line. You get partial credit (two points) for accurately visualizing only one of these two lines.

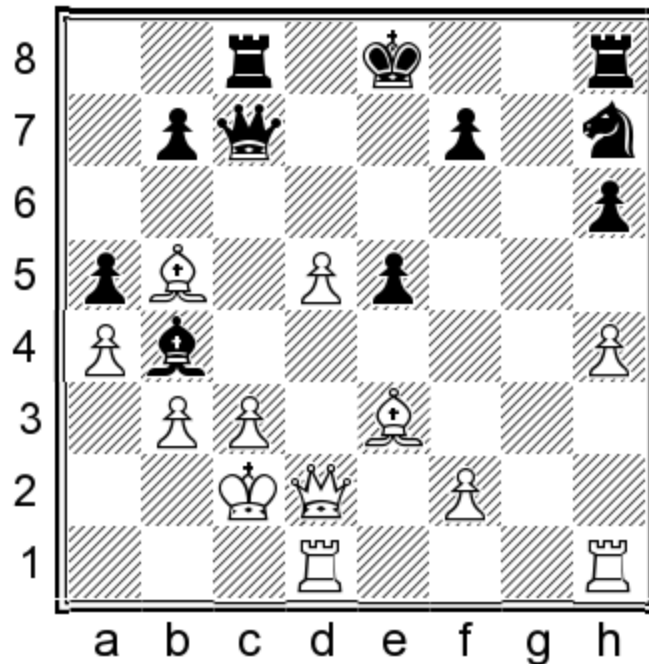
34...Qxe4

You can earn extra credit for finding a way to unpin after this move:

35.Qe3 Qd5 36.b4! Rf8 37.Qc5+-

One extra credit point.

Your score = /3 points + extra credit



Please visualize the following move sequence:

26...Kd8 27.Bxh6 Bxc3 28.d6 Qc5

White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 19-

26...Kd8 27.Bxh6 Bxc3 28.d6 Qc5

The position is highly double-edged, and both sides must pay maximum attention because their kings are in danger. White wins with a beautiful queen maneuver:

29.Qg5+!

A) 29.Qd3! (two points) is the second-best option. It is less flashy than 29. Qg5+, but it gets the defensive job done since it covers key squares around the king, like c2 and c3. You also get extra credit for finding resources in the following key lines:

29...Bd4+ (29...Qxf2+ 30.Qe2 Bd4+ 31.Kb1+- or 29...Qa3 30.Qf5! Qb2+ 31.Kd3+- (one extra credit point)) 30.Kd2! (

30.Kb1?? loses to 30...Qa3) 30...Nf6! 31.d7! (one extra credit point; 31.Bg5 e4) 31...Nxd7 32.Bg5+ f6 33.Bxd7.

The alternatives are considerably worse:

B) 29.Bg5+ (one point) 29...f6 30.Be3 Bxd2+ 31.Bxc5 Bb4! 32.Rhg1 with compensation;

C) 29.Qe2 (one point) 29...Bd2+! 30.Bc4 Bxh6 31.Qf3 with compensation;

D) 29.Qc1?? (no credit) blunders the game away in view of 29...Bd2+! 30.Kxd2 Qxf2+.

29...f6

29...Nxb5 leads to a nice two-bishop checkmate: 30.Bxg5+ f6 31.Bxf6.

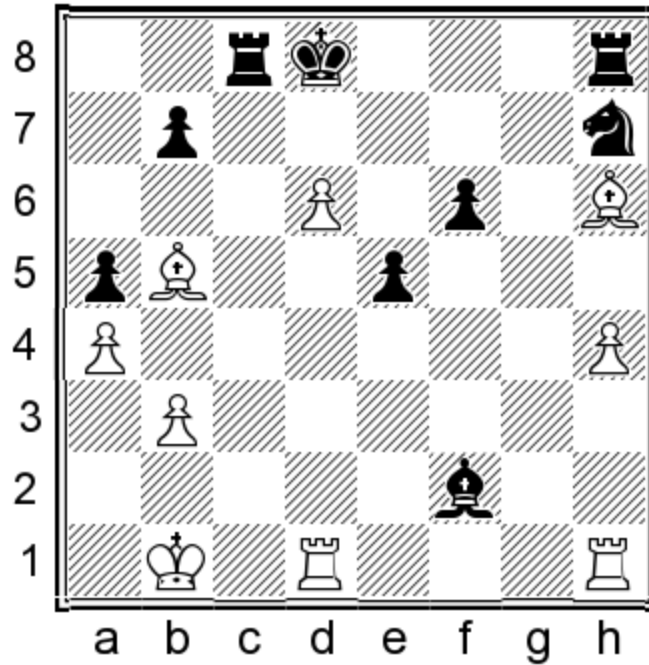
30.Qf5!

Three points. The most efficient follow-up from a geometric point of view. The queen threatens mate on d7 and protects the f2-pawn. That said, you also get full credit for 30.Qg4!? Qxf2+ 31.Rd2!! Bxd2+ 32.Kb1, 30.Qg2!? Bd4+ 31.Bc4, and 30.Qg3!? Bd4+ 31.Bc4. However, 30.Qg7?? (no credit) loses on the spot to 30...Qxf2+ 31.Kd3 e4+! 32.Kxe4 f5+.

30...Qxf2+

In case of 30...Bd4+ 31.Kb1 Qxd6, White has a winning attack. Many moves win, including 32.Rc1.

31.Qxf2 Bd4+ 32.Kb1 Bxf2



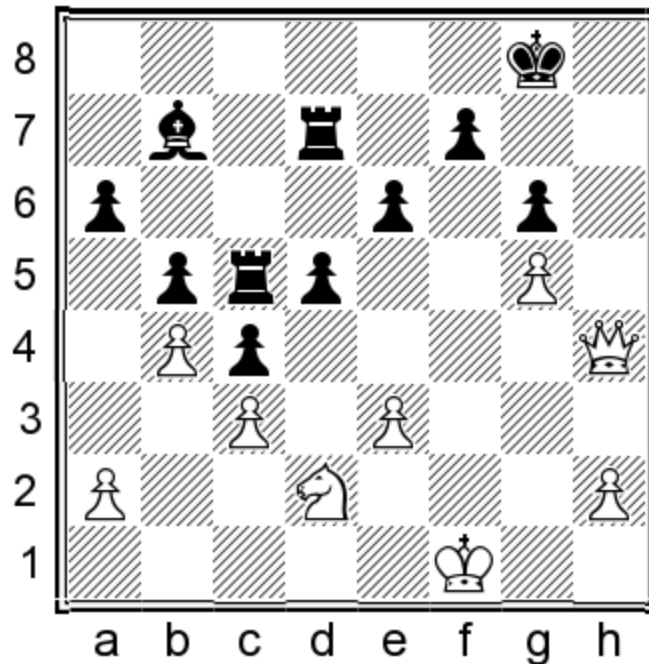
At first, the magnitude of White's advantage in the endgame may not seem obvious. However, it soon becomes clear that Black has no good answer to the power of the d6-pawn. For example:

33.Rhf1 Bd4

33...Bxh4 34.Be3 with an irresistible Bb6+ threat.

34.Bg7 Rg8 35.Bxf6+ Nxf6 36.Rxf6

Your score = /3 points + extra credit



Please visualize the following move sequence:
 28...d4 29.bxc5 dxc3 30.Ne4 Bxe4 31.Qxe4 Rd3
 White to play. Please provide the best continuation.

SOLUTION

Visualization – Exercise 20-

28...d4 29.bxc5 dxc3 30.Ne4 Bxe4 31.Qxe4 Rd3

This is a fascinating endgame. At first glance, it seems like White has no way to stop the opponent's c-pawn. However, it turns out that the white c-passer has the last laugh. It all starts with:

32.Qe5!!

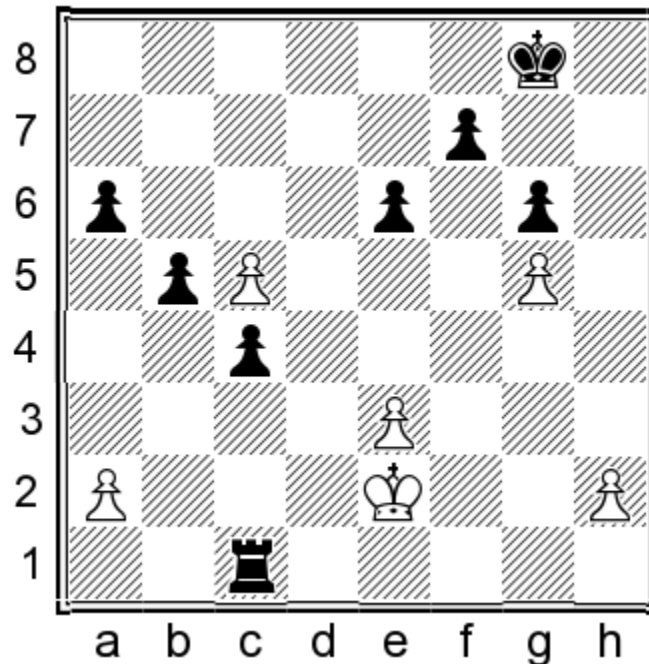
(two points). White maneuvers his queen to contain the dangerous passer. Everything else is lost for White and, hence, gets no credit.

A) 32.Qg2 Rd1+ 33.Ke2 c2;

B) 32.Ke2 c2 33.Qh1 Rd1 34.Qxd1 cxd1Q+ 35.Kxd1 Kf8. Black wins the king and pawn endgame by a tempo;

C) The attempt to give a perpetual check eventually also fails:
 32.Qa8+ Kg7 33.Qb8 c2 34.Qe5+ Kf8 35.Qh8+ Ke7 36.Qf6+ Ke8
 37.Qh8+ Kd7.

32...c2 33.Qb2 Rd1+ 34.Ke2 c1Q 35.Qxc1 Rxc1



Black has forced the opponent to give up his queen, but one little detail turns the tables:

36.c6!

This pawn is unstoppable. The best Black can do is snatch a couple of pawns with his rook, but the queen vs rook endgame that arises after...

36...Rc2+ 37.Kf3 Rxh2 38.c7 Rxa2 39.c8Q+ Kg7 40.e4!

(two extra credit points) is supposed to be winning for White. He will combine mating threats on the kingside (by running his king toward the f6-square) with threats to the black pawns. Eventually, all three pawns fall, and White gets a winning Q+2 ♖ vs R+3 ♙ endgame on the same flank.

Your score = /2 points + extra credit

You can add up the points you earned on the twenty exercises you just solved to get:

Total points for Deep Visualization exercises = /36 points

Total extra credit points earned for Deep Visualization exercises = extra credit

Total scores and grading scale

In this section, you will learn about the straightforward process of calculating total scores for your solutions and comparing them to the grading scale. This method, which is easy to follow, applies to all upcoming chapters.

Let's get started by transferring your scores (total points and total extra credit points) for the Deep Visualization exercises into the blank spaces below:

Total points for Deep Visualization exercises = /36 points

Total extra credit points earned for Deep Visualization exercises = extra credit

Then, please add these two scores to get the total score for Chapter 2. You can insert that score in the blank space below:

Total score for Chapter 2 = points

Now that you have your total score, let's see how it stacks up. Below is the grading scale, which categorizes scores into four rating categories. This will give you an idea of where your score falls:

- A score between 0 and 49% corresponds to a below 2100 Elo rating. (please note that I have International FIDE Elo in mind and not national or online ratings)
- A 50-69% score corresponds to the 2100-2250 Elo rating range
- A 70%-89% score corresponds to the 2250-2400 Elo rating range

- A 90% and over score corresponds to 2400 Elo and above

The grading scale is designed to represent the score in point ranges corresponding to the percentages above. Your total score will fit into one of those ranges.

The grading scale for Deep Visualization exercises:

Your total score Corresponding Elo rating

0-17 pts	Below 2100
18-24 pts	2100-2250
25-31 pts	2250-2400
32 pts or more	2400+

While the primary audience for this book is ambitious club players in the 2100-2400 Elo range, I believe anyone from a 2000-Elo player to a grandmaster will find some challenging exercises in this book. Therefore, the grading scale includes the expanded rating range (below 2100 and over 2400). Of course, these evaluations are approximate and may not be entirely accurate for every individual. The same scoring principles and grading scale apply to scoring in the Tactics, Middlegame, and Endgame modules.

Chapter 3

Tactics Training

I have designed the exercises in this chapter to help you improve your analytical skills and enhance the depth and objectivity of your calculations. Instead of solving the usual ‘White to play and win’ type of puzzles, you will:

1. discover hidden tactical ideas in 15 ‘Find a Hidden Tactic’ exercises;
2. find and analyze resources in tricky tactical positions in 12 Tactical Analysis exercises; and
3. play out 8 double-edged Tactical Training Positions.

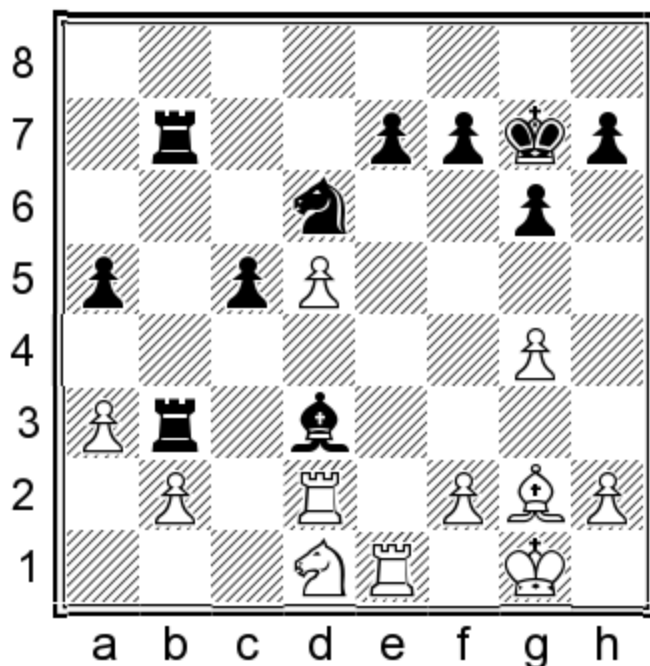
This tactical training schedule may be unfamiliar to those used to solving primarily tactical puzzles, but it’s designed to be effective. I will guide you through the format of the exercises with a few introductory examples to make them more approachable and enjoyable.

Find a Hidden Tactic

I created this engaging exercise for the first volume of the Workbook a couple of years ago, inspired by a similar method used by several Soviet coaches. It will challenge you to look for tactical opportunities more broadly than you may be accustomed to.

Consider the following example.

FHT – Example 1



Your first task is to review the following three-move sequence. You are free to move the pieces but cannot analyze anything other than the moves in the text.

29.Re3 c4 30.Bf1 Bxf1 31.Rxb3 Rxb3

Once you get familiar with the position and the moves, your next task is to discover a ‘hidden’ tactic that was possible but did not happen. The tactic results from an unpunished blunder and could be hidden at any move of the sequence, for White or for Black. That means there are six possible points at which a tactic could occur, and you need to figure out the right moment without any hints.

Naturally, some moves are more likely to produce tactical opportunities than others, and recognizing them is critical to finding the right solution. More on that a bit later.

Returning to our exercise, Black could exploit the ‘knight’s geometry’ between the two white rooks with:

30...c3!

(one point) Simultaneously clearing the c4-square and blocking the third rank so White can no longer trade the rooks on b3. In case of

31.bxc3 Bxf1 32.Kxf1, Black wins thanks to the 32...Nc4 fork. He wins the exchange in the same way in case of 31.Nxc3, while 31.Rdxd3 meets with 31...c2!.

On the other hand, 29...Nc4?? is not the hidden tactic we are looking for because 30.Rdxd3 or 30.Rexd3 wins two pieces for a rook. In the Solutions section, I will list such tempting but wrong solutions after the correct solution.

Your score = /1 point

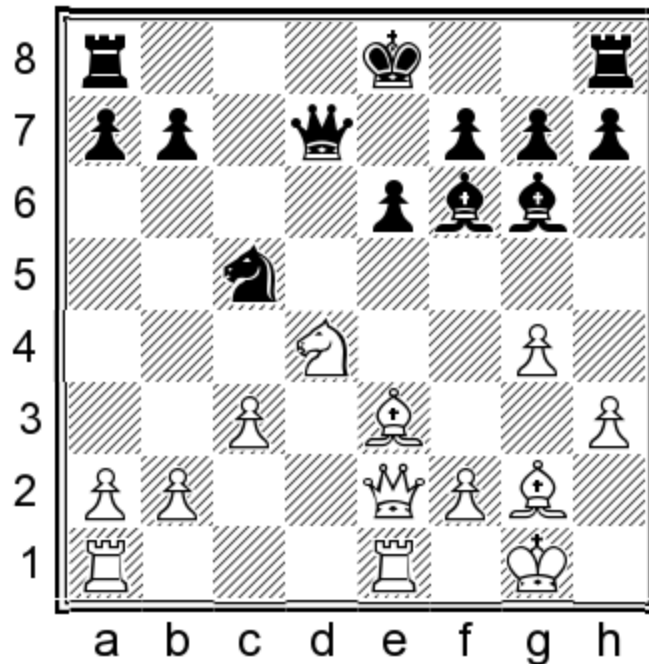
Understanding the pivotal moment when a tactic may occur is crucial. In this case, it was when 30.Bf1 was played, creating a **moment of high tactical tension**. The proximity of the white and black pieces increased the likelihood of a tactic happening. It's important to note that tactics often arise when a piece or pieces are undefended, or loosely defended ('in contact'), or they have a specific geometric relation to the opponent's pieces (knight's geometry or diagonal, vertical, or horizontal geometry), opening up possibilities for double attacks, pins, skewers, and more.

It's important to note that not every such situation will present a tactical opportunity. For instance, the white rooks were already vulnerable to a black knight fork on move 29, but the idea didn't work then. Instead, we recycled it one move later in a slightly different version.

By focusing on these 'high tactical tension' moments in your training, you can develop a **tactical radar** during the game. This radar will prompt you to look for tactics when the right circumstances appear. Learning to rely on your own tactics antenna is the crucial aspect of this exercise, as no one will be there during the game to whisper in your ear about any available tactics, as is the case with typical tactical puzzles.

Let's see another game fragment that exemplifies that.

FHT – Example 2



Please find a ‘hidden tactic’ in the following three-move sequence.

17...Bd3 18.Qd2 Be4 19.Bxe4 Nxe4 20.Qc2

A couple of black pieces were loosely protected on move 18, and White exploited this tactically by sacrificing the knight: 19.Nxe6! (one point) 19...Qxd2 (19...fxe6 20.Qxd7+ Kxd7 21.Bxc5; 19...Bxg2 20.Nxc5) 20.Bxd2 (now, the e-file also opens up, highlighting the vulnerability of another black piece – the king) 20...Nxe6 (20...Bxg2 21.Nxc5+; 20...fxe6 21.Bxe4) 21.Bxe4, winning. Kuljasevic-Martinovic, Zadar 2001 (1-0, 39).

Your score = /1 point

Sometimes, the moment of high tactical tension will not be so obvious. You may observe several such moments or none at all in an exercise. Tactics can sometimes be hidden in plain sight. When this happens, you must thoroughly examine alternative candidate moves on each of the six possible moves. Many FHT exercises in this volume will feature tricky or unusual tactics, so make sure to look for unexpected resources.

Tactical Analysis

This exercise is specifically designed to help you develop a more thorough and better-structured calculation process. Instead of asking you to look for the best move in the position, I will provide you with two or more candidate moves and task you with analyzing them as deeply as possible. Unlike with other exercises, **you can move the pieces** as you try to find the truth. Some students like to calculate the moves first, write them down, and only then proceed to analyze their lines deeper. That works, too, as long as one puts in honest analytical work.

What does a proper analysis look like? Many people ask this because they lack experience with this essential method. I already explained it in the second volume of the Workbook, so let me reiterate the main points here:

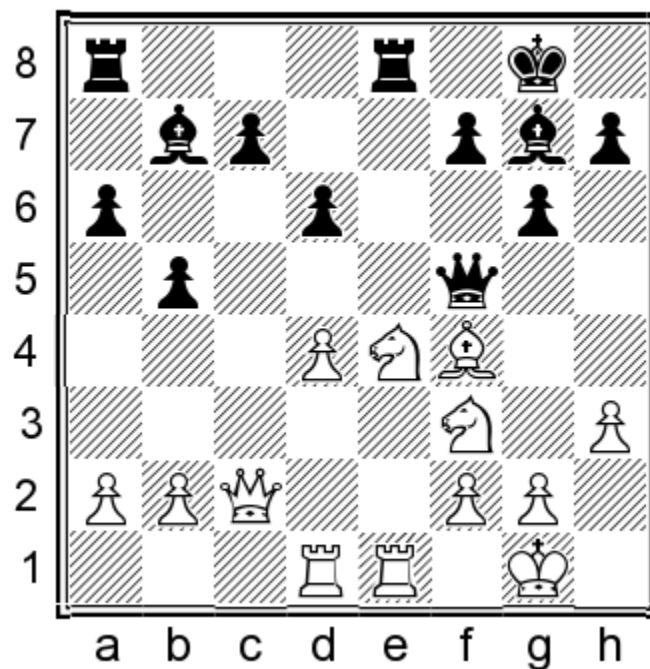
1. We consider all the logical, relevant candidate moves, starting with the first move. We follow this procedure on every following move.
2. We try to find issues with those candidate moves ('refute them') by looking for the opponent's most resourceful replies. This will form a line or a variation.
3. We focus on one line at a time. When we are done with it, we move to the next line.
4. We analyze particular lines **until we have exhausted the forcing moves** and can make a reasonably accurate evaluation of the final position. The bolded part is critical to thorough analysis.

As you tackle these exercises, keep in mind that we are primarily interested in the correct, move-by-move process rather than the final destination (the best move). You will earn points for correctly analyzing particular variations, whether they are the 'right' solution or not. It's important not to skip moves you think are 'wrong' as this could lead to losing points for the exercise. On the other hand, you

can often earn extra credit for analyzing your lines to a depth greater than the bare minimum. Remember, the key is to analyze until no forcing moves are left. When practiced regularly, this thorough analysis should ultimately lead to better move selection and fewer blunders in your games.

Let us see how it works in practice.

Tactical Analysis – Example 1



Black sacrificed a piece on e4 on move 19 and followed it up with 20... Qf5, expecting to get it back with interest. Your task is to analyze three candidate moves for White to determine which one is the best reply:

- A) **21.Qxc7**
- B) **21.d5**
- C) **21.Be5**

We start with the most obvious move:

- A) **21.Qxc7**

which leads to the forcing line

21...Bxe4 22.Bxd6

A1) Now, the accurate 22...Rac8! gives Black a winning advantage in the endgame after 23.Qa5 Bxf3 24.gxf3 Qxf3 25.Qa3 Rxe1+ 26.Rxe1 Qxa3 27.Bxa3 Bxd4. Getting to the end of this forcing line in your analysis yields you two points;

A2) 22...Bxf3?! 23.gxf3 Qxf3 is the inferior choice because of 24.Qc3!³ (one point).

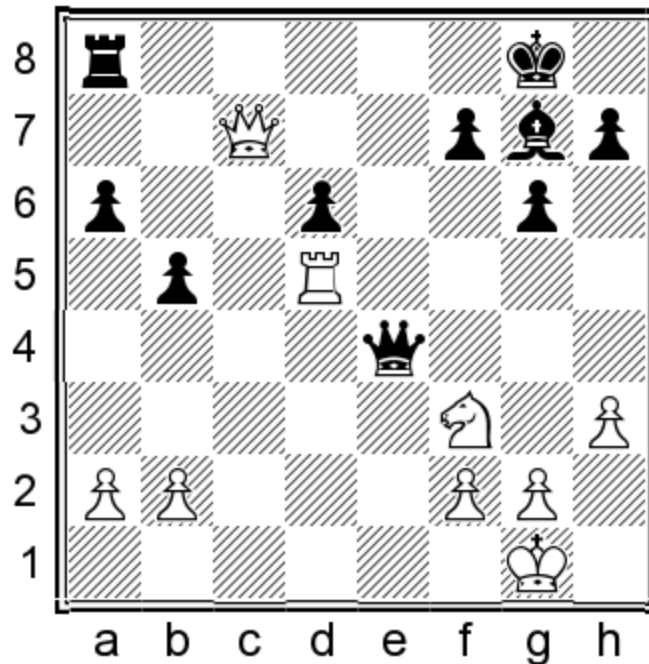
You would only get full credit (two points in total) for analyzing both branches of 21.Qxc7 (22...Rac8 and 22...Bxf3) until the end, and if your final evaluations are close enough to those provided here. For example, if you analyzed only 22... Bxf3, you lose the 1-point credit for not analyzing 22... Rac8, and vice versa. Also, if your evaluation of the 22...Bxf3 line is ‘winning for Black’ instead of ‘slightly better’, you lose half of the credit for this line (0.5 point). Hopefully, you will find this scoring system fair for what this exercise aims to achieve. You have few excuses to be lazy with your analysis because you are rewarded for full effort and punished for the lack of it.

Next, we have:

B) 21.d5

This move shuts down the dangerous light-squared bishop.

B1) 21...Qxf4 22.Qxc7! Bxd5 the critical move; one point. You get no credit for analyzing only 22...Rxe4 23.Rxe4 Qxe4 24.Qxb7=) 23.Rxd5 Rxe4 24.Rxe4 Qxe4 and now:



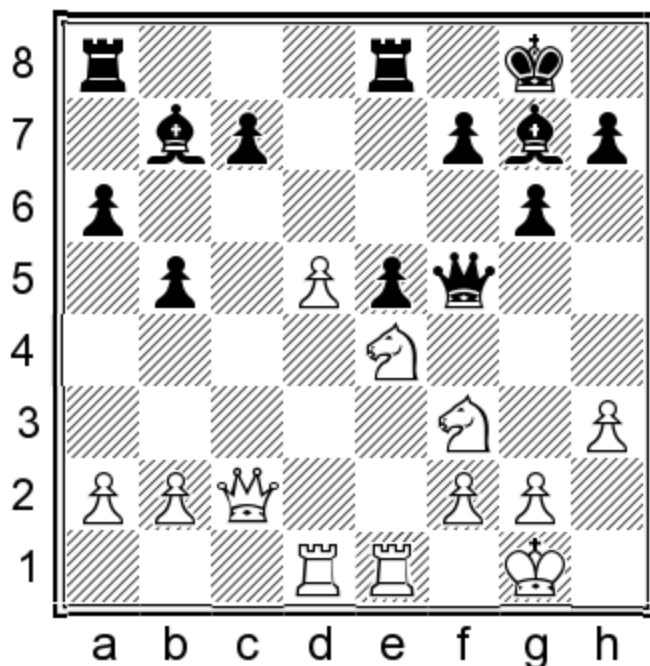
B11) 25.Qxf7+!. You would earn one more point for finding this nice tactical resource in your analysis. 25...Kxf7 26.Ng5+ Ke7 27.Nxe4. Finally, you get one extra credit point for finding that 27...Bxb2 28.Rxd6 a5 and 27...Rc8!? give Black a considerable advantage in the endgame. However, the alternatives 27...Rd8?! 28.b3= and 27...Be5?! 28.Rd2= get no credit;

B12) You would get another point for analyzing the alternative 25.Rxd6 Qb1+ 26.Kh2 Qxa2!µ . However, you get no credit for preferring 26...Qxb2?!, which runs into 27.Rxa6! Rxa6 28.Qc8+ Bf8 29.Qxa6³ .

B2) You also get credit for analyzing and correctly evaluating 21...Bxd5 22.Rxd5 Qxd5 23.Bd2!³ (one point).

C) 21.Be5! dxe5 22.d5!

One point.



White sacrifices a pawn to blunt both of Black's bishops. In the 21.Qxc7 line, he suffered because of the light-squared bishop; in 21.d5 because of its dark-squared colleague. However, both black bishops are passive in a position with a closed center, while the white knights have good outposts. As you know, I reward your additional effort with extra credit to promote deep analysis. Here, you are eligible for extra credit if you analyzed and correctly evaluated any of the following lines: 22...Rac8 23.Nh4! (23.Nh2!) 23...Qf4 24.g3 Qh6 25.a4³ or 22...Red8 23.Qb3³ (one extra credit point each).

Please note that the points you get for analyzing particular moves are not mutually exclusive when they are of similar value, such as the B1 and B2 lines in the example above. In those cases, you can add all correctly analyzed lines to your final tally for the exercise. This means that the more possibilities you explore, the more points you can earn, encouraging you to delve deeper into the analysis. Conversely, when one move is significantly better than its alternative, you get the points only for the best move you analyzed. I will usually point out a specific move that gets partial instead of full

credit, as seen in the A1) and A2) lines above. If you analyzed only the A2) line, you would earn one point. However, if you analyzed both A1) and A2), you would earn only 2 points for the better option, the A1) line. In that case, you do not add one point for the A2) line to your exercise score.

Finally, if the lines were analyzed incorrectly (for example, you missed the crucial move), a move you analyzed is not given in the analysis, or I specifically note that the line you analyzed receives ‘no credit’, then this line doesn’t count toward your total score.

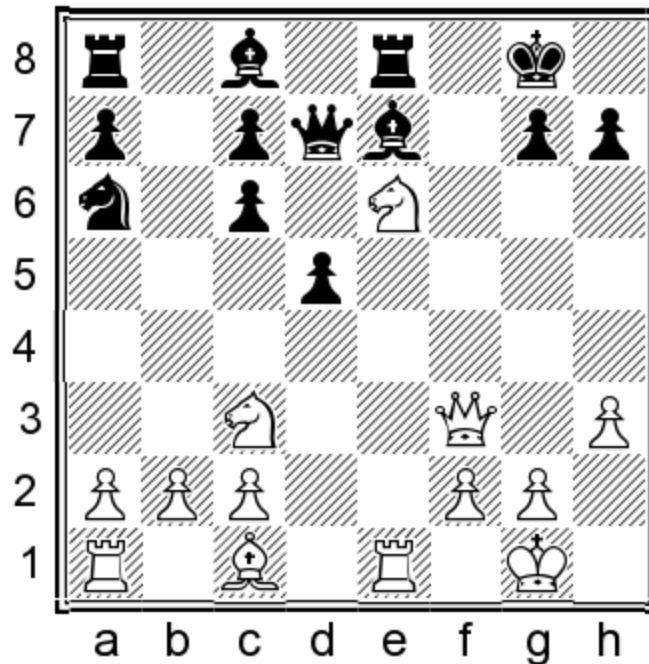
Let’s see how all this works in practice. For this example, you can get credit for correctly analyzing the following moves/lines:

- Line A1) = two points or Line A2) = one point
- Line B1) 21...Qxf4 22.Qxc7! Bxd5 = one point
- Line B11) 25.Qxf7+! = one point
- Line B12) = one point
- Line B2) = one point
- Line C) 21...dxe5 22.d5! = one point
- Line B11) 27...Bxb2 28.Rxd6 a5μ or 27...Rc8!?!μ = one extra credit point
- Line C) 22...Rac8 23.Nh4!?! (23.Nh2!?!) 23...Qf4 24.g3 Qh6 25.a4³ or 22...Red8 23.Qb3³ = one extra credit point

This gives us the maximum possible score of 7 regular and 2 extra points; 9 points in total. Let’s assume you analyzed correctly lines A2), B1), B12), C), and partly correctly line B2), but missed lines A1) and B11). Then you earn 4.5/7 possible regular points. Let’s further suppose you received extra credit for line C). In that case, your final score would look like this:

Your score = 4.5/7 points + extra credit

Tactical Analysis – Example 2



This example shows another type of task you will see with some Tactical Analysis exercises. Instead of exploring several candidate moves in the starting position, you analyze a single move, usually a promising sacrifice. That is arguably a more challenging analytical task because it's more open-ended than the 'multiple-choice' exercise we saw in Example 1. Instead of being provided with candidate moves, you must generate them yourself. That's a very good practical exercise to improve your analytical accuracy. In this case, we would like to know whether the following knight sacrifice works for White:

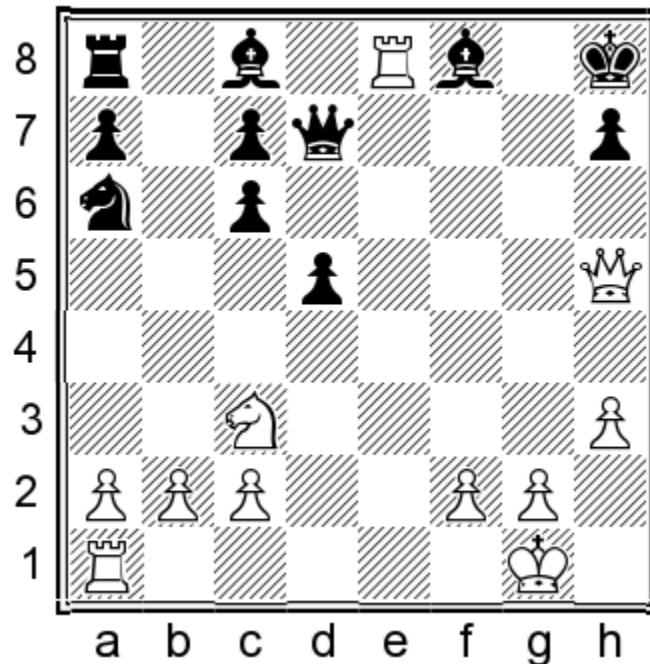
16.Nxg7!?

The idea is obviously to get the black king out in the open. Still, a piece is a serious investment, so we need to analyze White's attacking and Black's defensive options accurately.

16...Kxg7

The other option is 16...Rf8. Yuneev played this in the game, but it did not save him: 17.Qh5 (you get partial credit for analyzing 17.Bf4!?) Kxg7 18.Qg3+ Kf7 19.Re5 Bf6 20.Rh5 (one point), which

also leads to a strong attack for White, but is not as conclusive as the game continuation) 17...Kxg7 18.Bh6+ Kh8 (18...Kg8 19.Re3!) 19.Bxf8! Bxf8 20.Re8 (two points).

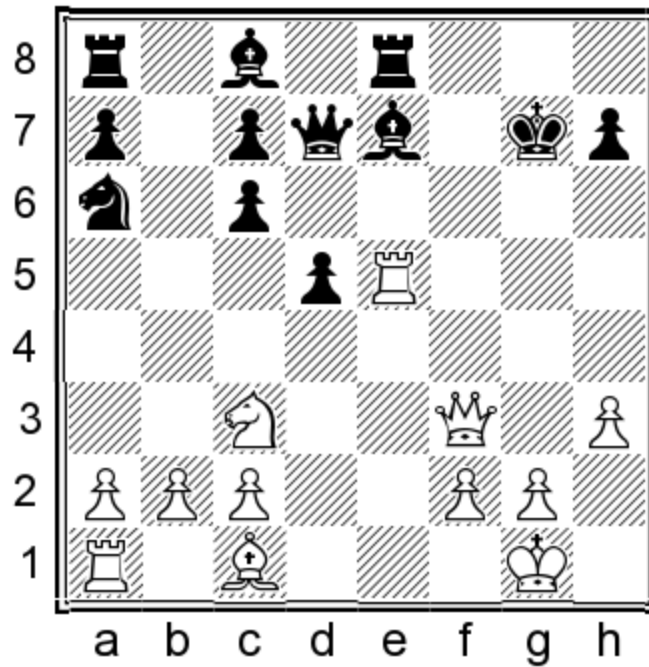


analysis diagram

You get full credit for reaching this winning position in your analysis and extra credit for analyzing further: 20...Bb7 21.Rxa8 (21.Rae1!? is likely to transpose) 21...Bxa8 22.Re1 Bb7 23.Re8 Kg8 24.Ne2! (one extra credit point). White brings the final piece to the kingside, and Black is helpless against the attack due to his misplaced queenside pieces. White eventually won in Tseitlin-Yuneev, Leningrad 1979. Naturally, you receive no credit for these lines if you missed 16...Rf8 altogether.

17.Re5!!

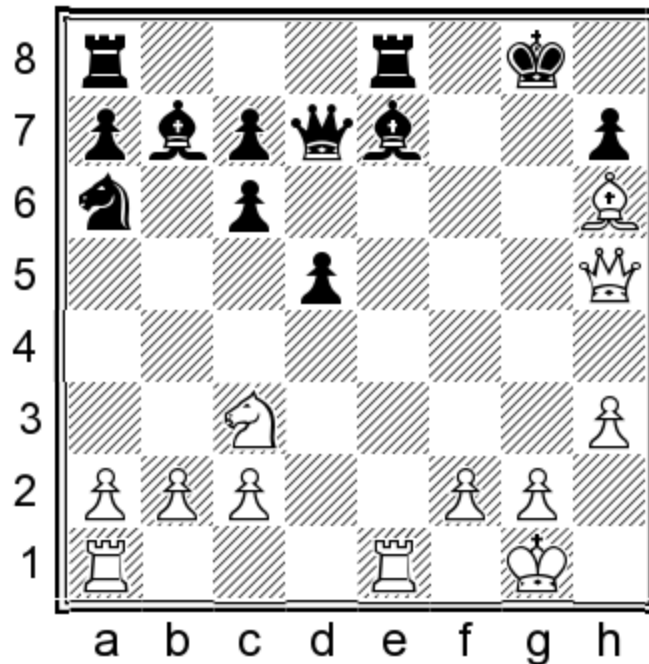
(two points)



Only this strong move ensures that White can exploit the vulnerability of the opponent's king. White prepares to mobilize his queenside pieces while setting up a deadly mating net with Bh6+ Kxh6, Qf7!, followed by Rh5#.

You get partial credit for analyzing any of the following alternatives:

A) 17.Qh5?! Bb7! (Black needs to connect his rooks after White's last move) 18.Bh6+ Kxg8 .



analysis diagram

The only move, but good enough to hold. White doesn't have a convincing way to continue the attack. You get one point for reaching this critical position in your analysis. You can earn additional credit for further analysis: 19.Rad1! (the critical try, as White prepares 20. Ne4 and 20. Rd3; 19.Re3 (no credit) is inferior due to 19...Bf6 20.Rg3+ Kh8 and Black wins)

A1) 19...Bf8 20.Ne4 Re6! 21.Qg4+ Kh8μ (one point);

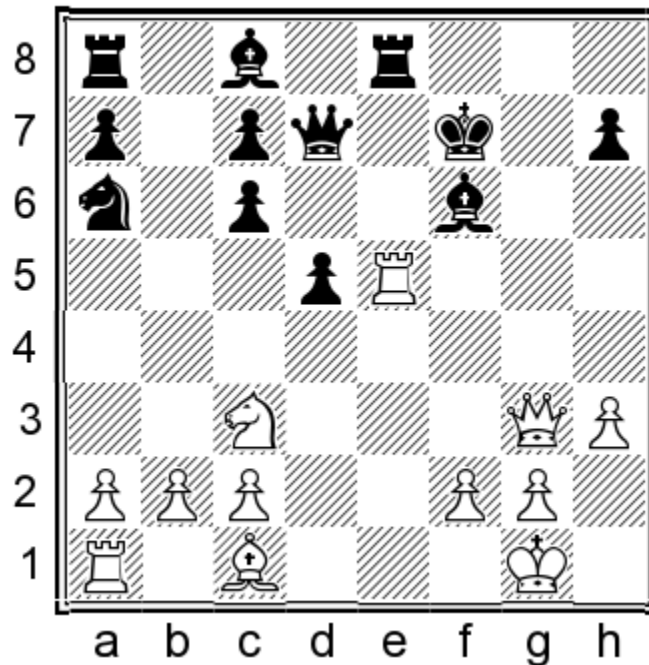
A2) 19...Nc5! 20.Ne4 (20.Rd4 Bf6 21.Rg4+ Kh8-+)

20...Nxe4 21.Rxe4 Bf6 22.Rf4 Re5 23.Qf3 Bg7 24.Rg4 Re7³ (one point).

I analyzed these two lines in full (until the forcing moves were exhausted) for the sake of analytical truth. However, you can get full credit for partially analyzing them as long as your evaluations roughly match those at the end of my provided lines.

B) 17.Qg3+?! Kf7 18.Re5. You get one point for reaching this critical position. Getting extra credit for further analysis is possible: 18...Bf6! (this defense is better than the alternatives: 18...Bh4

19.Qxh4 Rxe5 20.Qxh7+ Kf6 21.Qh6+= (one extra credit point) and 18...Qd6 19.Bf4 Qg6 20.Qf3 Bd7³ (one extra credit point))



analysis diagram

19.Rh5 Re1+! (19...Rg8 is solid but misses an opportunity for a counterattack. 20.Qf3 Rg7 (one extra credit point). Even though the black king is safe here, White has decent compensation for the piece because the black pieces are uncoordinated. Hence, this move receives only partial credit compared to 19...Re1+) 20.Kh2 h6!! 21.Rxh6 Qf5! (two extra credit points; you get full extra credit for finding this defensive sequence) 22.Rxf6+ Kxf6 23.Bg5+ Qxg5 24.Qxg5+ Kxg5 25.Rxe1. Although Black is better, in the end, White still garners some hope to save the game, thanks to his kingside pawns;

C) 17.Bf4 is not impressive from an analytical point of view. Black can force a draw in many ways, including 17...Bd6 18.Qg3+ Kh8 19.Bxd6 cxd6 20.Nxd5 cxd5 21.Qc3+ Kg8 22.Qg3+ Kf8 23.Qf4+ (one point). You get full credit for analyzing this or any similar lines that end in perpetual check.

Black has several possible defenses in response to 17.Re5, but none of them actually work. You get full credit for showing refutations for each of them:

17...Rf8

A) 17...Kg8 18.Bh6 Qd6 19.Bf4! Qg6 20.Rae1 (one point). White is fully mobilized for the attack, and the end is near for Black;

B) 17...Bb7 18.Bh6+! Kxh6 19.Qf7 (one point) is one of the key ideas behind 17. Re5!!;

C) 17...Bf6 18.Bh6+ Kf7 19.Qh5+ (one point).

18.Bh6+! Kxh6 19.Qe3+ Kg6 20.Rxe7 Qd6 21.Ne2

One point. The simplest continuation. White prevents Qf4 and brings another attacker closer to the black king with a winning attack. Alternatively, you also get full credit for this line if you analyzed 21.Re1!? Qf4 22.Qd3+ Rf5 23.Ne2 Qxf2+ 24.Kh2.

Your score = /8 points + extra credit

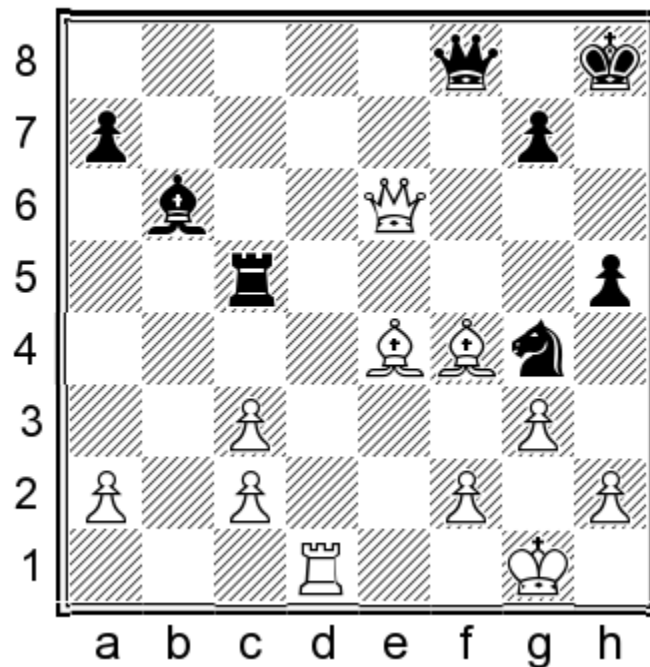
Tactical Training Positions

The final exercise in this chapter is a more practical one. Instead of analyzing, you will play out a sharp tactical position. You can do this with a training partner or a coach with set time limits to simulate a real-game situation.

Tactical training games are the ultimate test of your tactical and calculation skills. To paraphrase a basketball saying, ‘the board don’t lie’, suggesting that you can only truly showcase your skills on the chessboard. We might try to deceive ourselves when solving puzzles, but there are no excuses when we have to make over-the-board decisions within a time limit. Your performance in these training games will accurately reflect your actual tactical strength.

I will illustrate how this training tool works in the following example.

Tactical Training Position – Example 1



For each training position, I will recommend time control and ‘pre-thinking’ time. The latter refers to the time you have to familiarize yourself with the position before the clock starts running. This serves to compensate for the fact that you would already be familiar with the position if this were a real game situation. When you begin this exercise ‘cold’, that is, without previous knowledge about the position, it’s only fair that you get a few minutes to understand the main features and some critical ideas in the position.

In this example, I’d suggest taking 10 minutes of pre-thinking time if you are rated 2100-2300 Elo and 5 minutes if rated 2300+ Elo.

The recommended time control is 25 minutes + 5 seconds increment per move to mimic a typical game situation when you could get this kind of position. When you reach the Exercise section, you will see the suggestion written like this:

‘Recommended pre-thinking time: 5-10 minutes (2100-2300 = 10 minutes; 2300+ = 5 minutes). Recommended time control: 25 min + 5 sec.’

The next step is to play this position out at a recommended or desired time control. As mentioned earlier, one option is to play the position against a training partner, preferably someone within a margin of 200 Elo points of your strength. I suggest that you switch colors after the first game and try playing out the same position on the opposite side of the board. You can then follow it up with a post-game analysis session to understand your opponent’s thought process and discuss possible improvements together.

The second option is to have someone, such as your coach or a friend, test you against the moves provided in the book. In this scenario, they can view the entire analysis and make moves for one side, while you will be the one making the challenging decisions amidst numerous complex variations. Once you play a move not analyzed in the book, your partner can keep playing the game on his own, and you can later check the accuracy of your play with an engine. This is a highly rewarding training method as it helps you develop confidence in your own abilities, which will prove to be valuable in high-pressure tournament games.

It’s crucial to compare your play with the analysis I have provided in the book (in the Solutions section) to help you identify any mistakes or inaccuracies in your play.

Unlike the Tactical Analysis exercises, I will offer limited comments on specific lines. Many of the lines I provide are forcing, but covering every possible line that could happen in practical play is impossible. Therefore, the lines you will see here are usually the ‘best-play’ lines by both sides, or close to it. If a line you played in a training game is not in the text, there has probably been an inaccuracy or a mistake. But that’s completely normal. You can still

gain valuable experience playing out these sharp positions, even if you didn't follow the 'book' line.

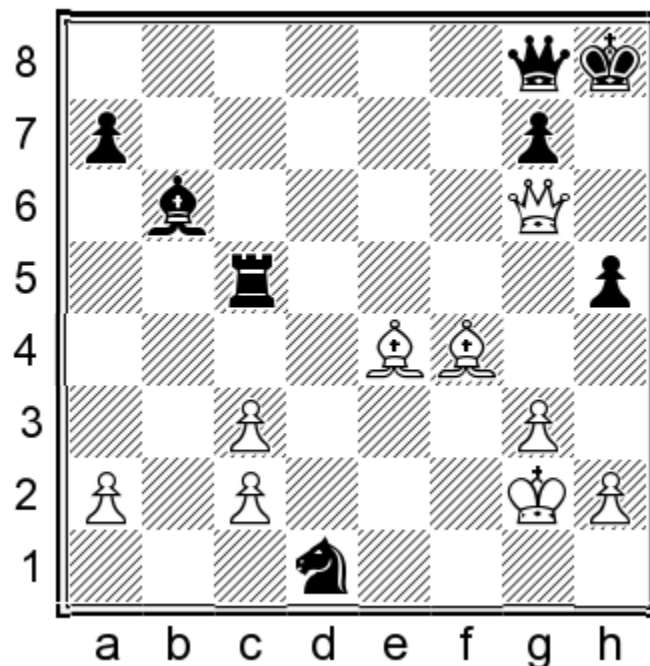
The final thing to mention is that I will not provide points for this exercise. However, I give extra credit for finding crucial or difficult ideas in your training games. You can accumulate those extra credit points to boost your total score at the end of the chapter.

Hopefully, I have introduced this exercise clearly enough. Let's now see what the analysis of this tricky training position looks like.

Black has two interesting options with many possible branches:

A) 31...Nxf2! 32.Kg2 Nxd1 33.Qg6 Qg8

33...Kg8 allows a perpetual check: 34.Qh7+ Kf7 35.Qg6+ Kg8.



Black is up a rook, and it seems like White's attack has ground to a halt. However, it's still not over:

34.h4!

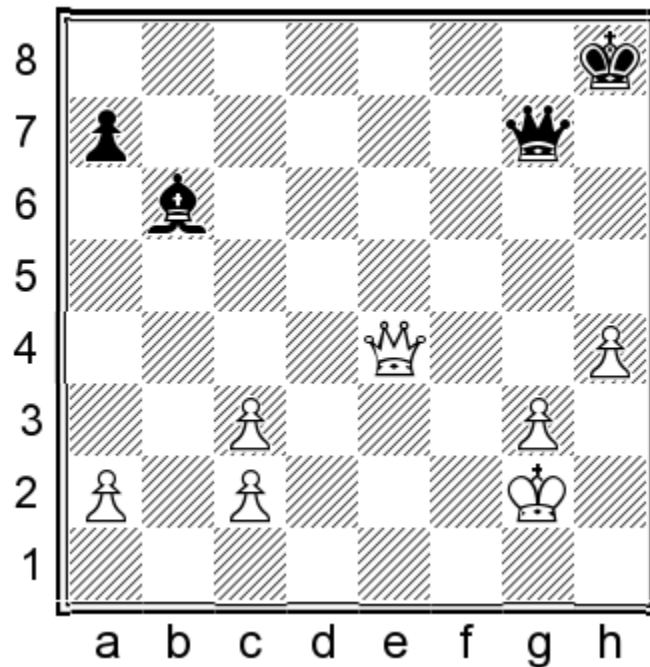
(one extra credit point) Preparing to block the rook with Bf4-g5 (34.Bg5? is premature due to 34...Rxc5 35.Qxc5 Qe8).

Now, Black must find a precise sequence to secure a winning advantage. Only one move suffices:

34...Ra5!!

This move prepares the ...Nd1-e3-g4-h6 maneuver.

A1) 34...Nf2 35.Bg5 Ng4 36.Qxh5+ Nh6 is the wrong way to do it because of 37.Qg6! Rc4 38.Bxh6 Rxe4 39.Bxg7+ Qxg7 40.Qxe4=.



analysis diagram

Please compare this position to the final diagram to understand the difference between this line and the winning one;

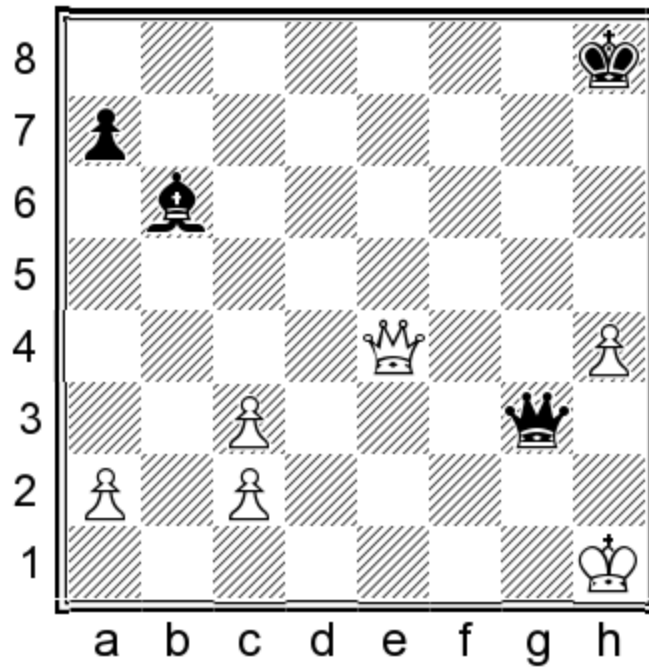
A2) 34...Nxc3 35.Bg5 Rxc3 (35...Nxe4 36.Qxh5+ Qh7 37.Qe8+ Qg8 38.Qh5+=) 36.hxc3 Nxe4 37.Qxh5+ Qh7 38.Qe8+ Qg8 39.Qh5+=;

A3) 34...Bd8 35.Bg5 Bxc3 36.hxc3 Ne3+ 37.Kh1 Ng4 38.Qxh5+ Nh6 39.Qg6! Nf7 40.Qh5+ Nh6=.

35.Bg5 Ne3+!

Two extra credit points. Black wins a crucial tempo with this check.

36.Kh1 Ng4 37.Qxh5+ Nh6 38.Qg6 Re5 39.Bxh6 Rxe4 40.Bxg7+ Qxg7 41.Qxe4 Qxg3

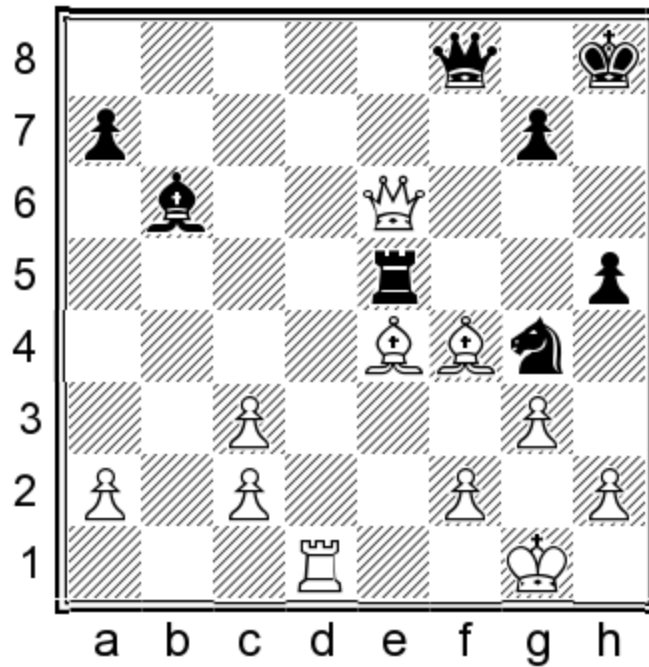


That's why the check on e3 was essential. If the king was on g2, this pawn would be defended, and the queen's endgame would be drawn, as in the 34...Nf2 line.

The second option is:

B) 31...Re5

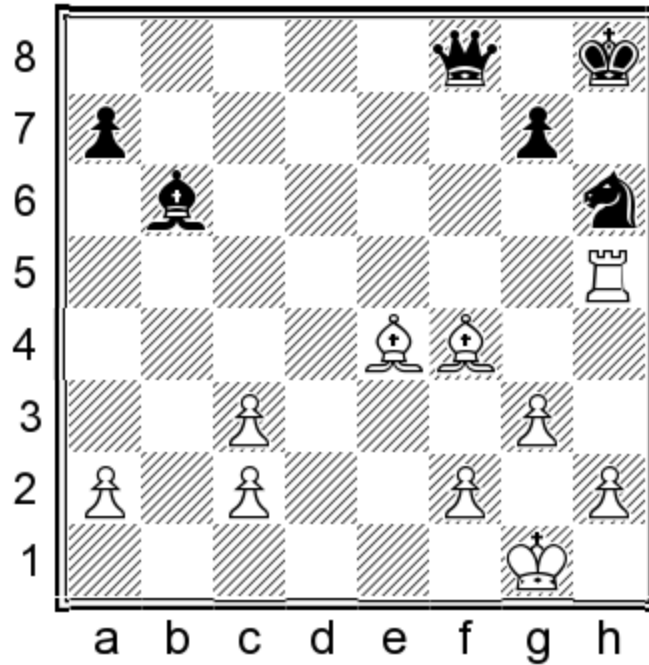
While attractive, this move allows White to escape:



B1) 32.Qg6 Rxe4 33.Qxh5+ (33.Qxe4 Nxf2 34.Qf3 Nxd1+ 35.Kg2 Qd8 36.Qxh5+ Kg8 and Black is better) 33...Nh6. White has enough compensation for the piece, but the position remains double-edged;

B2) The queen sacrifice 32.Qxe5!?. is correct:

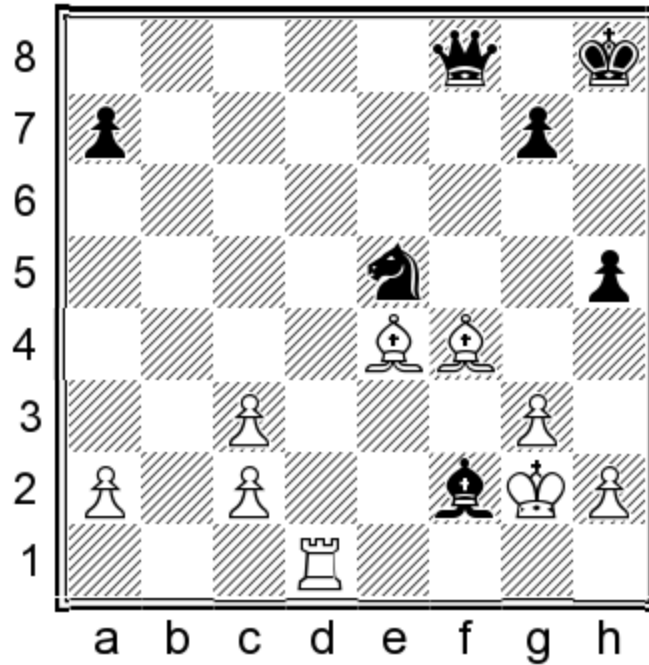
B21) 32...Nxe5 33.Rd5 Ng4 34.Rxh5+ Nh6.



analysis diagram

The point of the queen sacrifice was to force a draw with the cool idea 35.Rxh6+! (one extra credit point) 35...gxh6 36.Be5+ Kg8 37.Bd5+ Kh7 38.Be4+;

B22) 32...Bxf2+ is a less accurate continuation. White will even have some initiative after 33.Kg2 Nxe5



analysis diagram

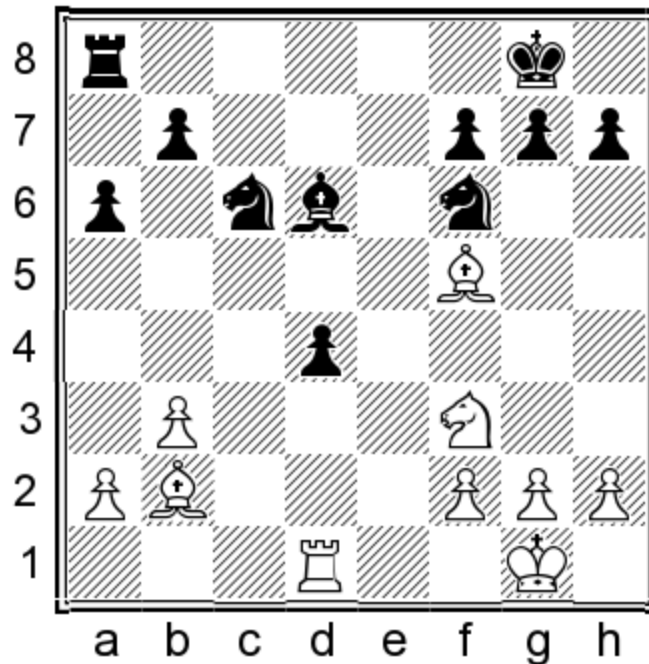
34.Bxe5 Bc5 35.Rf1 (35.Rd7 Qf2+ 36.Kh3 Bf8=) 35...Qe8 36.Rf5 Bd6! 37.Bf3! Qg6! 38.Rxh5+ Kg8 39.Bd5+ Kf8.

Alternatively, White can keep playing ambitiously with 34.Rd5!? Ng4 (34...Be3 35.Bxe3 Qe8 36.Bd4) 35.Rxh5+ Nh6 36.Kxf2 Qe8 37.Bf3, with an unclear position, or force a perpetual check with 36.Rxh6+!? gxh6 37.Be5+ Kg8 38.Bd5+ Kh7 39.Be4+.

Your score = extra credit

Exercises

Find a Hidden Tactic exercises



Please find a 'hidden tactic' in the following three-move sequence:
 22.Nxd4 Be5 23.Nxc6 Bxb2 24.Na5 b5

SOLUTION

– Exercise 1-

22.Nxd4 Be5 23.Nxc6 Bxb2 24.Na5 b5

24.Bc8!!

(one point) is the killer move that disrupts Black's piece coordination, thanks to the exposed back rank and a little knight geometry.

24...g6

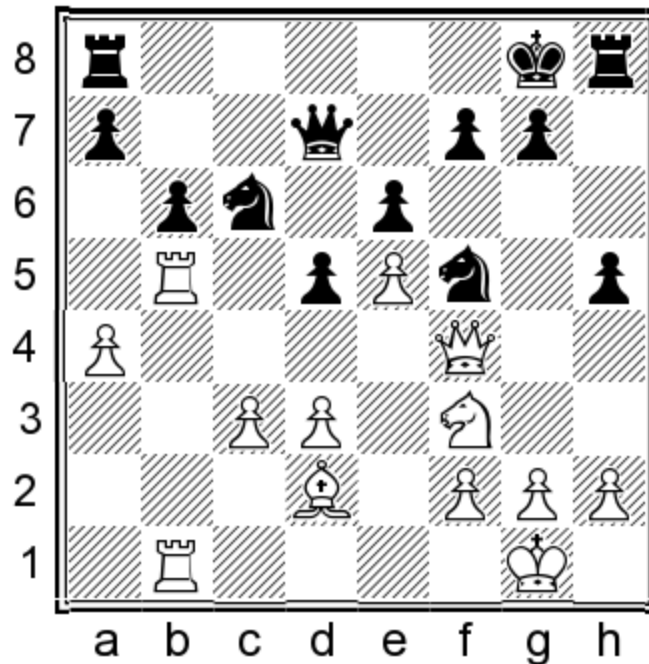
24...bxc6 25.Rd8+ Ne8 26.Rxe8#; 24...Rxc8 25.Ne7+ Kf8

26.Nxc8+-.

25.Bxb7+-

22...Rd8 23.Nxc6 Bxb2 24.Kxh2 Rxd1 is not the tactic we seek since the resulting endgame is drawish.

Your score = /1 point



Please find a ‘hidden tactic’ in the following three-move sequence:
 21...Rc8 22.h3 Rh6 23.Re1 Qd8 24.Ng5

SOLUTION

– **Exercise 2-**

21...Rc8 22.h3 Rh6 23.Re1 Qd8 24.Ng5

The exposed position of the rook on h6 should activate your tactics antenna. Fortunately, White can exploit it with a neat hidden tactic:

23.a5! bxa5

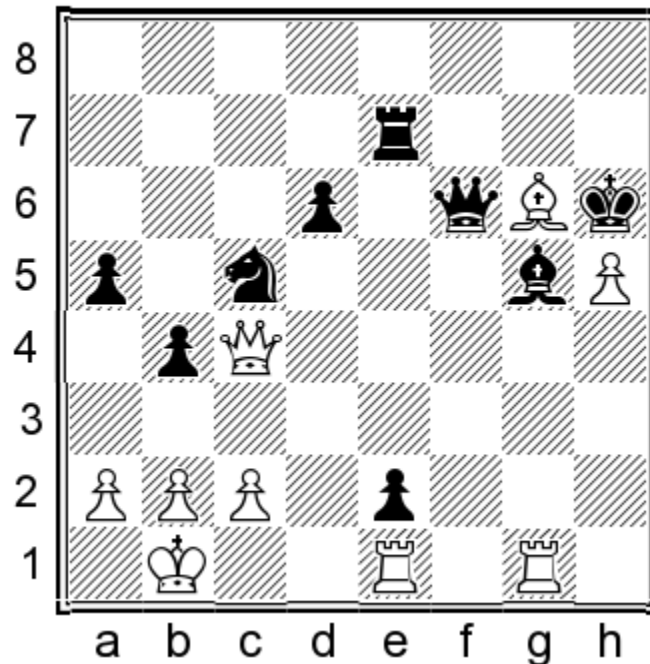
23...Nxa5 loses the exchange after 24.Qa4 since 24...Rg6 also runs into 25.Rxa5.

24.Qa4 Rg6 25.Rxa5

(one point) With an overwhelming positional advantage, which White eventually converted into a full point in the game Kamsky-Ivanchuk, Dresden 2008 (1-0, 40).

21...f6 22.exf6 gxf6 is an attempt to trap the queen with 23... e5. However, White can defuse it simply with 23.Nh4 Nxh4 24.Qxh4 , after which he is slightly better.

Your score = /1 point



Please find a 'hidden tactic' in the following three-move sequence:
36...Be3 37.Rh1 Na4 38.c3 d5 39.Qxe2

SOLUTION

FHT – Exercise 3-

36...Be3 37.Rh1 Na4 38.c3 d5 39.Qxe2

The correct tactic is:

37...Bf2!

One point. Black wins material with and keeps his strong passer.

38.Rxe2 Qf3!

Now White cannot save the rook because he gets checkmated on the back rank:

39.Rhe1 Bxe1 40.Rxe7 Qd1#

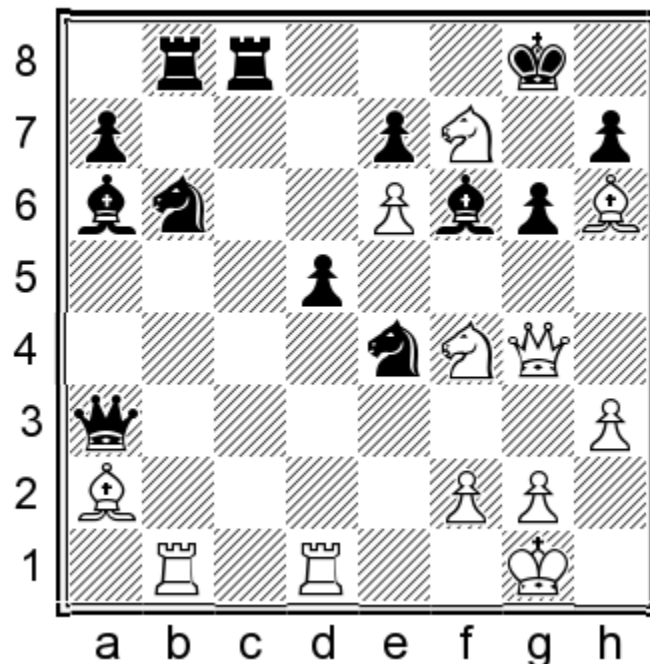
36...Qf2?!, preparing 37...Bd2, is wrong because White strikes first with 37.Qg8.

The same goes for 36...Na4? due to 37.c3 d5 38.Qxd5 Nxb2
39.Qxg5+! Qxg5 40.Rxg5.

37...d5? doesn't work because of 38.Qg4! Na4 39.c3 and the queen
on the fourth rank still prevents 39...bxc3 .

38...Nxb2 39.Kxb2 Bd2 is also not the tactic we are looking for.
White wins with 40.Bd3!.

Your score = /1 point



Please find a 'hidden tactic' in the following three-move sequence:
29...Qxa2 30.Nxg6 Qxf2+ 31.Kh1 Ng3+ 32.Kh2

SOLUTION

FHT – Exercise 4-

29...Qxa2 30.Nxg6 Qxf2+ 31.Kh1 Ng3+ 32.Kh2

31...Qe1+!

(one point) The correct hidden tactic, forcing the queen trade and
neutralizing White's attack.

32.Rxe1

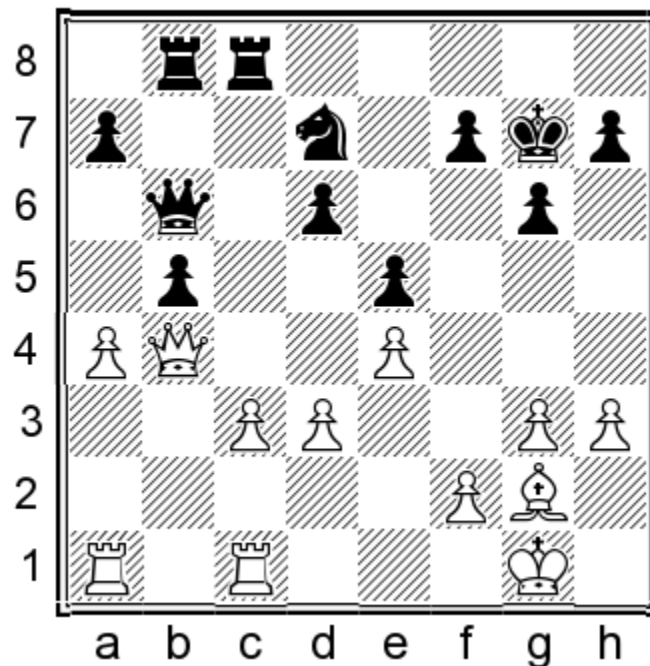
In case of 32.Kh2, we have another queen ‘desperado’: 32...Qg3+!
33.Qxg3 Nxc3.

32...Nf2+ 33.Kh2 Nxc3+ 34.hxc3 hxc3--+

E.Atalik-M.Muzychuk, Khanty-Mansiysk 2018 (0-1, 40).

29...Nxf2? (no credit) is a weak tactic. Black wins a pawn after
30.Kxf2 Qxa2+ but loses his counterplay after 31.Kg1 Qc2 32.Bg5.

Your score = /1 point



Please find a ‘hidden tactic’ in the following three-move sequence:
21...a5 22.Qxb5 Qc7 23.Qc4 Qxc4 24.dxc4

SOLUTION

– Exercise 5–

21...a5 22.Qxb5 Qc7 23.Qc4 Qxc4 24.dxc4

Instead of c7, the queen should retreat to a7:

22...Qa7!

To start the hunt for its counterpart.

White’s hand is forced:

23.Qd5 Rb2! 24.d4 Qb6!

One point. The white queen is trapped in the center of the board, as Black threatens to go ...Nf6 next.

You can get extra credit for calculating White's most stubborn defensive attempt:

25.c4

Black has two winning continuations here:

A) 25...Qxd4!? 26.Qxd4 exd4

(one extra credit point)

; or

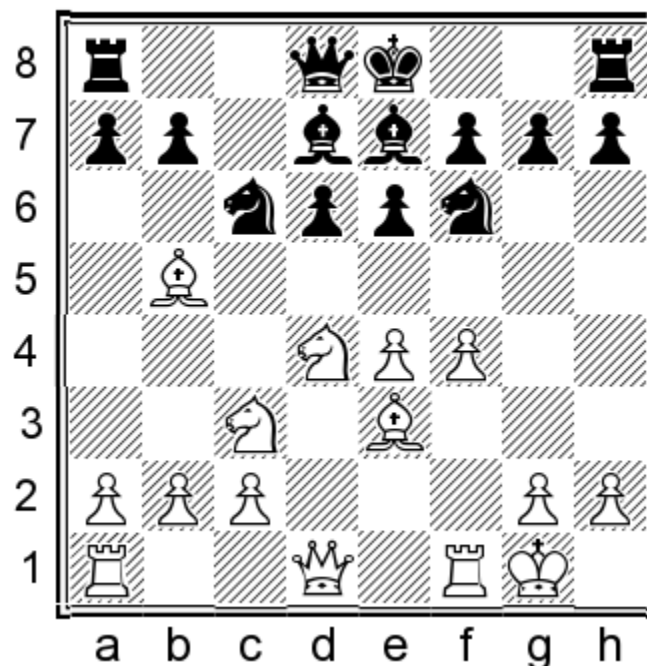
B) 25...Nf6 26.c5 Nxd5 27.cxb6 Nc3! 28.Bf1 exd4

(one extra credit point)

with a winning endgame in both cases.

The original game Shepherd-Annapureddy, Melbourne 2024, saw 25.Ra2 Nf6 and White resigned, as 26.Rxb2 Qxb2 loses the rook on c1.

Your score = /1 point + extra credit



Please find a 'hidden tactic' in the following three-move sequence:
10...0-0 11.Kh1 a6 12.Bd3 b5 13.Qf3

SOLUTION

– Exercise 6–

10...0-0 11.Kh1 a6 12.Bd3 b5 13.Qf3

This looks like a standard Scheveningen Sicilian. However, it is possible to exploit the exposed position of the several white pieces with a thematic tactical shot:

11...Nxe4! 12.Nxe4

12.Nxc6 Bxc6 13.Bxc6 Nxc3 14.bxc3 bxc6, winning.

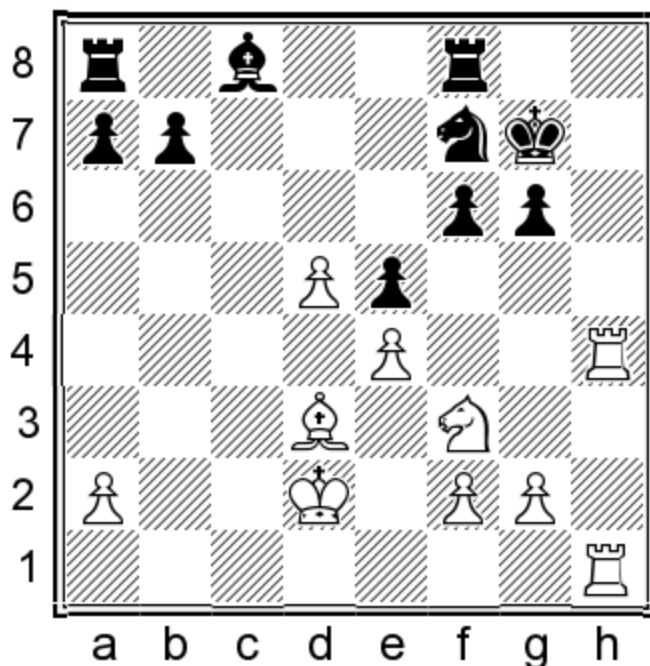
12...Nxd4 13.Bxd7

13.Bxd4 Bxb5 and Black was up a pawn in Mamatov-Panyushkin, Soviet Union 1977 (0-1, 23).

13...Nf5!

One point. This move is the key to Black's combination, securing an extra pawn for Black.

Your score = /1 point



Please find a ‘hidden tactic’ in the following three-move sequence:
 20.Rh7+ Kg8 21.Bc4 Rd8 22.Ne1 Rd6

SOLUTION

FHT – Exercise 7-

20.Rh7+ Kg8 21.Bc4 Rd8 22.Ne1 Rd6

22.d6 is the move we want to make work, but it is not advisable to play it immediately because of 22...Rxd6+ 23.Ke3 Be6.

One of the brightest young chess stars missed the winning tactic in the classical game Keymer-Rapport, Budva 2023 (1-0, 85) when he played 22.Ne1. Hopefully, you found:

22.Nd4!!

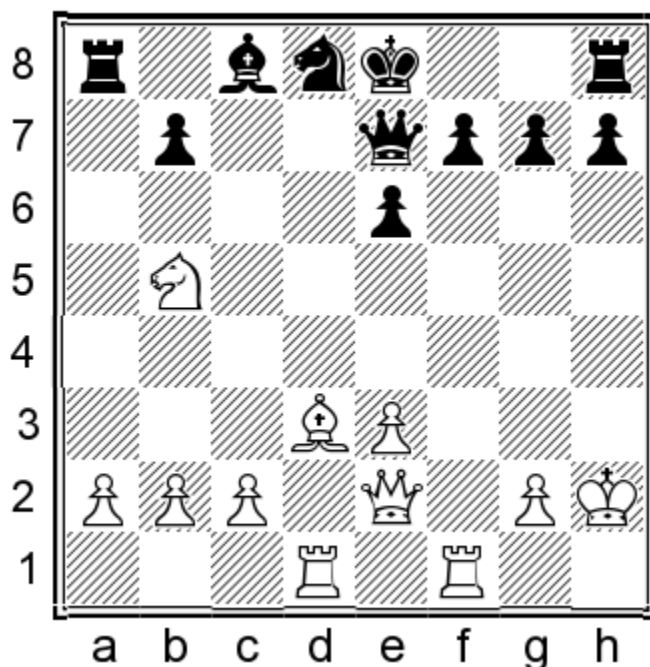
(two points)

22...Rd6

The purpose of the sacrifice was to invite black to block the d-file with 22...exd4 when the crushing 23.d6 becomes possible.

23.Nb5

Your score = /2 points



Please find a ‘hidden tactic’ in the following three-move sequence:
21.Qh5 h6 22.Rf4 0-0 23.Nd6 f5

SOLUTION

FHT – Exercise 8-

21.Qh5 h6 22.Rf4 0-0 23.Nd6 f5

Black threatens to consolidate with 22...0-0. The only move to stop this is an ‘invisible move’:

22.Bh7!!

(two points) After this, the black king remains in the center, and all tactics work for White. The most important one is:

22...Rxh7 23.Nd6+! Kf8 24.Nxf7 Nxf7 25.Rd8+! Qxd8 26.Qxf7#

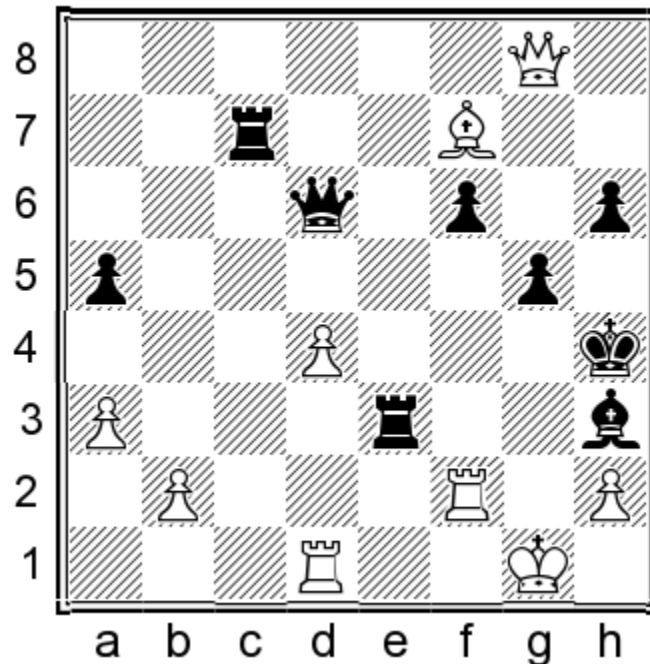
The other two important variations are 22...Ra5 23.Qe5! Qh4+ 24.Kg1 Rxh7 25.Nd6+ and 22...Ra6 23.Qe5! Rxh7 24.Nc7+ Kf8 25.Nxa6 bxa6 26.Qb8.

22.Nd6+?? is a surprisingly common visualization mistake with lower-rated players in this position. They assume this wins because

of the discovered attack 23. Bb5+, but this move is illegal because 22...Qxd6+ puts the white king in check first!

22.Bg6? doesn't work because Black can save his king with 22...0-0! 23.Rxd8 Qxd8 24.Bxf7+ Kh8.

Your score = /2 points



Please find a 'hidden tactic' in the following three-move sequence:
34.Qg6 Rxf7 35.Qxf7 f5 36.Qc4 f4

SOLUTION

- Exercise 9-

34.Qg6 Rxf7 35.Qxf7 f5 36.Qc4 f4

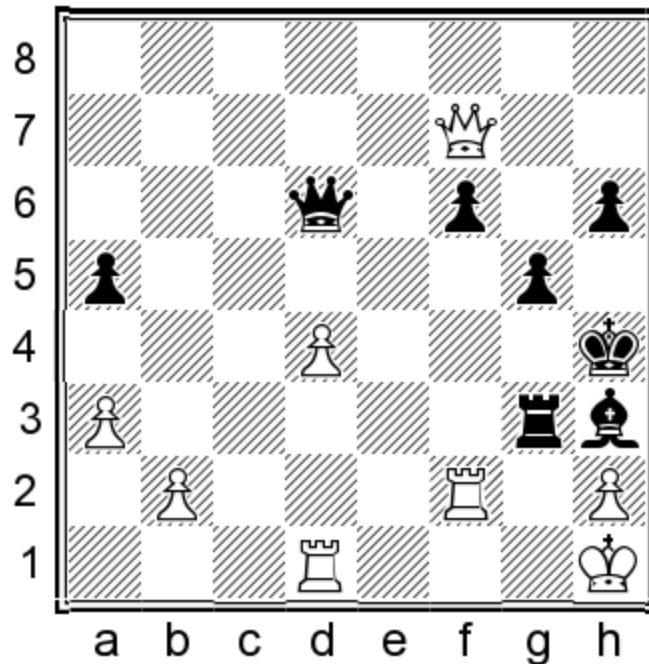
Instead of the move 35...f5, played in the game Yordanov-Fishchuk, Sant Boi de Llobregat 2024 (1/2-1/2, 63), Black could win by force:

35...Rg3+!

One point.

36.Kh1

36.hxg3+ loses to 36...Qxg3+ 37.Kh1 Qxf2 38.Qb7 Bg4.



36...Rd3!

One point. This is the right way to exploit the opponent's vulnerable back rank.

37.Rxd3

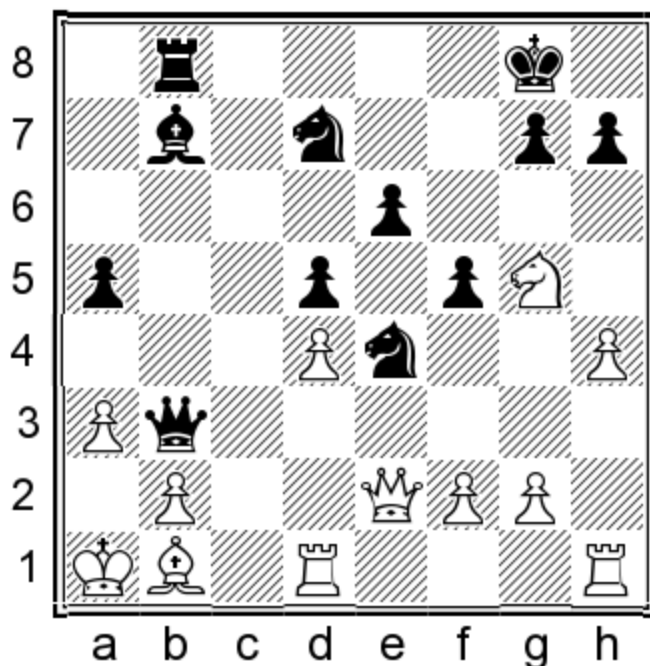
37.Re1 Qc6+ 38.Kg1 Rxd4.

37...Qc6+ 38.Rdf3 Qc1+ 39.Rf1 Bxf1

On the other hand, 36...Qc6+? 37.d5 Rd3 (no credit) is the wrong move order for this combination because White can save the game with 38.Rdf1! Rxd5 (38...Qc4 39.Rf4+! gxf4 40.Qxf6+=) 39.Qxf6! Rd6+ 40.Qf3.

35...Qxd4?? is a visualization error some people made in this position. The idea of deflecting the white rook from the back rank is correct, but the particular problem with this move is that 36.Rxd4+ comes with a check, so 36...Re1+ is not possible, and White wins instead.

Your score = /2 points



Please find a 'hidden tactic' in the following three-move sequence:
 24...Ba6 25.Bd3 Bxd3 26.Rxd3 Qb6 27.Rc1

SOLUTION

- Exercise 10-

24...Ba6 25.Bd3 Bxd3 26.Rxd3 Qb6 27.Rc1

Black wins with a spectacular blocking sacrifice:

25...Ne5!!

(two points)

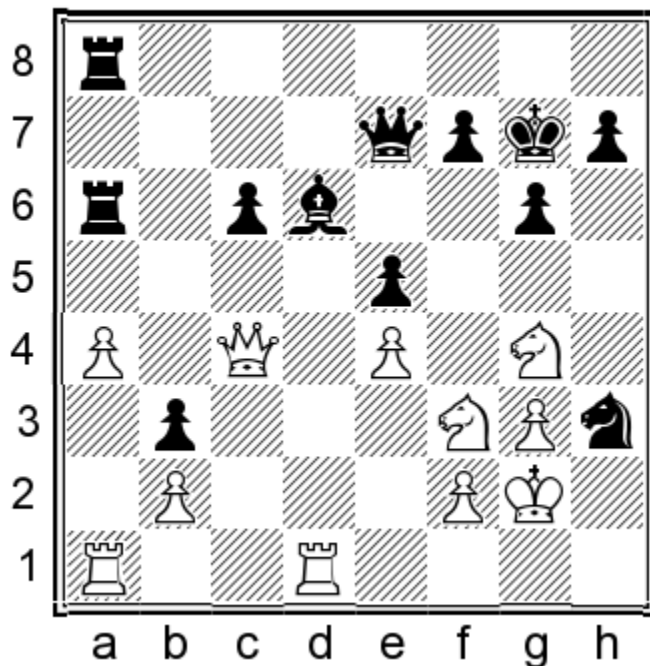
26.dxe5 Nc3!

White would have refuted this move with Qxe6+ one move earlier, but this is impossible now, with the pawn on e5. The checkmate is unstoppable:

27.bxc3 Qxa3+ 28.Qa2 Qxc3+ 29.Qb2 Qxb2#

You can earn extra credit for refuting White's other option after 25...Ne5: 26.Nxe4 Nxd3 27.Nd6 Ne5! (or 27...Nf4 28.Qd2 Qb6) 28.Qd2 Nc4. (one extra credit point)

Your score = /2 points + extra credit



Please find a ‘hidden tactic’ in the following three-move sequence:
30...Ng5 31.Rxd6 Nxf3 32.Rad1 h5 33.Nf6

SOLUTION

FHT – Exercise 11-

30...Ng5 31.Rxd6 Nxf3 32.Rad1 h5 33.Nf6

In the game Zhalmakhanov-Amin, Douglas 2023, Black played 31...Qxd6 here because he realized too late that his intended reply, 31...Nxf3, doesn't work. The game continued 32.Nxg5 and White eventually converted his advantage (1-0, 42). The refutation of 31...Nxf3 he spotted when it was too late was:

32.Qc5!!

(two points)

This quiet move wins on the spot because Black cannot simultaneously defend against 33.Rxg6+ and 33.Kxf3.

32...Nd4

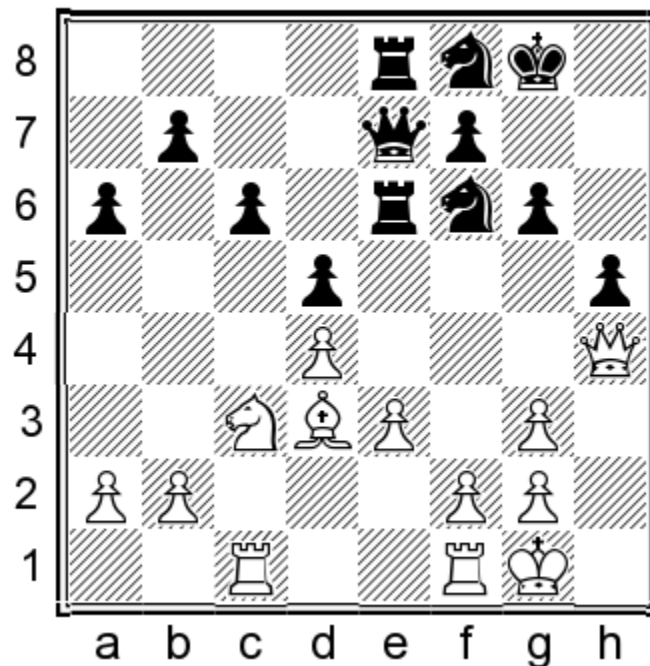
32...Qf8 33.Kxf3, winning a piece.

33.Rxg6+ Kf8 34.Rg8+ Kxg8 35.Qxe7

30...h5 (no credit) doesn't work because of 31.Ne3 Qf6 32.Rxd6 Qxd6 33.Kxh3.

32.Rxc6?! (no credit) is underwhelming compared to the winning move. Even though White can still try to win after 32...Nd2 33.Qd5 Rxc6 34.Qxc6, 34...Rd8! gives Black enough counterplay to hold the balance.

Your score = /2 points



Please find a 'hidden tactic' in the following three-move sequence:

23...Kg7 24.Ne2 Qb4 25.Nf4 R6e7 26.Rc2

SOLUTION

FHT – Exercise 12-

23...Kg7 24.Ne2 Qb4 25.Nf4 R6e7 26.Rc2

In the game Bates-Vitiugov, Porto Carras 2018 (0-1, 33), a 2700-player missed an opportunity for a powerful thematic sacrifice:

24...Rxe3!!

Two important tactical details make this sacrifice work.

Firstly,

A) 25.fxe3 Qxe3+ 26.Kh1 g5!

(two points) pushes the white queen away, allowing Black to return the sacrificed material with interest:

27.Qh3 Qxd3

White will lose the d4-pawn, too, and it's all over.

Secondly,

B) 25.Nf4

traps the rook. However,

25...Re6!

(one point) still gives Black a great position. Perhaps Vitiugov decided against the rook sacrifice because he missed this strong move in the game.

25...Rxd3 26.Nxd3 Qe2 (no credit) is still better for Black but not nearly as strong as the alternative.

26.Nxe6+ Nxe6

Black gets more than simple compensation in return for the exchange. For example:

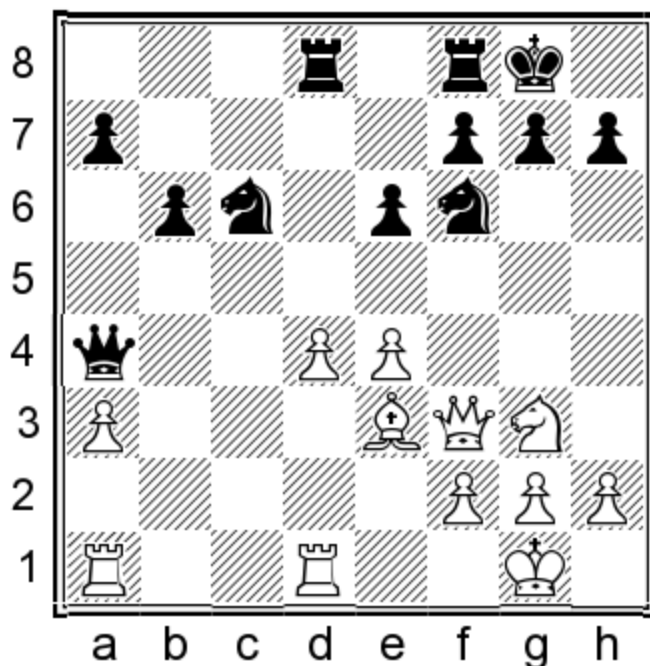
27.Rfe1

If 27.a3 g5, Black has a decisive advantage.

27...Qb4 28.Re2 Ng4

The white center collapses while his queen is on the sidelines.

Your score = /3 points



Please find a 'hidden tactic' in the following three-move sequence:
 20.e5 Nd5 21.Bg5 Rd7 22.Rd3 Rc8

SOLUTION

- Exercise 13-

20.e5 Nd5 21.Bg5 Rd7 22.Rd3 Rc8

21...Nxd4!

One point. This move is not difficult to spot, but it's essential to calculate the ensuing variations precisely to make it work. You can get up to three points on this exercise if you find all the key moves in the lines below.

22.Qg4

22.Qd3 f6! (one point) 23.exf6 (23.Qxd4 Qxd4 24.Rxd4 fxg5 wins for Black) 23...Nxf6. Black keeps the extra pawn. Alternatively, 22...Nb3!? 23.Bxd8 Nxa1 24.Bxb6 axb6 25.Rxa1 (one point) also works because Black dominates the endgame.

22...Nc3! 23.Bxd8 Rxd8

One point. White doesn't have a good defense against Black's tactical threats.

24.Kh1

24.Rd3 Nde2+! 25.Nxe2 Rxd3 0-1 Tan Jun Ying-Poh Yu Tian, Penang rapid 2024.

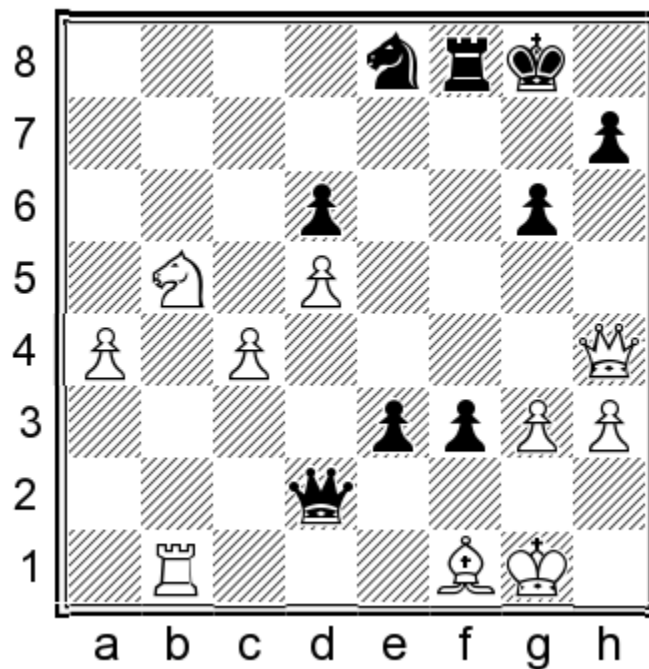
24...Nxd1 25.Rxd1

There isn't much White can do to compensate for the lost pawn, for example: 25...Kf8! 26.Nh5 g6 27.Nf6 h5.

22...Nxd4?? (no credit) doesn't work here in view of 23.Qg4 Nc7 24.Rad1.

22...Ndb4?! (no credit) is also pointless because of 23.Rd2.

Your score = /3 points



Please find a 'hidden tactic' in the following three-move sequence:

35.Qd4 Qf2+ 36.Kh1 Nf6 37.Nc3 Nh5

SOLUTION

- Exercise 14-

35.Qd4 Qf2+ 36.Kh1 Nf6 37.Nc3 Nh5

35...Qe1!!

(two points)

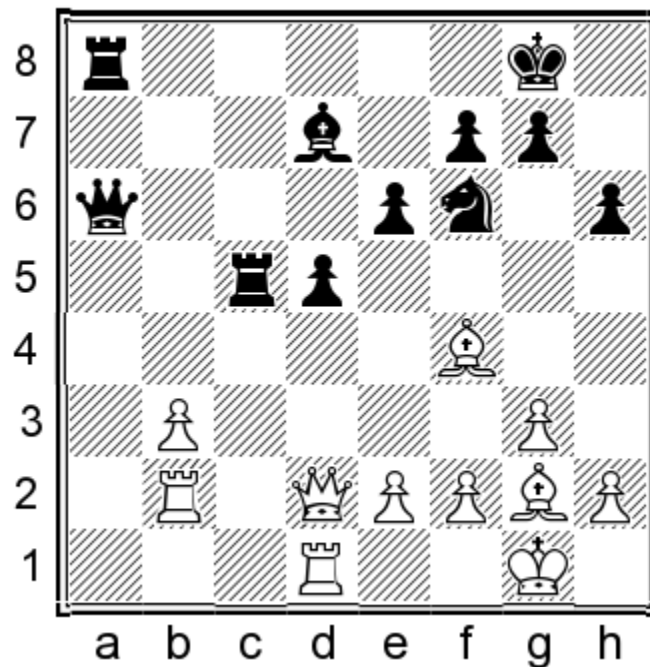
A classy double attack/promotion tactic. This move works much better than the text because it wins a crucial tempo by attacking the rook on b1.

36.Nc3

36.Rxe1 runs into 36...f2+ 37.Kh2 fxe1Q.

36...Qxg3+ 37.Kh1 e2

Your score = /2 points



Please find a 'hidden tactic' in the following three-move sequence:
24.Bxh6 gxh6 25.Qd4 Qc6 26.Qxf6 Rc1

SOLUTION

FHT – Exercise 15-

24.Bxh6 gxh6 25.Qd4 Qc6 26.Qxf6 Rc1

25...Qa1!!

Two points. White missed this brilliant queen sacrifice when he captured the h6-pawn. Now, the weakness of his back rank is fatal.

26.Rxa1

26.Rf1 loses to 26...Ra2.

26.Qd2 Qa3–+ Lazavik-Wojtaszek, Douglas 2023 0-1 (34).

26...Rxa1+ 27.Bf1 e5!

One point. The essential follow-up.

27...Ne4?! (no credit) doesn't get the job done because of 28.Rc2!

Rxf1+ 29.Kxf1 Rxc2=.

28.Qxc5

Or 28.Qh4 Rcc1 29.Kg2 Kg7! and Black is winning.

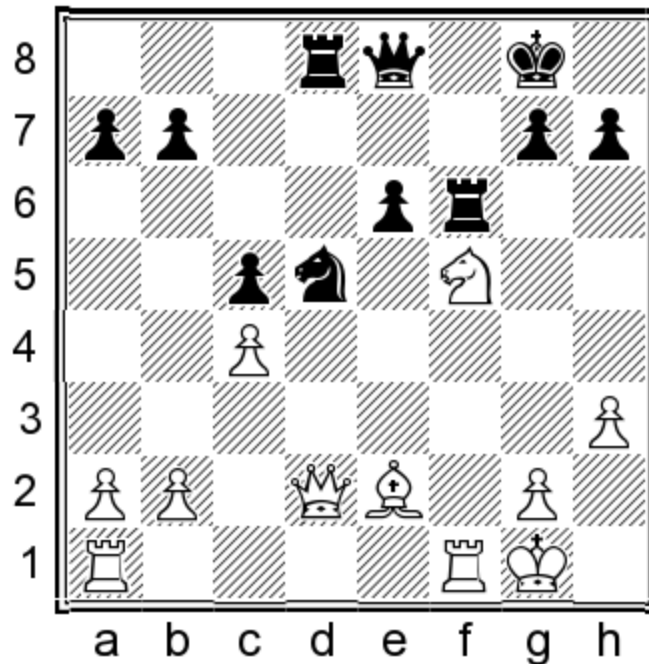
28...Bh3

White will have to give up his queen to stop the checkmate on f1.

Your score = /3 points

Total points for FHT exercises = /27 points

Tactical Analysis exercises



White is currently up a piece, but Black hopes to win it back. Please analyze and evaluate the following three continuations:

- A) 19...Nb4
- B) 19...Nc7

SOLUTION

Analysis – Exercise 1-

C) 19...Nb6

If you analyzed everything correctly, you will have concluded that White gets a winning position against each of the three possibilities:

A) 19...Nb4

This move is easily refutable.

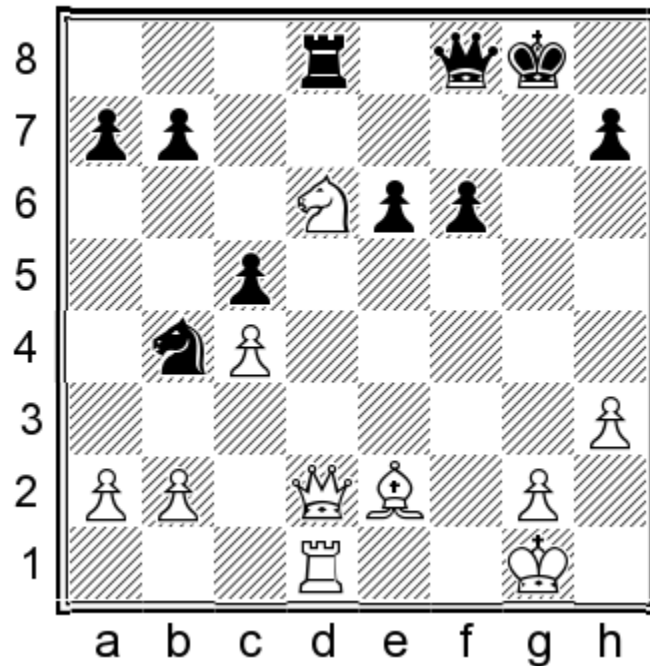
20.Nd6

The simplest way to win. Alternatively, 20.Nxg7! (one point)

20...Rxf1+ 21.Bxf1 Qe7 22.Qh6 Qxg7 23.Qxe6+ also leads to a winning position, but Black keeps a fighting chance.

20...Qf8 21.Rxf6 gxf6 22.Rd1

Two points.



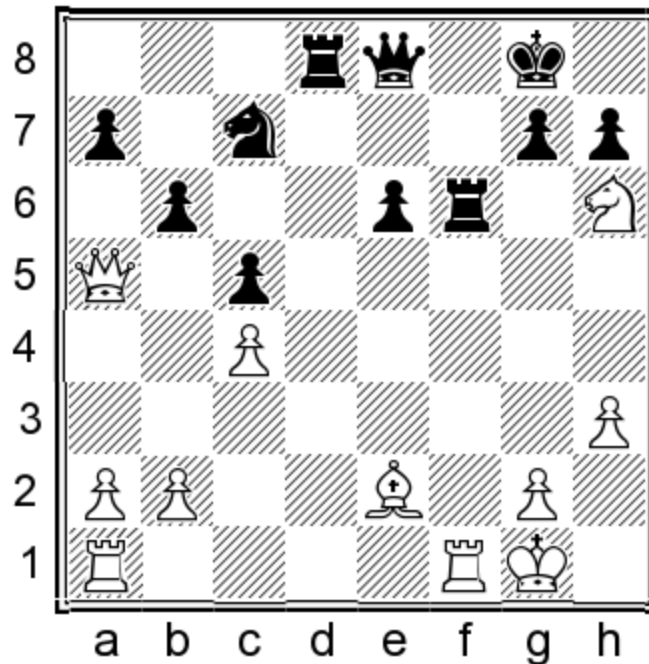
Black cannot utilize the pin on the d-file, and White's extra piece will eventually decide the outcome in his favor.

B) 19...Nc7

Objectively the best option, although this is not obvious initially.

B1) White can exploit the undefended knight on c7 with 20.Qa5! (two points) 20...b6!. The most stubborn defense (20...exf5? 21.Qxc7 Rd7 fails to 22.Qxc5! and you earn credit for finding this resource for White: 22...Qxe2 23.Qc8+ (one point)). White needs to play accurately to preserve his advantage. The best move is:

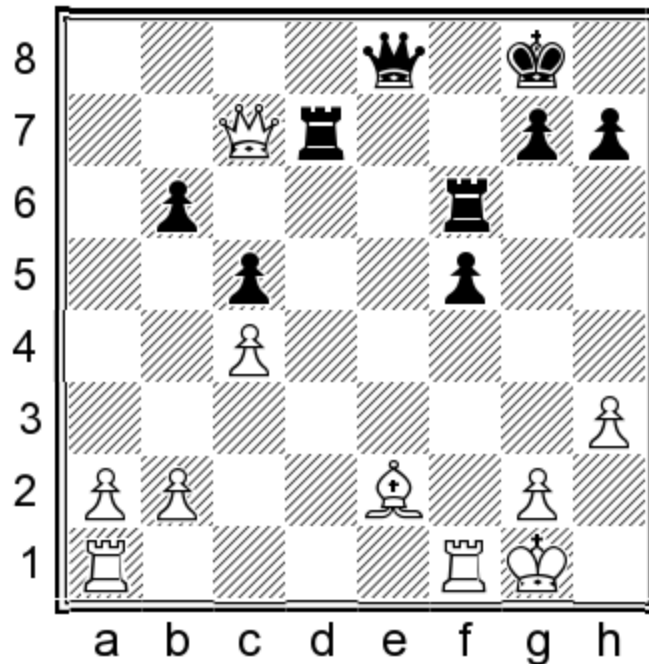
B11) 21.Nh6+!



With this desperado sacrifice, we ensure we get the best possible version of the position where White captures the a-pawn: 21...Rxh6 22.Qxa7 (two points). White has a dominant position. Surprisingly, Black does have a way to protect both the c7-knight and the b6-pawn: 22...e5! and you deserve one extra credit point for finding it in your analysis, as well as for White's best reply 23.Rad1! (one extra credit point), which gives him a nearly winning positional advantage.

You can earn more extra credit for analyzing the line 23.Qxc7 Rd7 24.Bh5! Rxh5 25.Qxb6 e4! (one extra credit point), which is slightly worse than 23.Rad1 because Black obtains some counterplay with his e-pawn;

B12) 21.Qxa7? is underwhelming compared to 21.Nh6+ since it allows Black to open his heavy pieces with 21...exf5 22.Qxc7 Rd7! (one point).



Suddenly, White can no longer keep his material advantage: 23.Qf4 Qxe2 with equality. You get credit for this line only for finding this strong resource for Black – otherwise, you get no credit;

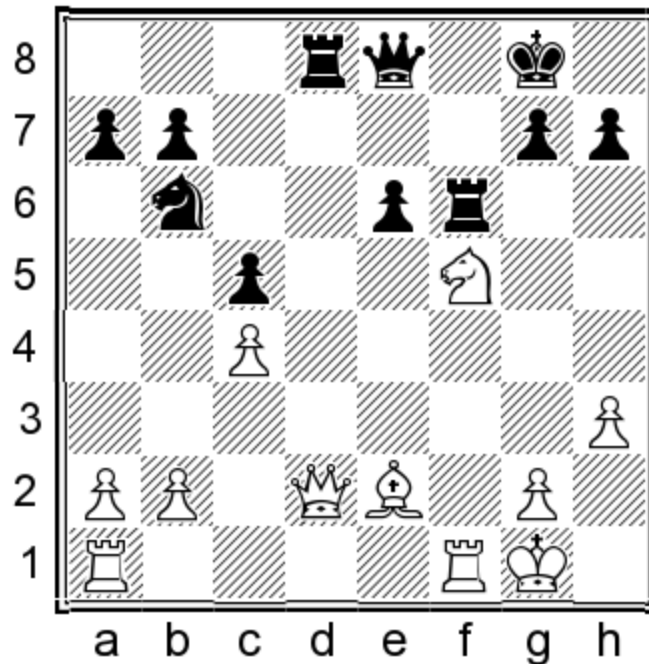
B13) 21.Nxg7 (one point) is a little better than the tempting 21.Qxa7, but the endgame after 21...bxa5 22.Nxe8 Nxe8 is far from decisively winning for White.

B2) 20.Nd6 Qf8 21.Qa5 (one point) is an inferior version of the 20.Qa5 idea (21.Rxf6 gxf6 22.Rd1? Ne8= (no credit) justifies Black's 19th move) in view of 21...Rxf1+ 22.Rxf1 Qxd6 23.Rd1 Qe7 24.Rxd8+ Qxd8 25.Qxa7 Qd4+ 26.Kh1 and White is 'only' better;

B3) 20.Qf4? (no credit) is the wrong way to attack the knight as White's knight is pinned with 20...Rd7!.

C) 19...Nb6

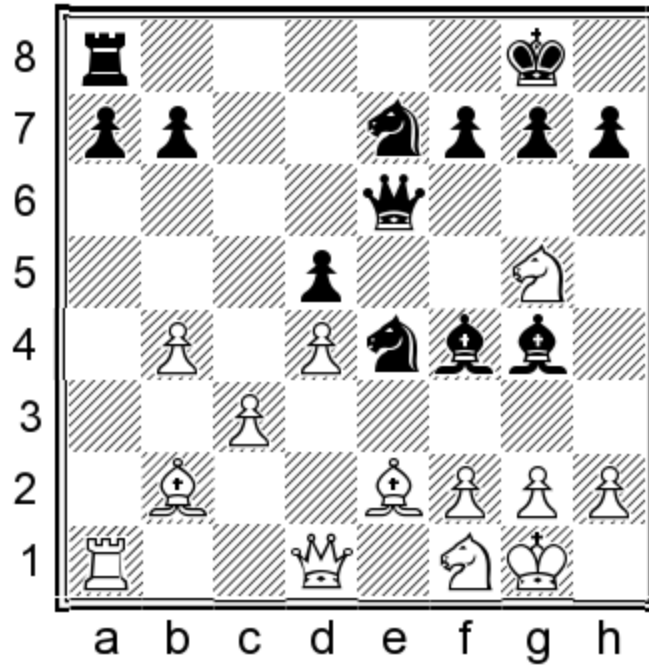
This move makes more sense than 19...Nb4 because the knight can retreat to c8 in some lines.



C1) White can secure a winning position only by playing 20.Nxg7! Rxf1+ 21.Bxf1 (two points; 21.Rxf1? Rxd2 22.Nxe8 Rxe2= (no credit)) and Black will be down a pawn no matter what. You get extra credit for further analyzing any of the lines 21...Qe7 22.Qh6 Qxg7 23.Qxe6+ or 21...Kxg7 22.Qg5+ Kh8 23.Qxc5 (one extra credit point);

C2) 20.Nd6?! works less well than in similar positions with the knight on b4 due to 20...Qf8! 21.Rfd1 (or 21.Rxf6 gxf6 22.Rd1 Nc8=) 21...Nc8 (one point), and Black gets his piece back with an acceptable position, for example: 22.Qe3 Rxd6 23.Rxd6 Qxd6² . Additionally, you can get extra credit for finding that 20...Qe7? is inferior because of 21.Rad1 Rxf1+ 22.Bxf1 (one extra credit point), followed by the Nf5 discovered attack. However, no credit is given for missing Black's intermezzo after 21.Rxf6? Rxd6!.

Your score = /10 points + extra credit



White just played 19. Ng5, creating a tactical crisis. Please analyze the following four continuations and provide the final evaluations:

- A) 19...Bxh2+
- B) 19...Bxe2
- C) 19...Bxg5
- D) 19...Nxg5

SOLUTION

Analysis – Exercise 2-

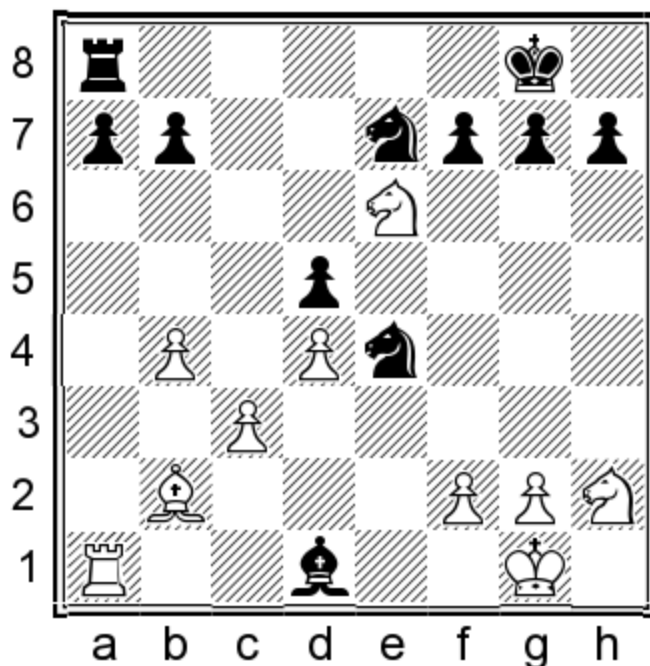
A) 19...Bxh2+!?

is the critical try from a practical point of view, although 19...Bxe2 is a little better, analytically speaking.

20.Nxh2 Bxe2 21.Nxe6

21.Qxe2 Nxg5 leaves White down a pawn and hopeless.

21...Bxd1



22.Nc5!

Two points. This move gives White much better drawing chances than the tempting 22.Nxg7, which happened in the game Fontaine-Carlsen, PRO League Stage rapid 2018 (0-1, 52): 22...Kxg7 23.Rxd1 Rc8 (one point). The 16th World Champion eventually converted this slight but stable advantage into a full point. The bishop on b2 was a dud throughout.

22...Nxc5 23.dxc5 Bh5

23...Bc2 or 23...Bb3 are similar, whereas 23...Be2?? prevents 24.b5 but loses a piece to a skewer: 24.Re1.

24.b5!

One extra credit point. By reaching this point in the analysis, you earn another point. It's clear that White has managed to secure enough compensation for the pawn, effectively maintaining the balance. On the other hand, Black is pinned down on the queenside, setting the stage for White to potentially force further simplifications in the upcoming moves. Moreover, White's knight is

poised to reach a dominant d4-outpost in just two jumps, a strategic advantage that may have a significant impact on the game. Even White's c3-pawn and bishop, which were previously problematic, are now of less concern.

Analyzing 20.Kxh2? was optional, but you still earn extra credit if you did: 20...Qh6+! (20...Qd6+?? loses to 21.Kg1 Bxe2 22.Nxe4 (no extra credit) 21.Nh3 (or 21.Kg1 Bxe2 22.Qxe2 Qxg5-+) 21...Bxh3 (21...Nxf2?? loses to 22.Qd2 (no extra credit)) 22.gxh3 Qf4+! (two extra credit points; 22...Nxf2?! 23.Qd2 Qxh3+ 24.Kg1 (one extra credit point) is much less clear) and Black has a winning attack: 23.Kg1 Qxf2+ 24.Kh1 Nf5.

B) 19...Bxe2!

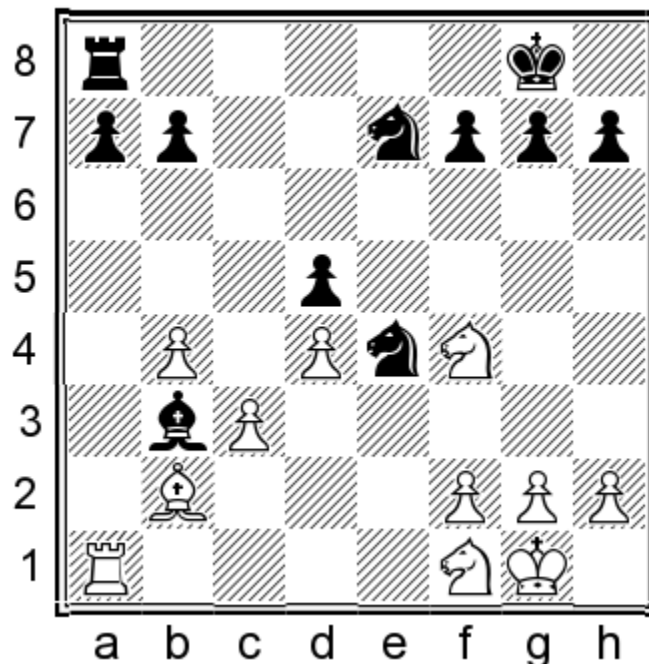
The best move.

20.Nxe6 Bxd1

20...Bxh2+ 21.Nxh2 Bxd1 transposes to the 19...Bxh2+ line.

21.Nxf4 Bb3!

Two points.



This endgame is a tad more promising than the similar one in the main line with 19...Bxh2. After 22.f3 Nd6, Black can gradually strengthen his position, while White has few active options. The possibility of creating an outside passed pawn on the a-file and pressure on the backward c-pawn gives Black some winning chances in the endgame despite the opposite-colored bishops. The alternatives are inferior, but you still earn credit for analyzing and evaluating them correctly:

C) 19...Bxg5?! 20.Bxg4 f5

20...Qc6!?! is unclear.

21.Be2 Ng6

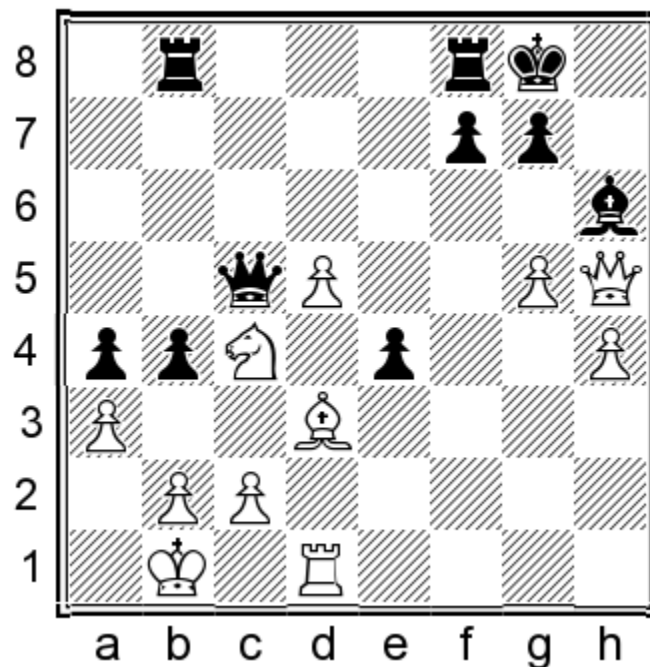
– unclear

(one point)

D) 19...Nxc5? 20.Bxg4 f5 21.Be2 Bd6 22.Bd3²

(one point)

Your score = /6 points + extra credit



We have another double-edged affair here. White needs to consider the following three moves:

- A) 29.gxh6
- B) 29.Bxe4
- C) 29.Be2

Please analyze and evaluate them.

SOLUTION

Analysis – Exercise 3-

A) 29.gxh6

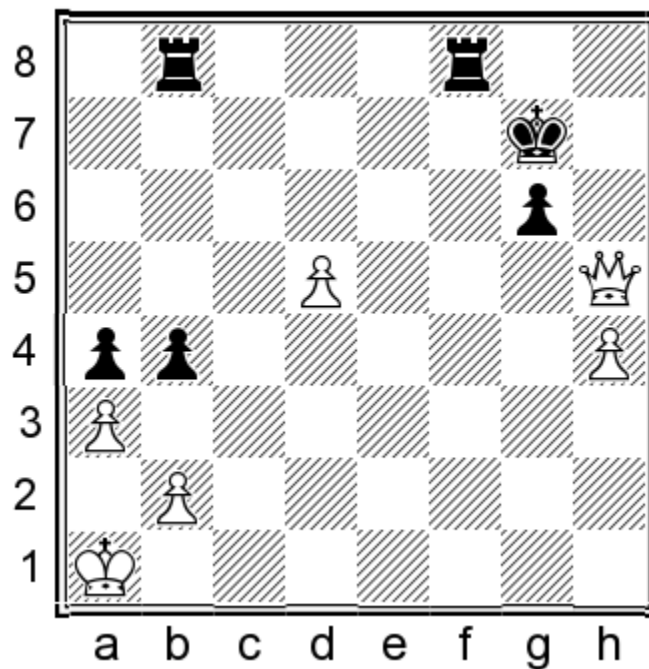
A bit too hasty. Now Black can force simplification:

29...exd3 30.hxg7

30.Rxd3? (no credit) allows 30...Qg1+ 31.Rd1 Qg6=.

30...dxc2+ 31.Kxc2 Qxc4+ 32.Kb1 Qe4+ 33.Ka1 Kxg7 34.Rg1+ Qg6 35.Rxg6+ fxg6

(two points)



You earn extra credit for analyzing this endgame more deeply:

36.Qe5+ Kg8!

One extra credit point. It's crucial to avoid the seventh rank to recapture b4 safely.

36...Kh7? loses to 37.axb4.

37.axb4

37.Qe6+ Kh8!.

37...Rxb4 38.Qe6+ Kh8! 39.Qxg6 Rxh4

One extra credit point. Black has good drawing chances due to the reduced material.

B) 29.Bxe4

This is an outright blunder.

29...g6!

(one point)

29...Qxc4? (no credit) allows White to get a much better version of the Q vs R+R endgame analyzed in the 29.gxh6 line: 30.gxh6 Qxe4 31.hxg7 Kxg7 32.Rg1+ Qg6 33.Rxg6+ fxg6 34.Qe5+.

Fortunately, White can force a draw now:

30.Bxg6

30.Qxh6 Qxc4 31.Bxg6 leads to the same outcome.

30...fxg6 31.Qxh6 Qxc4 32.Qxg6+ Kh8 33.Qh6+

(one point)

C) 29.Be2!

Sometimes, a calm retreat is the best way to continue an attack. The c4-knight is White's key defensive piece, and it's worth spending a tempo to preserve it.

29...g6

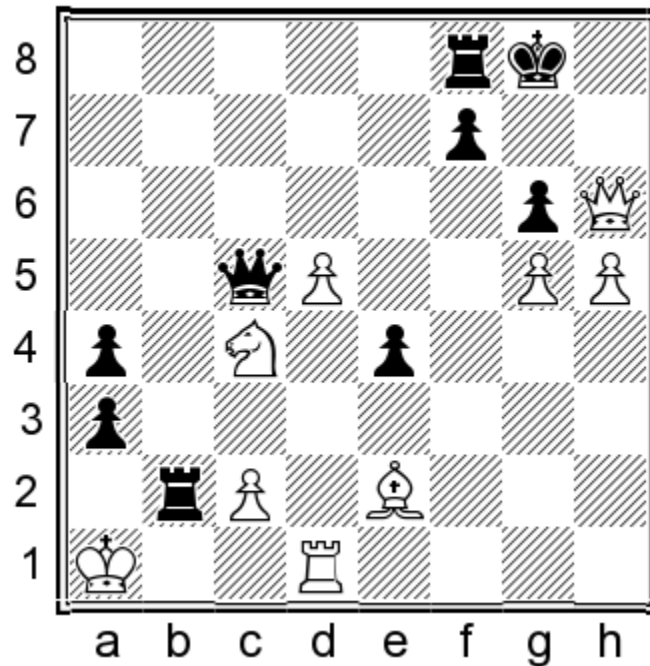
The most stubborn reply, trying to trap the white queen. In case of 29...bxa3 30.gxh6 Rxb2+, 31.Ka1! (one point) wins similarly to the main line. However, 31.Nxb2?? (no credit) loses to 31...Qc3.

30. Qxh6 bxa3

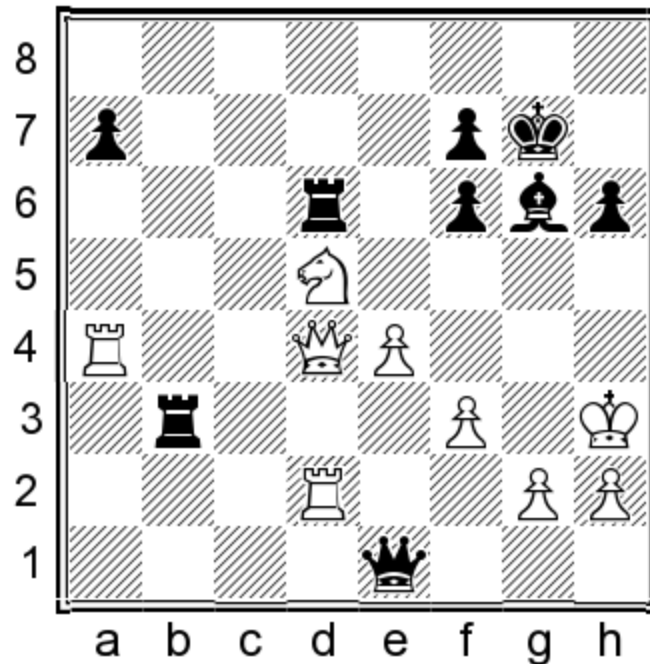
This looks dangerous for White.

31. h5! Rxb2+ 32. K a1!

(two points) This calm reply dispels Black's illusions of a mating attack.



Instead, the black king will soon fall under a decisive attack.
Your score = /7 points + extra credit



Please analyze 34...Bxe4 in as much detail as possible and provide your final evaluation.

SOLUTION

Analysis – Exercise 4-

34...Bxe4

This seems to be winning, but White has a cunning saving resource:

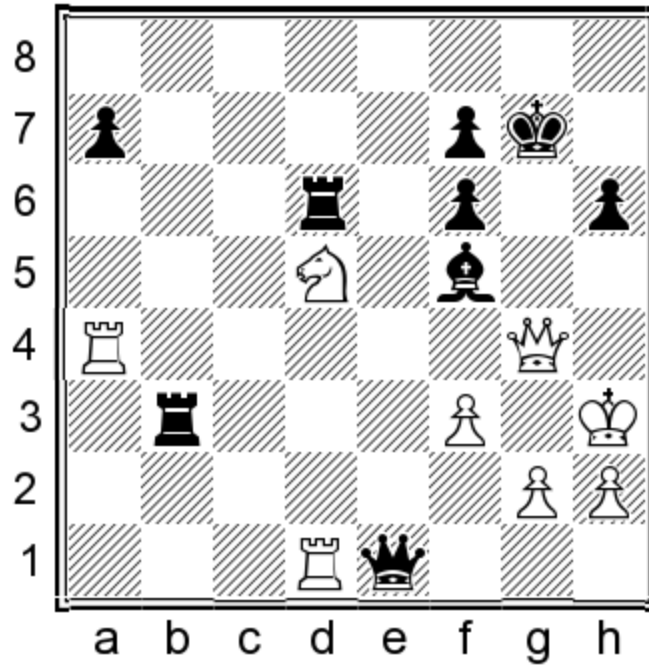
A) **35.Rd1! Bf5+**

Now we have a powerful counter:

36.Qg4+!

Two points. The star move of this exercise. The alternative, 36.g4? (no credit), fails to 36...Rxf3+ 37.Kg2 Qe2+ .

White escapes from a tough situation with a queen sacrifice.



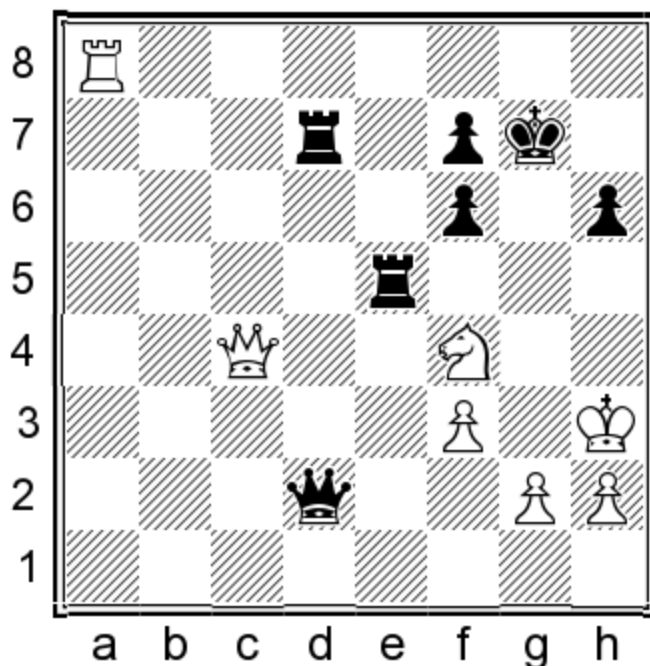
36...Bxg4+ 37.Rxg4+ Kf8 38.Rxe1 Rxd5=

B) 35.Qxe4?

This move occurred in the original game, Tin Jingyao-R.Svane, Baku 2023. White hoped to generate counterplay against the opponent's king. However, his attack wasn't as strong as he had hoped:

35...Qxd2

B1) After 36.Nf4 Rb5! 37.Rxa7 Rd7 (one point) Black is safe. You earn additional credit for finding this, and some more for refuting 38.Ra8 (38.Ra4! (one point) keeps White in the game) with 38...Re5! 39.Qc4



39...Rdd5! (two points). This forced White's resignation in the game due to 40.Nxd5 Rh5+ 41.Kg3 Qe1+ 42.Kf4 Rh4+ 43.g4 Qe5#;

B2) 36.Ne7 is the obvious alternative, when Black can force a winning endgame with 36...Rb5 (one point; 36...Re6?? (no credit) fails to 37.Nf5+ Kh7 38.Qa8!) 37.Nf5+ Rxf5 38.Qxf5, with the key point being 38...Rd4! 39.Ra6 Rf4 (one point). You can earn a total of two points for analyzing this line up to this point.

C) 35.Ra1?

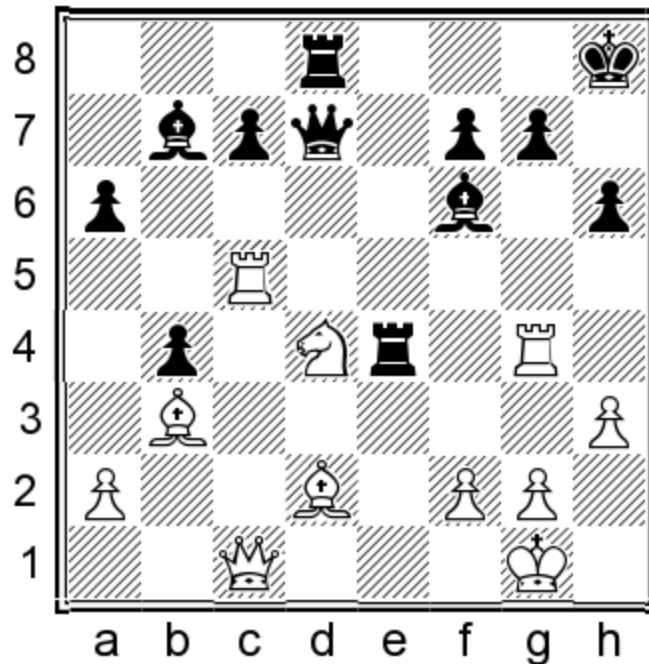
A worse version of the 35. Rd1 idea because of 35...Bf5+!, and now White doesn't have the 36.Qg4+!! resource from the main line.

36.g4 Qe4! (one point) is lights out. 36...Bb1!?! (one point) also works,

but not 36...Rb1?? (no credit) because of 37.gxf5 Rxa1 38.Rg2+ Kf8 39.Qc5! Qe5 40.Qc8+ Qe8 41.Rg8 and White wins, or 36...Rxf3+?? due to 37.Kg2 which is unclear (no credit).

You also get full credit for 35...Rb1!?! 36.Rxb1 Bxb1 37.Rd1 Qe6+. Black keeps a decisive advantage (one point).

Your score = /9 points + extra credit



White has several attractive options at this point. Please analyze the following four continuations to determine which is the best:

- A) 25.Rxe4
- B) 25.Rxc7
- C) 25.Bxh6
- D) 25.Be3

SOLUTION

Analysis – Exercise 5-

I created this exercise based on the game Grischuk-So, Berlin Candidates Tournament 2018. Compared to the position from that game, a b2-pawn is missing here, and this slight difference makes the puzzle a little more challenging.

A) 25.Rxe4?

This move allows Black to win his piece back relatively smoothly:

25...Bxe4 26.Be3

26.Bxh6 Bxd4 27.Rxc7 Qd6 28.Bf4 Qg6= (one point).

26...Bxd4 27.Rxc7 Qd6 28.Bxd4 Qxd4 29.Rxf7=

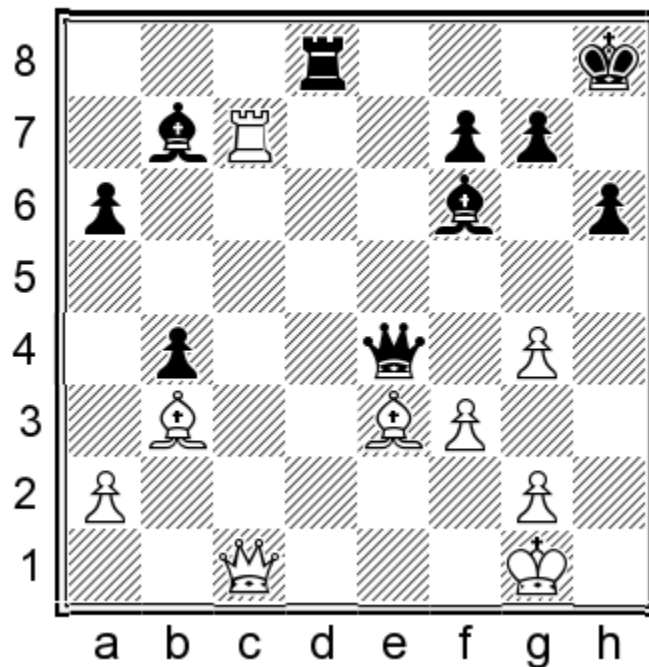
One point.

B) 25.Rxc7!

This wins by force.

We give our piece back only temporarily:

A1) 25...Rxc7!? (an attempt to muddy the waters) 26.hxg4! (two points). The simplest and strongest. (26.Rxd7?! (one point) is an inferior choice because it allows Black to get practical compensation for the piece after 26...Rxc7+ 27.Kf1 Rxd7. The white king doesn't feel too comfortable here.) 26...Qxd4 27.Be3 Qe4 28.f3!, winning (one point).



White's pieces work in perfect harmony, and there is nothing Black can do anymore to save his piece;

A2) 25...Qxd4 runs into 26.Be3, and Black loses a piece no matter what. Since this line is likely to transpose to A1), there is no credit to earn for analyzing the variations I provide below. These are only for informative purposes. After 26...Rxc7, 27.Bxd4!? is possible (but there is no need to complicate matters since 27.hxg4! simply transposes to the main line): 27...Rxc7+ 28.Kf1 (28.Kh1?

runs into 28...Be4! (28...Ba8? 29.Rc8! or 28...Bf3 29.Bd1! Bd5 30.f3+– justify White's bold 28th move) 29.Bc2 Ba8!=) 28...Bxd4 29.Rxf7!. White wins.

C) 25.Bxh6?

This doesn't work:

25...Rxc7 26.hxc7 Qxd4

One point. Black should only avoid 26...Qxc7? (no credit) due to 27.Nc6! and White wins.

27.Bf4

, unclear.

D) 25.Be3?!

This appears to keep the extra piece, but it runs into a small tactical problem:

25...Bxd4

25...Rxc7? 26.hxc7 Bxd4 (no credit) is the wrong move order due to 27.Rxc7, winning.

26.Rxc7 Qe8!

Two points. Attack is the best defense. This elegant move protects the b7-bishop indirectly.

26...Qb5 accomplishes the same task, but the black king is desperately weakened after 27.Bxd4 Rxd4 28.Rxf7 Rxc7 29.hxc7 (one point). White is winning.

27.Bxd4

27.Rxb7 loses to 27...Rxe3!.

27...Rxd4 28.Rxe4 Rxe4

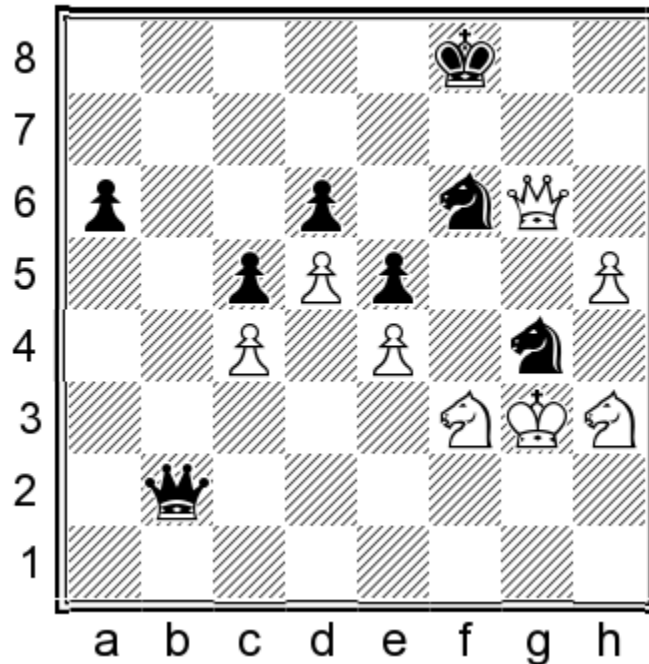
Black has survived the worst. You can earn extra credit for analyzing the line further:

29.Qc5 Re5 30.Qd6 Re1+ 31.Kh2 Qb8! 32.Bxf7 Rc1!

One extra credit point.

33.Rd7 Qxd6+ 34.Rxd6 a5²

Your score = /8 points + extra credit



We have a high-traffic situation here with four knights, two queens, and two vulnerable kings fighting in a narrow patch of the chessboard. Who will get the upper hand, White or Black? Please analyze and evaluate the following three continuations:

- A) 44...Qe2
- B) 44...Qc1
- C) 44...Qc2

SOLUTION

Analysis – Exercise 6-

A) 44...Qe2!

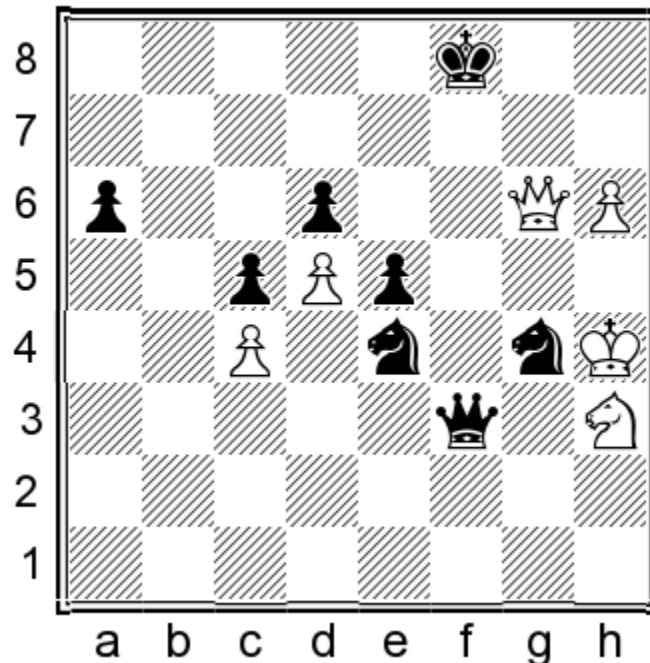
Out of the three queen moves, only this one saves Black. Establishing the ‘contact’ between the f3-knight and the f2-square is the key to creating counterplay against White’s threats like h5-h6 and Nhg5.

45.h6

45.Nhg5 can be met by 45...Qf2+ 46.Kh3 Qf1+ 47.Kh4 Qf2+ 48.Kh3 Qf1+ (one point) with a perpetual.

45...Nxe4+ 46.Kh4 Qxf3

One point.



This is the main difference compared to the 44...Qc2 line. Thanks to the ‘contact’ from e2 to f3, Black won the knight, threatening 47...Qg3+.

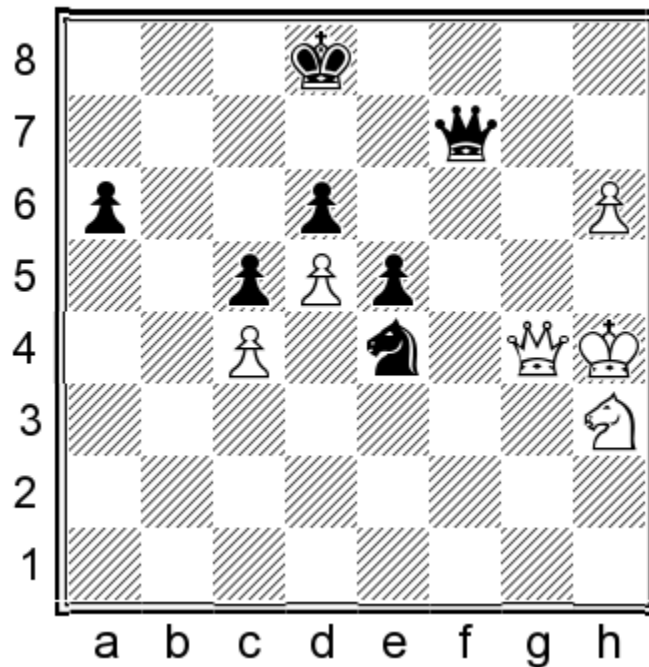
47.Qg7+ Ke8

The situation has become very sharp, and now White has to be more careful.

A1) The greedy 48.Qxg4? fails to 48...Qf6+ 49.Kh5 Qf7+ (one point). Black is winning now with the extra pawn since the h-pawn is going nowhere. You can earn extra credit for providing deeper analysis that proves this: 50.Qg6 Nf6+ 51.Kg5 Nh7+ 52.Kh5 Kf8! (one extra credit point).

Alternatively, 50.Kh4 Qe7+! (leaving the f6-square available to the knight) 51.Ng5 (51.Kh5 now runs into 51...Nf6+) 51...Qxg5+ 52.Qxg5 Nxg5 53.Kxg5 Kf7-+ (one extra credit point);

A2) 48.Qg8+! Ke7 49.Qe6+! (one point). Precision is required. Before taking on g4, White needs to push the black king outside of the square of the h-pawn (49.Qg7+ fails to 49...Qf7! (one point; 49...Kd8 50.Qxg4=). You get extra credit for showing the ‘full proof’: 50.Qxg4 Nf6! 51.Qg5 Qh7! (one extra credit point). This is the only winning move. White is stopped on the kingside, and Black will simply push the a-pawn next) 49...Kd8 50.Qxg4 (50.Qg8+ Kc7 51.Qg7+ Kb6 52.Qxg4= is equivalent to the main line) 50...Qf6+ 51.Kh5 Qf7+ 52.Kh4! (one point; 52.Qg6 (no credit) is wrong because of 52...Nf6+ 53.Kg5 Nh7+ 54.Kh5 Ke7-+)



position after 52.Kh4

52...Qf6+. Black has to force a draw by perpetual (52...Qe7+? was the winning move in a similar position in the 48. Qxg4 line.

However, the position of the black king makes all the difference.

Now 53.Ng5! (one point) wins instead of losing! Black can no

longer enter a pawn endgame because the h-pawn is unstoppable):
53.Kh5 Qf7+ (one point).

The game Donchenko-Petenyi, Porto Carras 2018 (1-0, 47) saw:

B) 44...Qc1??

which was immediately refuted by:

45.Nhg5!

45.Nfg5? Qe1+=.

45...Qf4+ 46.Kg2 Ne3+ 47.Kh1!

(two points) Black resigned as there was no good defense against
48.Qf7# and 48.Ne6+.

C) 44...Qc2?

This is a little better than 44...Qc1, as it prevents 45.Nhg5.

However, it does little to stop...

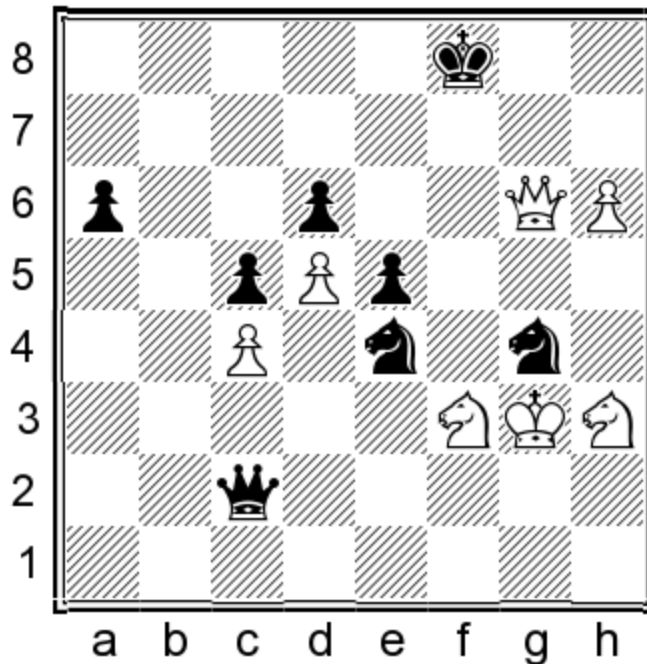
45.h6

.

Now:

45...Nxe4+

Hoping that the white king will capture the knight on g4.



However, White can side-step all checks:

46.Kh4!

(one point) You can earn extra credit for analyzing Black's further attempts to attack the black king, for example:

46...Ne3 47.h7 Ng2+ 48.Kh5 Ng3+ 49.Kg5 Ne4+ 50.Kh6 Qc1+ 51.Nfg5

One extra credit point.

You can also earn extra credit for analyzing the 'wrong' move:

46.Kxg4? Qg2+ (46...Nf2+ loses to 47.Kh5 Qxg6+ 48.Kxg6 Nxh3

49.h7 Nf4+ 50.Kh6 (one extra credit point)) 47.Kh5 (47.Kf5?

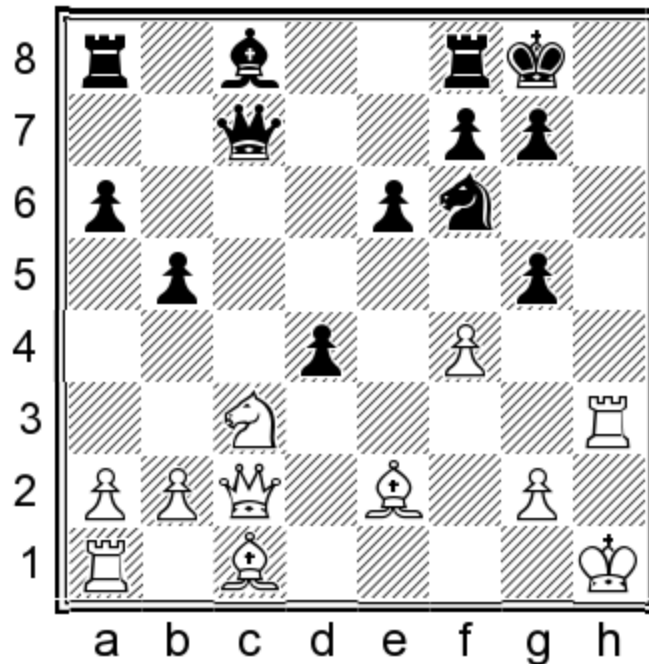
loses to 47...Qxf3+ 48.Nf4 Qxf4+ 49.Ke6 Ng5+ 50.Kxd6 Nf7+

(one extra credit point)) 47...Qxf3+ (47...Qxh3+? 48.Nh4 Qh1=)

48.Kh4 Qf6+! (one extra credit point; this move turns the tables!)

49.Qxf6+ Nxf6 50.Kg5 Nh7+ 51.Kg6 Kg8. Black is winning.

Your score = /11 points + extra credit



Please analyze in as much depth as possible and provide your final evaluation for the following three continuations:

- A) 19...dxc3
- B) 19...g4
- C) 19...g6

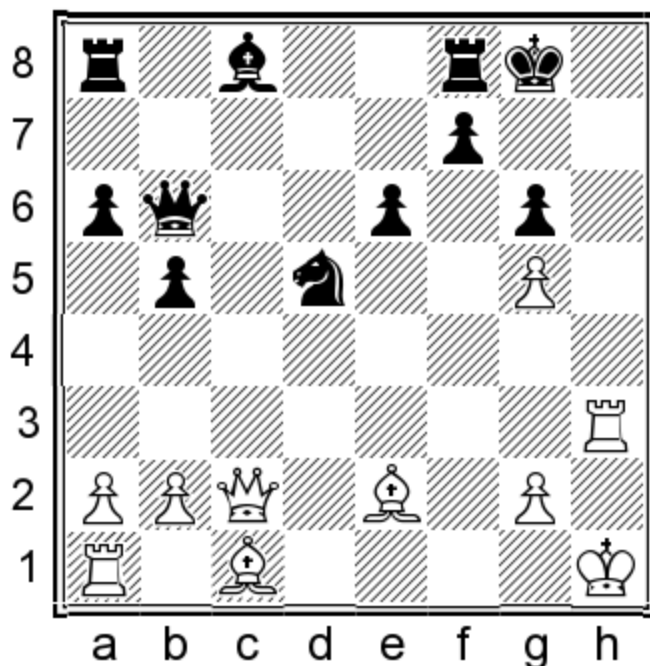
SOLUTION

Analysis – Exercise 7-

A) 19...dxc3

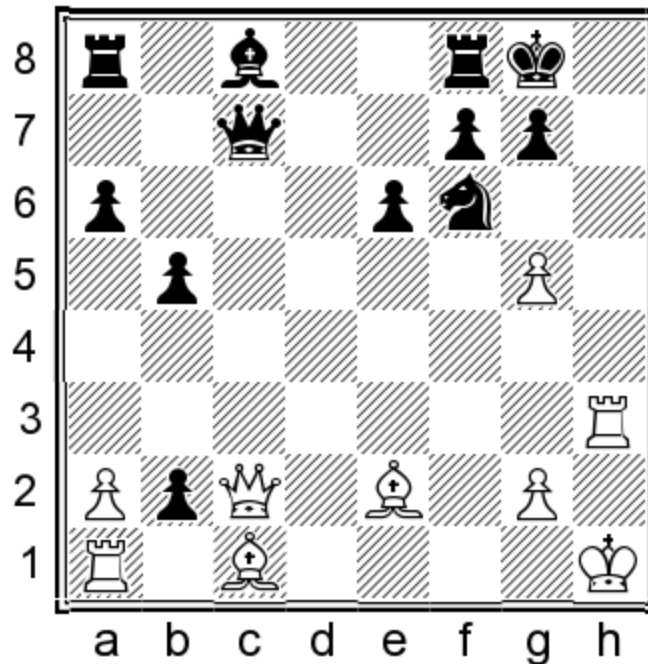
This is the critical move. White has two important options now.

A1) 20.Rxc3 (the black pawn needs to be eliminated) 20...Qb6!
 (one point, keeping the queen on the g1-a7 diagonal prevents the white queen from roaming free on the kingside) 21.fxg5 Nd5
 22.Rh3 g6



23.Bf3! (one point). White keeps better chances despite being down a pawn, thanks to the opponent's vulnerable king. On the other hand, a direct attempt at a mating attack with 23.Qe4 doesn't work anymore due to 23...e5! 24.Rh6 Qd4!= (one point). This shows why Black put his queen on the g1-a7 diagonal a few moves back. 20...Qa7! is similar and also earns full credit. However, 20...Qe7? is wrong because of 21.fxg5 Nh7 22.Rh3 g6 23.Qe4!. White threatens the deadly Qe4-h4. Black could try to defend with 23...e5 but after 24.Rh6 (one extra credit point), it will be difficult to resist against the 25.Qh4 threat. Alternatively, after 21...Nd5 22.Rh3 f5, White keeps attacking with 23.Bf3! (one extra credit point), preparing the Qc2-f2-h4 maneuver;

A2) 20.fxg5?! appears to win at first, but Black has an ace up his sleeve: 20...cxb2!.



The black queen rises like a phoenix after 21.Qxc7 (21.Qxb2 is worse due to 21...Ne4 22.Be3 e5 and Black is better) 21...bxa1Q (two points). Black has survived the worst, but further analysis is required to evaluate this double-edged position.

You can earn extra credit for analyzing the lines after 22.gxf6:

A21) 22...e5!. The best defense. In fact, Black can still play for the win after this move, even if it looks a little scary for his king for a couple of moves. However, his material advantage will matter if White's attack doesn't materialize: 23.fxg7 (23.Rg3 Bf5! 24.Rxg7+ Kh8 (one extra credit point) 25.Rg5 Qb1 26.Rh5+ Kg8 27.Rg5+ Bg6 28.Bg4!³) 23...Bxh3 24.gxf8Q+ Rxf8 25.gxh3 (one extra credit point). Both kings are exposed, which makes this position tricky to evaluate. However, the engine points out a slight advantage for Black if he centralizes his queen with the ...Qa1-b1-e4 maneuver and brings the rook in the game;

A22) 22...Qxf6 happened in the game Risting-Arjun, New Delhi 2019. After 23.Bd3 e5 (the only move since 23...g6?? fails to 24.Bxg6! Qxg6 25.Rg3) 24.Bh7+ Kh8 25.Bf5+ Kg8 26.Bh7+ (one

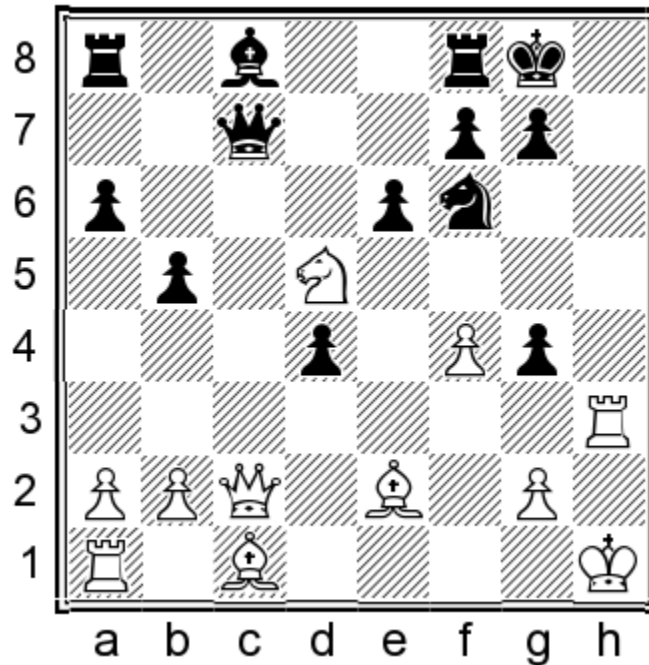
extra credit point) the players agreed to a draw by threefold repetition.

B) 19...g4??

This is a fatal blunder due to a stunning knight sortie:

20.Nd5!

(two points)



Black has to surrender his queen to avoid checkmate:

20...exd5

20...Nxd5 21.Qh7#; 20...Qxc2 21.Ne7#.

21.Qxc7 gxh3

C) 19...g6

Prevents the mating threat on h7, but it's only a temporary solution.

20.fxg5 Nh7

One point. White can keep attacking:

21.Qe4

Or 21.Bf3!/? Rb8 22.Qf2 dxc3 23.Qh4, which also gets full credit.

20...fxe6 21.Qxe6+ Kh8 22.Qf7

The ‘mate in one’ threat is the most straightforward way to continue the attack. That said, the less direct 22.Rh3!? also works. You get full credit (as in the main line) if you had planned to answer 22...Bf8 with 23.Qf7, transposing into 22. Qf7 Bf8 23. Rh3.

You can also earn extra credit for analyzing any of the following lines: 22...Bf6 23.Qf7 Re7 24.Bg7+! Bxg7 25.Qxe7± (one extra credit point) and 22...Qd8 23.Qf7 Rg8 24.g4!! g5 25.e6 Nf6 26.Re5 Qe8 27.Bxg5+– (one extra credit point).

22...Bf8

22...Bf6 fails to 23.e6! Re7 24.Bg7+ Bxg7 25.Qxe7 (one extra credit point).

23.Rh3

One point. White threatens 24.Bxf8, with a mating threat on h7.

23...Rxe5!?

The critical move. In case of 23...Re7 24.Bg7+ Bxg7 25.Qxe7 (one point), White regains the sacrificed material and keeps the initiative.

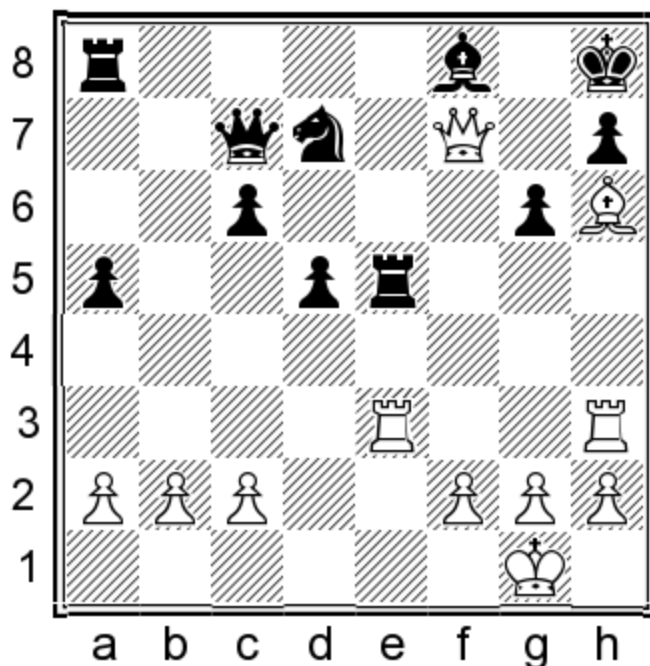
24.Ree3!!

Two points.

Only this move allows White to solve the back-rank issue and keep control over the e-file. The ball is back in Black’s court.

In the game Mei-Kavutskiy, San Jose 2022, White thought he could achieve the same goal with 24.Bd2?!, but this failed after 24...Bg7 25.Rxe5 Qxe5 26.Qxd7 Qe2! (one extra credit point) – a move likely missed by White when he played 24.Bd2. Now, he loses a piece due to his weak back rank, while the black king is safe. The game continued 27.Re3 Qxd2 28.g3 Rf8 and White resigned.

Alternatively, 24.Rf1? (no credit) allows Black to neutralize the attack with 24...Re7 25.Bg7+ Bxg7 26.Qxe7.



24...Rxe3

24...Rf5 is another important move, but White remains in control thanks to a nice tactic: 25.Bg7+! Bxg7 26.Qxg6 Nf8 27.Qxf5 (one point). The black king is still vulnerable. White is better.

Let it also be noted that 24...Qd6 runs into 25.Qxh7+! Kxh7 26.Bxf8+.

25.Rxe3!

One point. A slightly counter-intuitive change of direction. Instead of attacking on the h-file, White plans to reroute his rook to the seventh rank, where it can do even more damage. White has a dangerous attack now, and you can earn extra credit for continuing your analysis.

25.Bxe3? (no credit) doesn't work because of 25...Bg7 26.Bd4 Rg8 27.Qxg6 Nf8. Black defends and keeps the extra piece.

25...Qd6!?

One extra credit point. The best defensive attempt, unpinning the knight and covering the e7-square. 25...Bxh6 (no extra credit)

26.Re7 and 25...Qd8 (no extra credit) 26.Bxf8 Nxf8 27.Re7, winning for White, are both weak defenses.

Nevertheless, White can get a good return on his sacrifice:

26.Bf4!

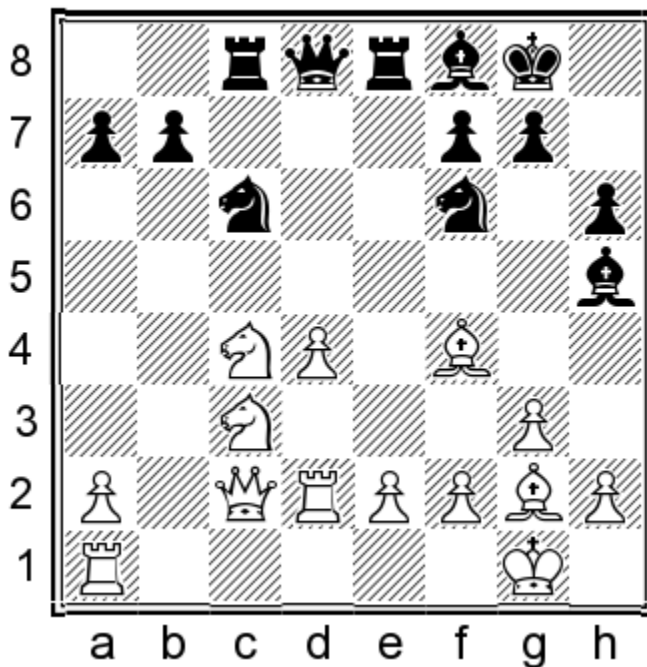
(one extra credit point) 26.Re7?! (no extra credit) 26...Qxe7 27.Bg7+ Bxg7 28.Qxe7 Nf6 gives White an inferior version of the interesting endgame from the main line.

26...Qf6 27.Be5! Qxe5 28.Rxe5 Nxe5 29.Qe6 Bg7 30.f4

One extra credit point.

White will win the c6-pawn, and then probably another one or two on the queenside. That will give him good winning chances in the endgame since the queen strongly supports the passed pawns. Meanwhile, whether Black could coordinate his three pieces to threaten a perpetual check or block the white pawns remains unclear.

Your score = /6 points + extra credit



Please analyze and provide your final evaluation for 17...Nxd4 .

SOLUTION

Analysis – Exercise 9-

Black should not hesitate to play:

17...Nxd4!

In fact, this continuation leads to several beautiful variations.

18.Qa4

The most stubborn defense. 18.Qd3 loses pretty trivially to 18...Nxe2+ 19.Nxe2 Qxd3 20.Rxd3 Bxe2.

18...b5!

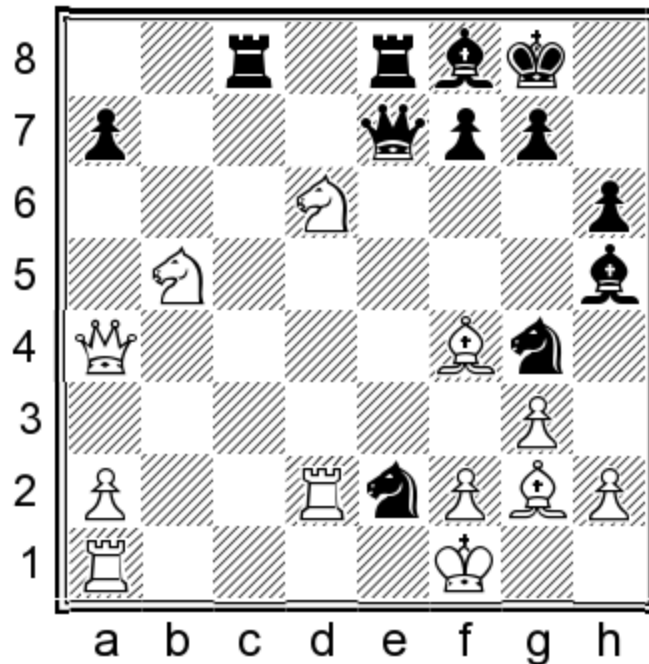
Two points. We exploit the position of the white queen to deflect the c3-knight from defending the e-pawn.

18...Bxe2?! also looks promising, but runs into an interference tactic: 19.Nd6! (one point; 19.Nxe2 Rxe2 wins for Black (no credit)) 19...Bxd6, and now White can minimize Black's advantage with either of the two captures: 20.Rxd4 Rxc3 21.Rxd6 Qc8 22.Re1 or 20.Qxd4!? Bxf4 21.Qxf4 Bd3 22.Nb5.

19.Nxb5 Nxe2+ 20.Kh1

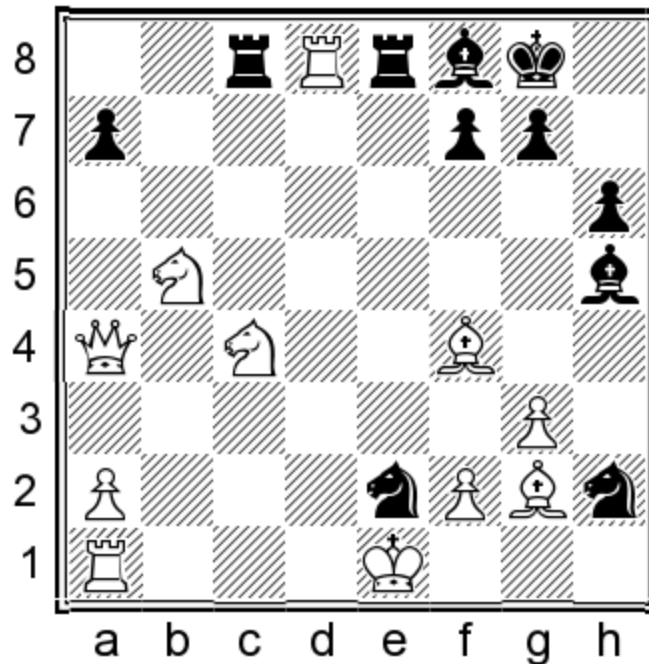
In case of the alternative 20.Kf1, Black has two good options:

A) 20...Qe7 21.Ncd6 Ng4! (two points).



There is no need to worry about some knight fork when we can forcefully attack the opponent's king. White needs to defend desperately with 22.f3 to avoid getting checkmated (as in the beautiful line 22.Nxe8 Nxh2+ 23.Ke1 Nxf4+ 24.Qe4 Nxf2# (one extra credit point)), but that's still not enough after 22...Ne3+! 23.Kxe2 Nc4+ 24.Kf2 Nxd2 (one extra credit point). You also get full credit for choosing the alternative 21...Nxf4 22.Nxc8 Qe5!, winning (two points);

B) The second possibility is the attractive temporary queen sacrifice 20...Ng4!? 21.Rxd8 Nxh2+ 22.Ke1.



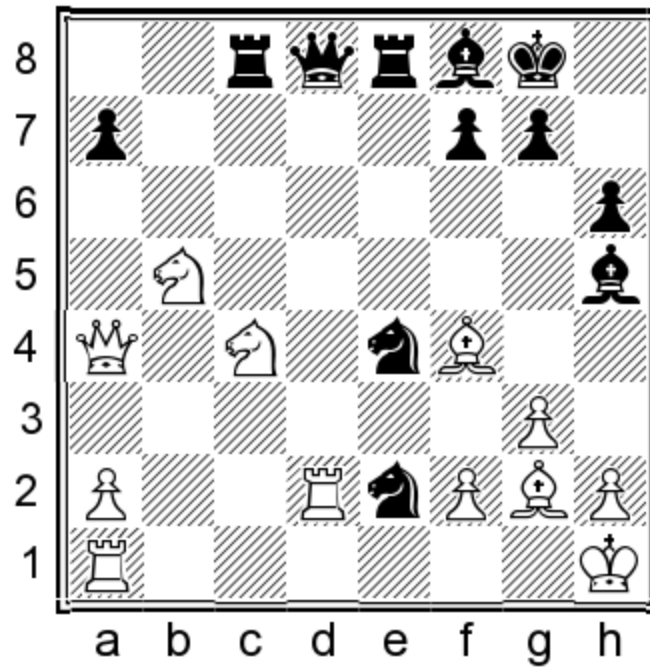
Black can get his material back with interest: 22...Nc3+! (two points) 23.Rxe8 Rxe8+ 24.Ne3 Nxa4, emerging with an extra pawn in a superior endgame due to the exposed white king.

20...Ne4!!

Three points.

A brilliant queen sacrifice, setting up two attractive mating patterns. As far as the alternatives go, 20...Qe7 (one point) is less effective than against 20.Kf1, as shown by the variation 21.Nbd6 Ng4 22.Rf1 Nxf4 23.gxf4 Qh4 24.h3, unclear.

I should also note that 20...Ng4 can now be met by 21.Rf1 and the white king is relatively safe.



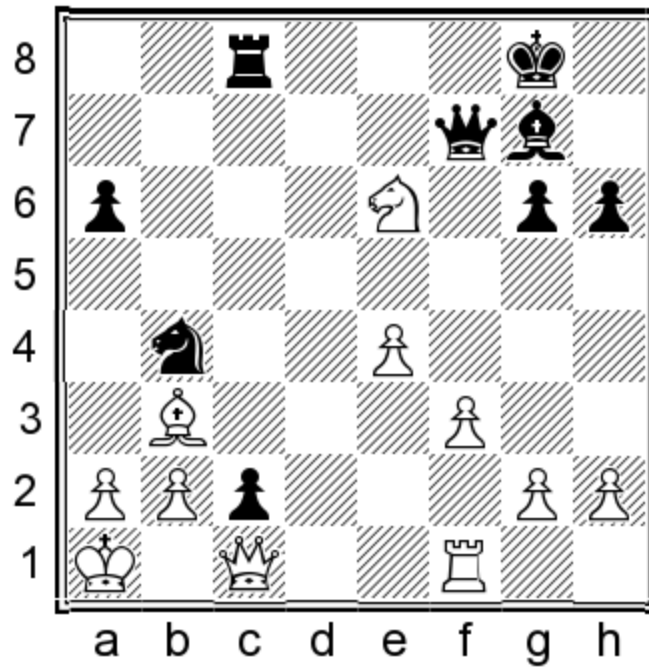
21.Bxe4

21.Rxd8 allows the attractive ‘supported’ smothered mate
 21...Nxf2#.

21...Rxe4 22.Qb3

White has stopped the checkmate (22.Rxd8 Bf3#), but his position is
 hopeless after something like 22...Qf6.

Your score = /8 points + extra credit



Please analyze in detail and evaluate the following three continuations:

- A) 32...Rc3
- B) 32...Qf6
- C) 32...Kh8

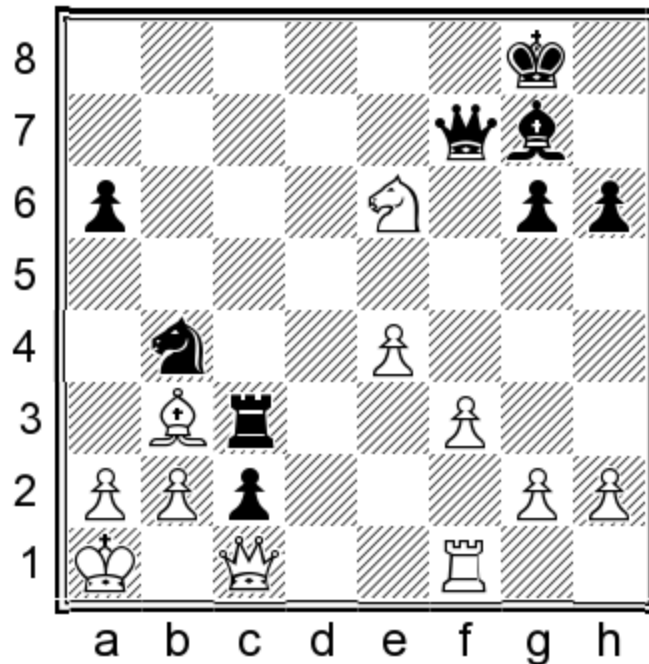
SOLUTION

Analysis – Exercise 10-

It turns out that Black doesn't even have to remove any pieces from the a2-g8 diagonal (as with line C, 32...Kh8):

- A) **32...Rc3!**

Very strong, preparing to capture on b3.



We should consider the following variations:

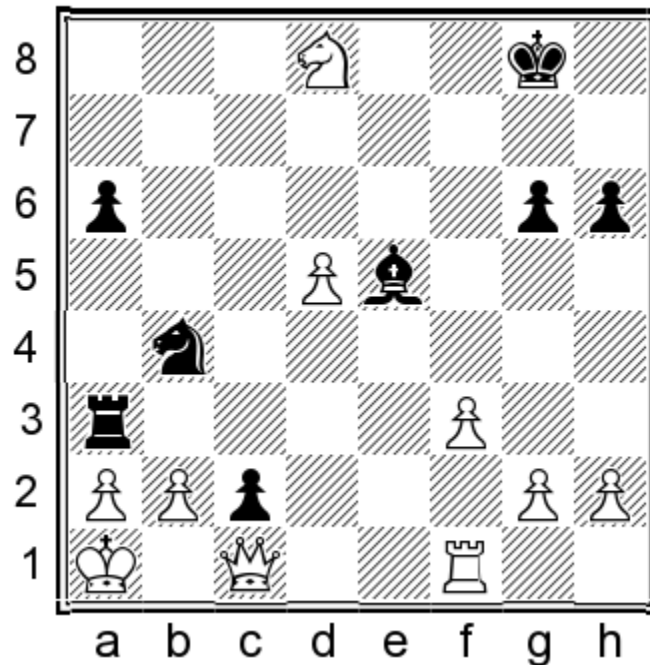
A1) 33.Bd5 Be5! (two points). The position has reached the boiling point; this is the only winning move. In the ensuing simplifications, the bishop will stand better on this square than any other on the a1-h8 diagonal.

As usual, there were several ways to go wrong. For example, 33...Bf6?! is very similar to the main line after 34.Nf4 Ra3 35.Bxf7+ Kxf7 36.Qxc2 Nxc2+ 37.Kb1 Ne3 38.Re1 Nxc2 39.Nxc2 Rxf3, but then White solves his problems with 40.e5, a move that wouldn't be available to him if the bishop was on e5 as in the main line.

33...Nxd5 also doesn't quite work because of 34.exd5 Be5 35.Qd2! Qf6 36.Rc1 Rxf3 37.Qxc2 Rf1 with equality (one extra credit point).

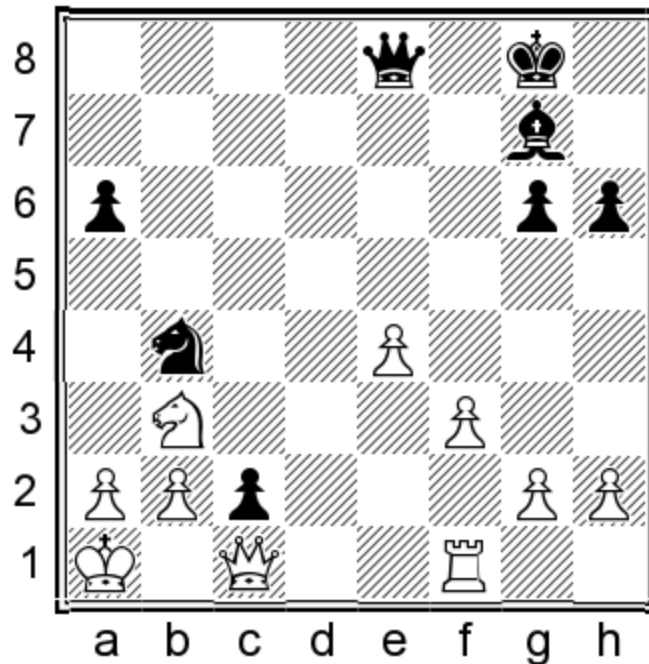
Coming back to 33...Be5, the punchline is 34.Nf4 Ra3! 35.Bxf7+ Kxf7. White is only temporarily up a queen. 36.Qxc2 is forced, leading to an endgame: 36...Nxc2+ 37.Kb1 Ne3! 38.Re1 Nxc2! 39.Nxc2 Rxf3 (one extra credit point). Funnily enough, White is completely lost in the endgame, where he is up a pawn. The difference in the activity of White's and Black's pieces is too big.

Alternatively, if White goes after the queen with 34.Nd8, Black wins in a spectacular fashion: 34...Qxd5! 35.exd5 Ra3!.



Black doesn't need the queen to checkmate the opponent's king. His four pieces on the queenside are enough. White has to give back material to save his king, but after 36.Qxc2 Nxc2+ 37.Kb1 Ne3! 38.Re1 Rd3 (one extra credit point), everything is defended. Black's extra piece should decide the issue in the endgame in which White's extra pawns are disconnected and weak;

A2) 33.Nd4 Rxb3 34.Nxb3 Qe8!! (two points).



White doesn't have a good defense against the mating attack with ...Qa4. You can get extra credit for analyzing any of the following lines: 35.Qd2 Qe5! 36.Qc1 Qb5! or 35.Nc5 Qb5 (one extra credit point). However, 35...Qa4?? (after 35.Qd2; no credit) blunders the game away. White consolidates completely with 36.Nc1.

Let's point out that 34...Qd7! works just as well as the main line. Black is winning after 35.Qd2 Qxd2 36.Nxd2 Nd3, so you get full credit if this is your solution;

A3) 33.Qd2 Rxb3 34.axb3. Once again, Black has a narrow path to a winning position: 34...Qf6! (34...Qxe6?? (no credit) fails to 35.Qxb4) 35.Nxg7 (35.Qd8+ Qxd8 36.Nxd8 Nd3-+) 35...Qb6! (two points).

B) 32...Qf6!

This is the other winning move for Black.

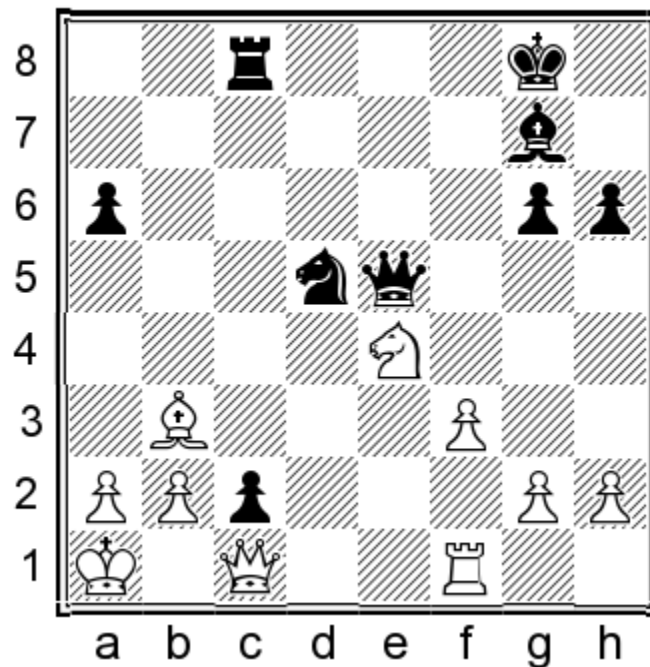
B1) In case of 33.Nxg7+ Kxg7, 34.Qe3 doesn't stop Black from playing 34...Nd3! (one point). The key difference compared to a similar position in the 32... Kh8 line is that 34.Rf2 doesn't work

because of 34...Nd3 35.Rxc2 Nxc1 and 36.Rxc8 doesn't come with a check. The devil is always in the detail!;

B2) 33.Ng5+ leads nowhere, as Black simply deflects White's attempts with 33...Kh8 34.Nf7+ Kh7 35.e5 Qb6;

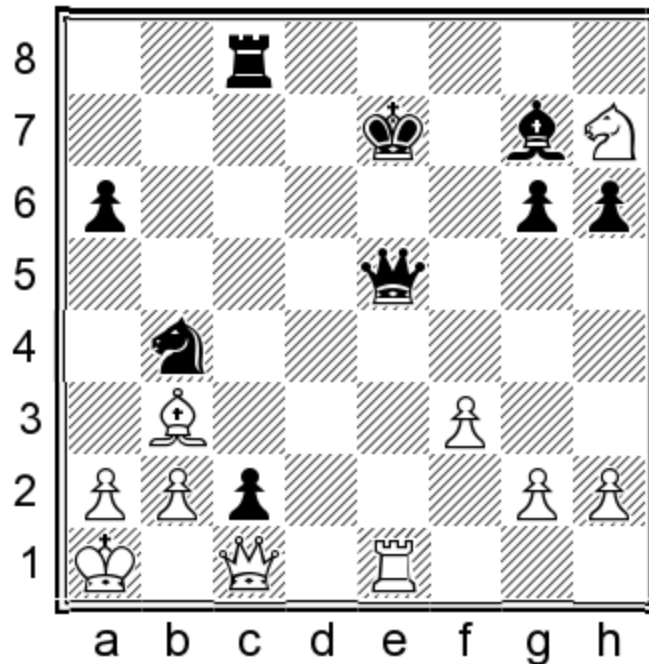
B3) 33.e5 is the trickiest defensive attempt, but Black should be able to refute it: 33...Qxe5 34.Ng5+. Black cannot move his king to the h-file now...

B31) but fortunately, there is 34...Nd5! (two points) and White has run out of bullets. Now it's Black's turn to attack. For example, after 35.Ne4



Black forces checkmate: 35...Qxb2+! 36.Qxb2 c1Q+ 37.Rxc1 Rxc1# (one extra credit point);

B32) Alternatively, 34...Kf8!? also works, although Black needs to show greater precision than in the 34...Nd5 line after 35.Nh7+ Ke7 36.Re1.



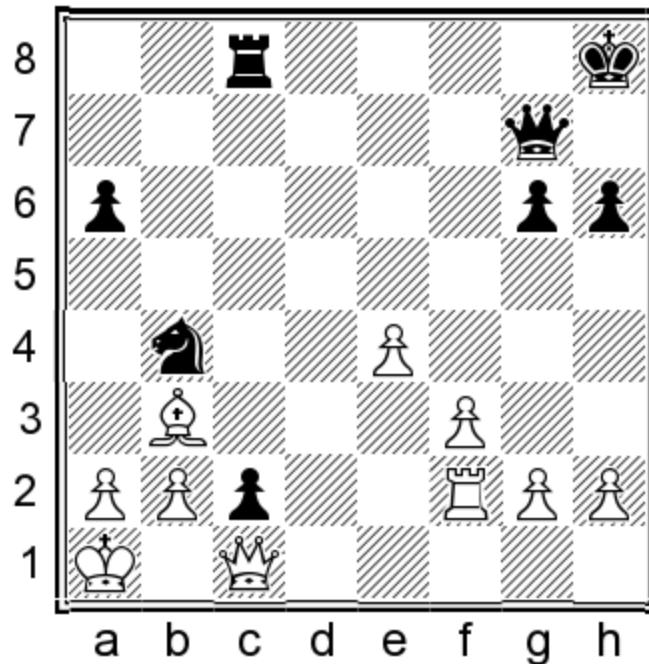
Now, the only winning move is 36...Rc5!! (two points), but that move is challenging to find. The point is that the rook simultaneously covers the fifth rank and the a3-f8 diagonal (please see 38...Be5 below). 36...Nd3 (or any other reasonable move) is enough only for a drawish endgame after 37.Rxe5+ Bxe5 38.Qxc2 Rxc2 39.Bxc2 (one extra credit point).

We can see the main point behind 36...Rc5 in the following variation: 37.f4 (37.Rxe5+ Bxe5 38.g3 Bxb2+!) 37...Qxe1 38.Qxe1+ Be5!! (one extra credit point). The black rook is placed perfectly on c5, protecting the bishop and preventing the queen from taking on b4 with check. The c-pawn is unstoppable now, for example, 39.Bc4 Nd3!.

In the game Dev-Livaic, Zadar 2019 (1-0, 47), Black made a big mistake here:

C) 32...K

He thought White could not prevent 33... Nd3 (and he was right, in a way), but this move had a tactical problem. 33.Nxg7 Qxg7 34.Rf2!! (two points).



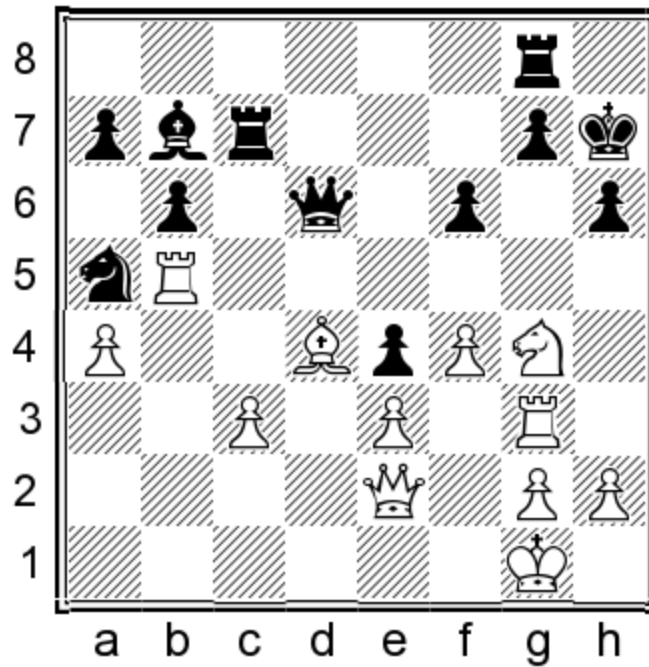
The move Black had missed. Suddenly, the black king becomes a target in some lines, and Black doesn't have a proper way to protect the c2-pawn.

C1) The problem is that now 34...Nd3 runs into 35.Rxc2 Nxc1 36.Rxc8+ (key intermezzo) 36...Kh7 37.Rxc1 and White is better;

C2) 34...Qc7 is another important idea, overprotecting the c-pawn and introducing new threats. However, White can solve all problems with a precise sequence: 35.a3! (35.Qxh6+? (no extra credit) 35...Qh7 36.Qc1 Qxh2=) 35...Qf4 (35...Nd3 loses to 36.Qxh6+) 36.Rf1!, winning (one extra credit point);

C3) Black played 34...Kh7, but after 35.Rd2! (one extra credit point) 35...Qa7 36.Bxc2 Nxc2+ 37.Rxc2 Rxc2 38.Qxc2 Qg1+ 39.Qb1, he struggled to make a draw in the queen ending and eventually failed.

Your score = /11 points + extra credit



Please analyze and evaluate the following continuations:
 27...Ba6 and 27...Nc6 .

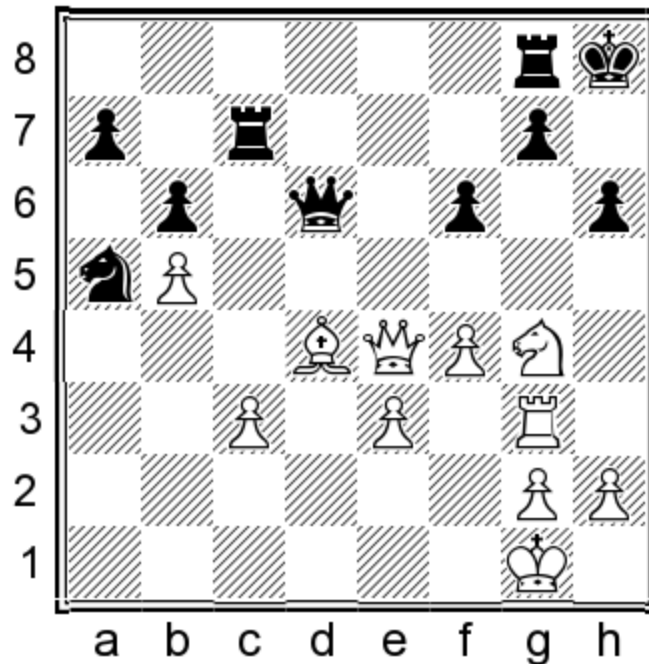
SOLUTION

Tactical Analysis – Exercise 11-

A) 27...Ba6?!

This greedy move backfires. White has two good ways to unpin:

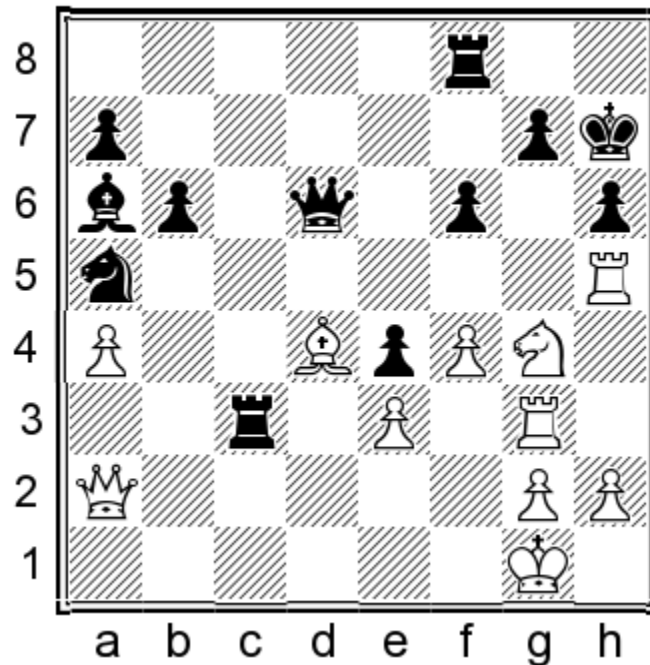
A1) 28.Qc2!? Bxb5 29.Qxe4+ Kh8 30.axb5 (two points).



White has good compensation for the pawn, thanks to his active pieces. You can earn extra credit for calculating any of the semi-forcing lines after 30...Nb3, which tries to eliminate the powerful bishop: 31.Rh3 (one extra credit point; White goes straight for checkmate, preparing the Nxf6 sacrifice) 31...Nxd4 (31...Re7 32.Nxf6 gxf6 33.Rxf6+ Kg7 34.Rh7+ Kf8 35.Qa8+ Re8 36.Qb7 Re7= (one extra credit point)) 32.Nxf6! Nf3+!! (one extra credit point) 33.Kf2 Qd2+ 34.Kxf3 Qd1+ 35.Kf2 Qd2+= (one extra credit point). You get no extra credit for 32...gxf6?, which loses to 33.Rxf6+ Kg7 34.Rh7+ Kf8 35.Qa8+;

A2) 28.Qa2! (one point). A clever move, maximizing the queen's mobility to target the surprisingly vulnerable rook on g8: 28...Rf8 (28...Bxb5 runs into 29.Nxf6+, although Black can save himself with 29...Qxf6 30.Bxf6 Bc4! (one point) 31.Qd2 gxf6 32.Rxg8 Bxg8 33.Qd6 Rf7=) 29.Rh5 (one point). White has a dangerous attack. Interestingly, Black can still defend with a string of only moves. You can earn extra credit for finding them: 29...Rxc3! (one extra credit point; other moves, such as 29...f5 30.Ne5 and 29...Bc4

30.Qc2 Re7 31.f5!, lead to strategically hopeless positions for Black).



position after 29...Rxc3

A bolt from the blue! Suddenly, White has to deal with mating threats too.

30.h3!, solving the back-rank issue (30.Bxc3 is obviously forbidden because of 30...Qd1+ 31.Kf2 Qf1#) and now Black needs to find 30...Rc4! (one extra credit point), keeping a fragile balance in this double-edged affair.

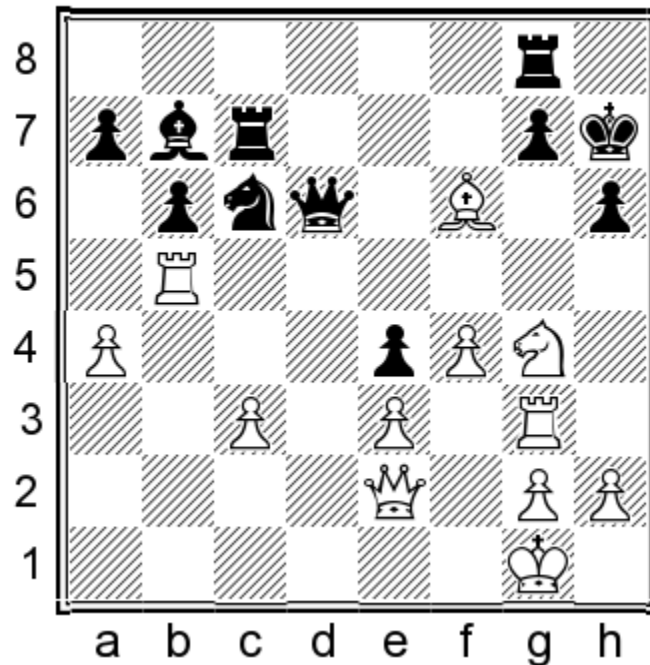
B) 27...Nc6!

This is a much better move. Instead of going after material, Black gets his knight back in the game, preparing to trade it for the dominant bishop on d4.

Let's consider White's responses:

B1) In case of 28.Rh5, Black wins a pawn with 28...Nxd4 29.exd4 (29.cxd4 loses to 29...Rc1+ 30.Kf2 Qc6) 29...Qxf4 (one point) with good winning chances.

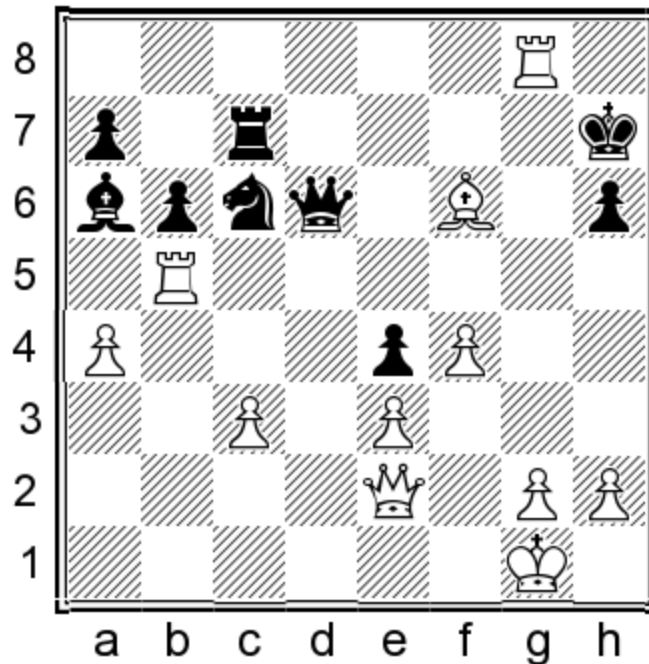
B2) We must consider the sharp 28.Bxf6, since today most players won't go down without a fight.



B21) Accepting the sacrifice with 28...gxf6?? (no credit) is soundly refuted by 29.Rh5 Rg6 30.Nxh6 (or 30.f5!?) 30...Rxh6 31.Qg4;

B22) 28...Bc8 (one point) neutralizes White's attack thanks to the ...Bxg4 threat. However, this is an inferior option to the line below because White has grabbed a pawn;

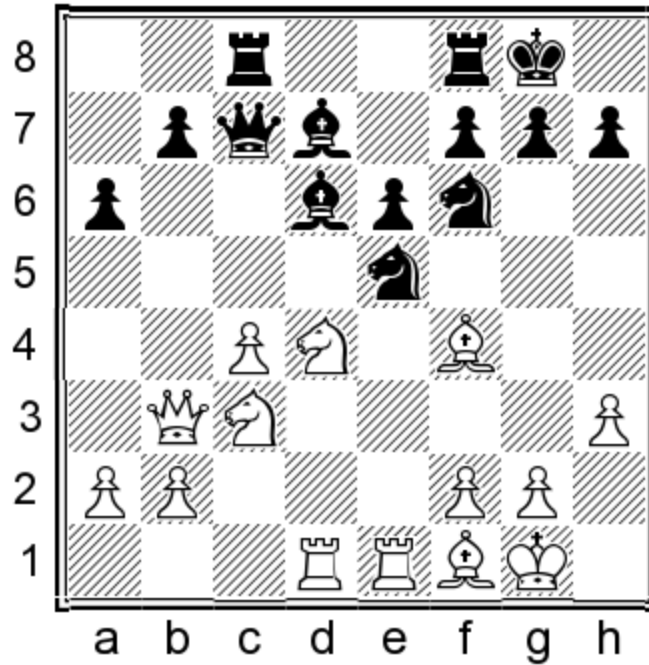
B23) Instead, we can refute this move with 28...Ba6! (two points). The point is that with the bishop occupying the f6-square, White does not have the Qa2, Nxf6+ tactic as in the 27...Ba6 28.Qa2! line. He loses material: 29.Nxh6! (one point; White is all-in on the attack at this point) 29...gxh6 30.Rxg8.



Here, Black can secure a significant advantage and good winning chances in one of two ways: 30...Kxg8 31.Qg4+ Kf8 32.Rf5 Rf7 33.Bg7+ Ke8 34.Qh5 Bc4! (one point) or 30...Qxf6!? 31.Qc4 Bxb5 32.axb5 Qf7! 33.Qxf7+ Rxf7 (one point).

You get extra credit for calculating the following winning sidelines: 29.Rh3 Bxb5 30.axb5 Qd3! 31.Qe1 Ne7 (one extra credit point) and 29.Qc2 Bxb5 30.axb5 gxf6 31.bxc6 f5 32.Ne5 Rd8 (one extra credit point).

Your score = /10 points + extra credit



White has three promising-looking continuations:

- A) 17.Nf5
- B) 17.c5
- C) 17.Ne4

Please analyze them deeply and provide your final evaluation.

SOLUTION

Analysis – Exercise 12-

Thanks to his strong centralization, White has the initiative in the early middlegame. It's the perfect time to initiate a change in the position, but what is the best move?

- A) **17.Nf5!?**

This is quite tempting, but Black has an antidote:

17...exf5

Black gets some, but not enough, compensation in case of 17...Nf3+?! (no credit) 18.gxf3 Bxf4 19.Ne7+ Kh8 20.Nxc8 Rxc8 21.Bg2.

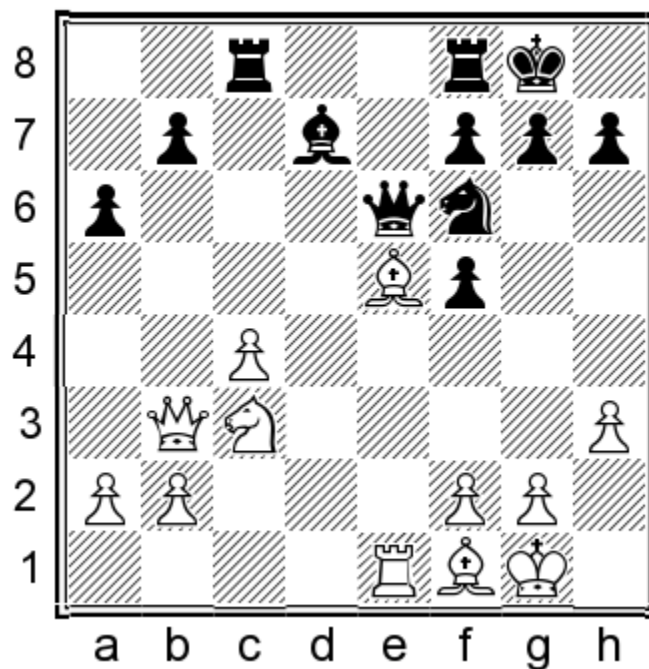
18.Rxd6 Qxd6 19.Bxe5

And now:

A1) 19...Qc6 allows White to regain the sacrificed material with interest: 20.Bxf6! Qxf6 21.Nd5 Qd6 22.Ne7+ Kh8 23.Nxc8 Bxc8 (one point). White can comfortably press his queenside majority advantage in the endgame;

A2) 19...Qe7 (no credit) is an inferior way to pin the e5-bishop due to 20.Qxb7 when 20...Bc6 is not possible;

A3) 19...Qe6! (two points).



Only this precise move holds the balance. Pinning the strong white bishop is essential. You can earn extra credit for analyzing the possible continuations: 20.Nd5 Nxd5 21.cxd5 Qh6 22.Qxb7 Qd2 23.Ra1 Bb5! 24.Bxb5 axb5 25.Qxb5 Rfd8= (two extra credit points) and 20.Qxb7?, which is very risky now in view of 20...Bc6 21.Qxa6 Ra8! 22.Qb6 Rfe8 (one extra credit point), when 23...Nd7 becomes very difficult to dodge. Black is better.

B) 17.c5?!

This was White's choice in Fromm-Petkov, Vrnjacka Banja 2023.

B1) Black equalized with 17...Nf3+ 18.Nxf3 Bxf4 19.g3 Bc6! 20.Bg2 Bh6 (one point) 21.Ne5 Bxg2 22.Kxg2, although he eventually lost the game (1-0, 79);

B2) 17...Qxc5 18.Qxb7 Rb8 19.Qxa6 Rxb2 (one point) is also possible. White doesn't seem to have a way to exploit Black's slight lack of coordination. You can earn extra credit for demonstrating that Black is out of danger: 20.Bc1 (20.Be3 Qxc3 21.Qxd6 Nc4= (one extra credit point)) 20...Rb6 21.Ba3 Qc7 (21...Qxc3 22.Qxb6 Qxa3 23.Nxe6 Bxe6 24.Qxd6 Qxd6 25.Rxd6±) 22.Bxd6 Rxd6 (one extra credit point). White has a minimal advantage thanks to the outside passer, but it's not much to write home about.

C) 17.Ne4!

The best among the several promising-looking options.

17...Nxe4

In this instance, 17...Nf3+ doesn't work as well as in the game because White can compromise Black's kingside structure with 18.Nxf3 (or 18.Qxf3!? Bxf4 19.Nxf6+ gxf6 20.Qh5±) 18...Bxf4 19.Nxf6+ gxf6 20.Qc3 (one extra credit point). White is better.

18.Rxe4

At first glance, it doesn't look like White has gained much with the trade on e4, but closer inspection shows that Qb3-g3 is a nasty threat

18...Nxc4

The critical move for the evaluation of White's idea. Objectively, the best move is 18...f6, ensuring the solidity of the e5-knight. Naturally, this weakens e6, so White can claim a pleasant positional advantage after 19.Qg3 (one point) etc.

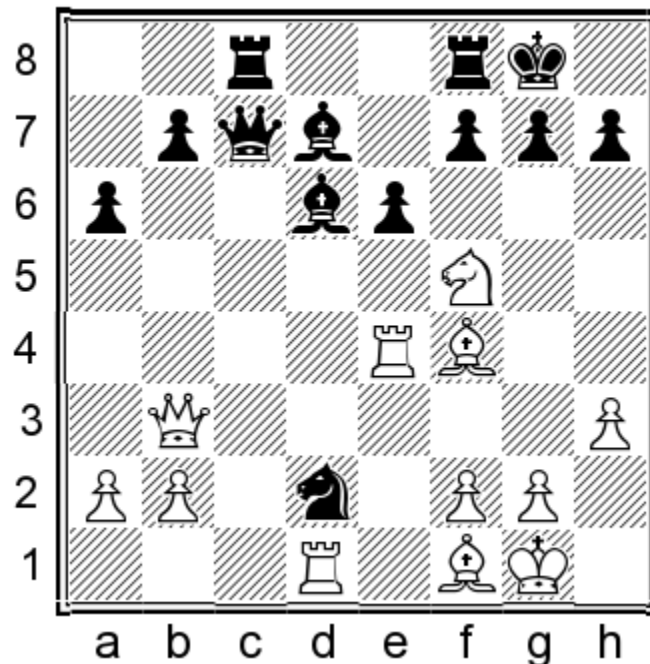
19.Nf5!

(two points) This is the big idea (19.Bxd6? (no credit) 19...Nxd6μ).

C1) 19...Bxf4 fails to 20.Ne7+ Kh8 21.Rxc4 Bc6 22.Nxc8 (one point);

C2) 19...exf5 20.Rxc4 Bxf4 21.Rxc7 Rxc7 seems like it might offer drawing chances, but the neat double-attack tactic 22.Rxd7! Rxd7 23.Qa4 (one point) kills those hopes on the spot;

C3) However, the fireworks are not over, because of Black's zwischenzug 19...Nd2! (two points).



That is just the kind of tactical mess that is the most fun yet most difficult to analyze. Black is up a pawn, but White has an extra tempo.

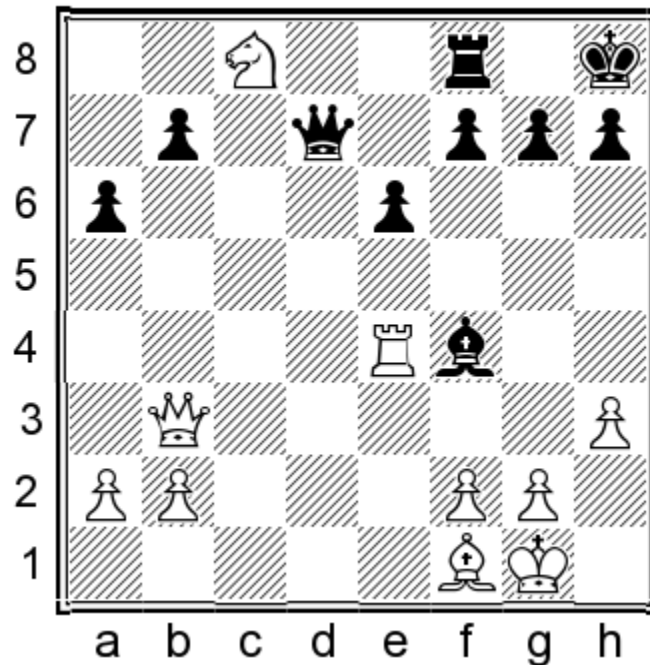
Who will prevail?

C31) 20.Ne7+!? Bxe7 21.Rxd2 looks promising because it forces Black to return the pawn: 21...e5 22.Bxe5 (one point). You get extra credit for analyzing further: 22...Qc6 23.Rc4 Qe6 24.Qxb7 Rxc4 25.Bxc4 Qxe5 26.Qxd7. White is better (one extra credit point);

C32) 20.Nh6+ (no credit) is another logical desperado tactic aiming to weaken the opponent's king. However, this is better than

the alternatives for Black after 20...gxh6 21.Bxd2 Bc6 22.Rh4 Kh8!
with an edge for White;

C33) 20.Rxd2 Bxf4 21.Ne7+ Kh8 22.Rxd7! Qxd7 23.Nxc8 (one point).



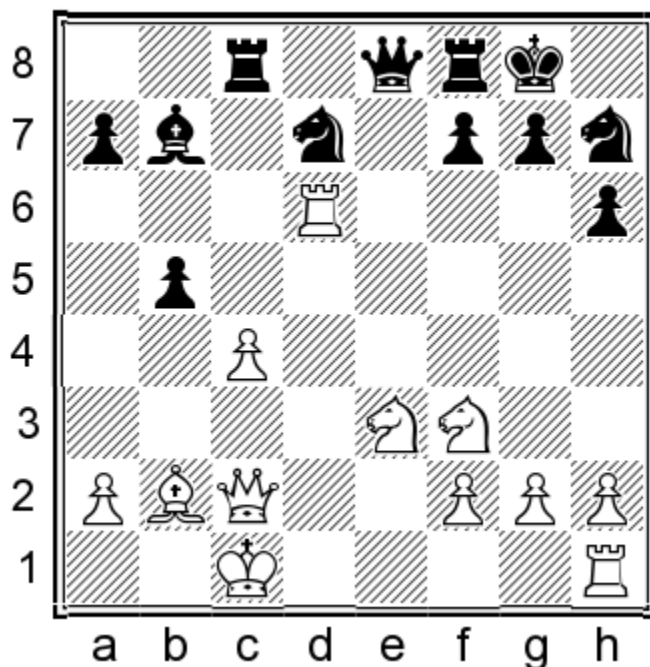
White appears to be winning a piece, but Black still has one more ace up his sleeve: 23...Bc7!. The knight is trapped due to 24.Nb6? Qd6 with an equal position. However, White can use the power of the pin with 24.Rc4! Rxc8 25.Qc2! (one extra credit point), and Black is in a perpetual pin on the c-file. Even though it's not obvious how White can exploit this yet, being down a pawn, it is quite likely that he could eventually create a second weakness on the kingside. I believe in White's winning more than Black's drawing chances in a practical game.

Your score = /14 points + extra credit

Total points for Tactical Analysis exercises = /109 points

Total extra credit points earned for Tactical Analysis exercises =
extra credit

Tactical Training Positions



Recommended pre-thinking time: 5-10 minutes (2100-2300 = 10 minutes; 2300+ = 5 minutes). Recommended time control: 30 min + 5 sec.

SOLUTION

Training Position – Exercise 1-

A) 20.Re1!?

A1) 20...Bxf3 21.Bxg7! (one extra credit point; 21.gxf3 Rxc4 22.Bc3 Rc5 23.Nd5 Qxe1+ 24.Bxe1 Rxc2+ 25.Kxc2³). This sacrifice is White's main attacking motif in most lines. The position is unclear after 21...Be4 22.Qc3 h5 ;

A2) 20...Be4 21.Qd2! is stronger than its more straightforward alternative (21.Qc3 f6 22.Ba3 a5! 23.Qd2 Nc5 24.Bxc5 Rxc5³). White still wants to sacrifice the piece on g7: 21...Nb6 22.Bxg7! (one extra credit point) 22...Kxg7 23.Qd4+ Kg8 24.Nd2 Bg6 25.Nc2 Qxe1+ 26.Nxe1 Nxc4 27.Rxg6+ fxg6 28.Qd5+ Rf7 which is unclear.

B) 20.Qc3?

This misses the point, allowing the opponent to shut down the long diagonal:

20...f6 21.Kb1 Nb6

C) 20.Rhd1?

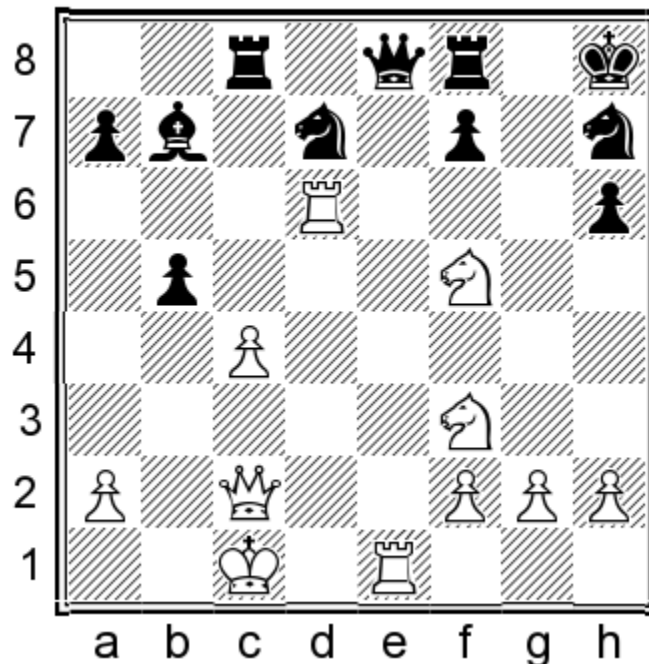
is wrong for the same reason:

20...Nb6 21.Ne5 f6 22.Rxb6 axb6 23.Nd7 bxc4 24.Nxf8 Nxf8 –+
Esen-Abdusattorov, Ankara 2022 (0-1, 30).

D) 20.Bxg7!

White should take the initiative on the kingside before the opponent's attack on the c-file becomes critical.

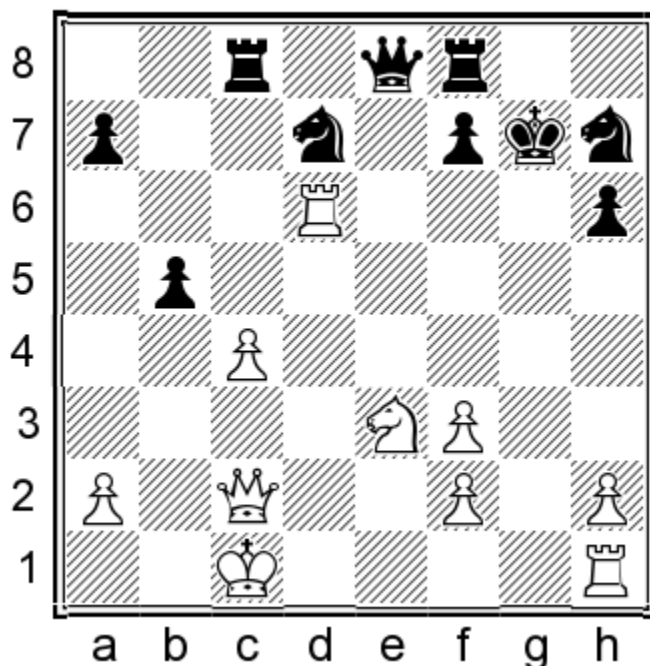
D1) 20...Kxg7 21.Nf5+ Kh8 22.Re1! forces a better endgame for White:



22...Rxc4 23.Qxc4 Qxe1+ (23...bxc4 24.Rxe8 Rxe8 25.Rxd7 Bxf3 26.gxf3) 24.Nxe1 bxc4 25.Rxd7 Bc8! 26.Rd5 Nf6 27.Ra5.

White gets a powerful attack in case of 22...Qd8?! 23.Qc3+ f6 24.N3h4! (one extra credit point) 24...Rxc4 25.Qxc4 bxc4 26.Re7;

D2) 20...Bxf3! 21.gxf3 (21.Bxh6 Be4 22.Qc3 Qe5 23.Qd4!
Qxd4 24.Rxd4 Nc5 25.Bxf8 Nxf8 26.f3 Bg6 27.Rhd1³) 21...Kxg7.



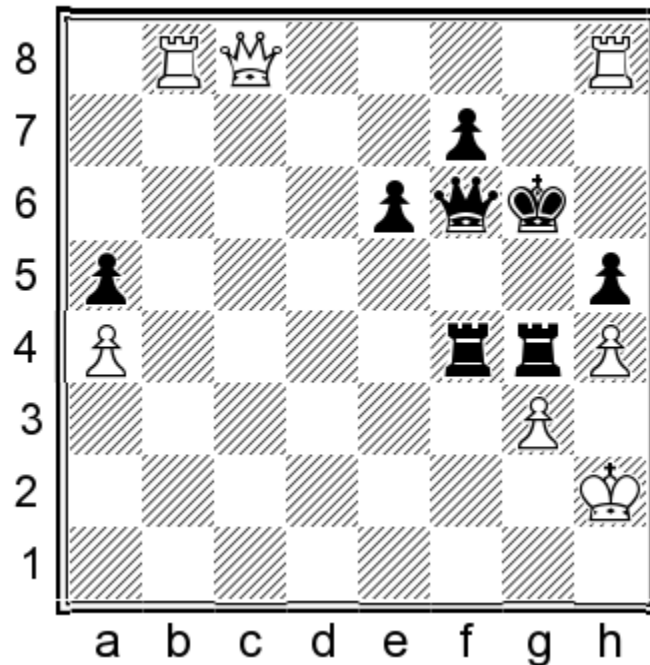
White has enough compensation for the sacrificed piece, thanks to the exposed black king. Still, precision is essential to keeping the initiative:

D21) 22.Re1 Kh8 23.Qf5! (one extra credit point; 23.Rxh6? loses to 23...Ndf6 (23...f5!? also works) 24.Qc3 Qe6) 23...Rxc4+ 24.Kd1! (one extra credit point). The king is safer here than in the corner (24.Kb1 loses to 24...Rb4+ 25.Ka1 Qc8). Black needs to force simplifications to avoid a deadly attack: 24...Rc5 25.Qxd7 Qxd7 26.Rxd7=;

D22) The subtle 22.Qd2!/? also works: 22...Qe5 (22...Ndf6 23.Nf5+ Kh8 24.Re1 Rxc4+ 25.Kb1 Qc8 26.Rxf6! Qc5 27.Re4 Rxe4 28.fxe4 Qe5 29.Rxh6 Qxe4+ 30.Qc2=) 23.Rxd7 Qa1+ 24.Kc2 Qxa2+ (24...Qxh1 25.Nf5+ Kg8 26.Ne7+ Kg7 27.Nf5+=) 25.Kd1 Qxd2+ 26.Kxd2=;

D23) 22.Rg1+? is inadvisable due to 22...Kh8 23.Rxh6 f5! (23...Ndf6?? loses to 24.Ng4! Rxc4 25.Qxc4!) 24.Qb2+ Qe5 and Black is better.

Your score = extra credit



Recommended pre-thinking time: 5-10 minutes (2100-2300 = 10 minutes; 2300+ = 5 minutes). Recommended time control: 35 min + 5 sec.

SOLUTION

Training Position – Exercise 2-

The rook on f4 cannot be taken, but it's also important to realize that Black threatens to launch a mating attack with ...Rf2+ or ...Rxh4+. Therefore, White needs to act energetically and fuel his attack with the right checks.

55.Qc2+

55.Qg8+ Kf5 56.Rb5+ Ke4 57.Qa8+ looks tempting, but White has worse piece coordination here compared to the main line. This allows the black king to escape in one of the following ways:

57...Kd3 58.Rb3+ (58.Qd8+ Qxd8 59.Rxd8+ Rd4 60.Rxd4+ Rxd4 61.Rxh5 Rxa4=) 58...Kc2 59.Rhb8 Rxh4+ 60.gxh4 Rf2+ 61.Kg1 Rf1+ 62.Kg2 Qf2+ 63.Kh3 Qf5+= or 57...Ke3 58.Rb3+ Kd4 59.Rxh5 Rxh4+! 60.gxh4 Rxh4+ 61.Rxh4+ Qxh4+ 62.Rh3 Qf4+ 63.Kg1 Qc1+ 64.Kg2 Qd2+=.

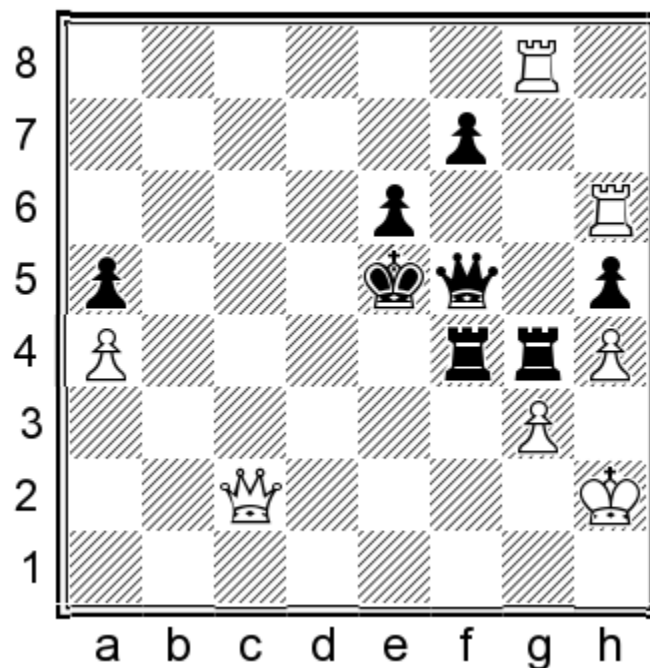
55.Rg8+ Kh7 56.Rh8+ (56.Qc2+? Rf5 57.Rxg4 hxg4μ) 56...Kg6 is just a move repetition.

55...Qf5 56.Rbg8+ Kf6 57.Rh6+

57.Qb2+ Rd4 58.Rxg4 Qxg4 59.Rxh5 Qxh5 60.Qxd4+=.

57...Ke5

57...Rg6 58.Rhxg6+ fxg6 59.Rf8++-.



The black king is finally out in the open. Among several ways to continue the attack, only 58.Qe2+ is promising. Other options allow the opponent to escape:

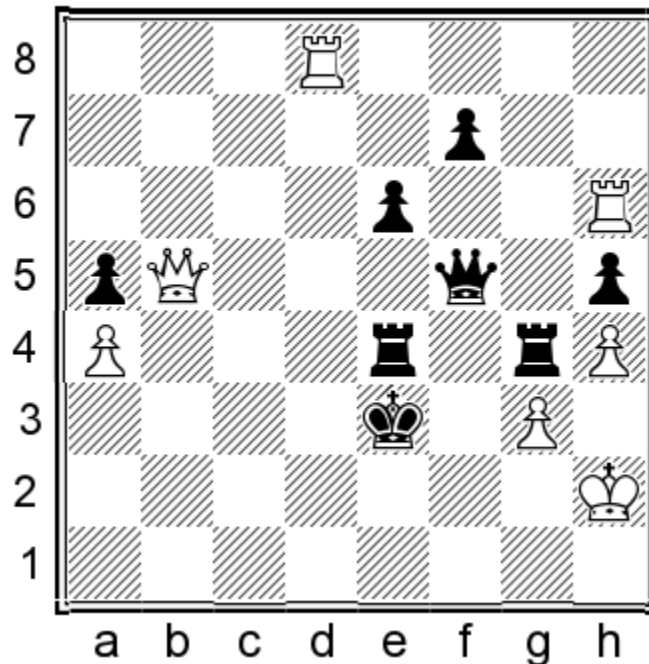
- A) 58.Qc5+ Ke4 59.Qc4+ Ke3 60.Qc1+ Ke2 61.gxf4 Rxg8=;
- B) 58.Qc7+ Ke4 59.gxf4 Rxg8=;
- C) 58.Rxh5 looks like a clever ‘luring into a skewer’ tactic, but it runs into 58...Rxh4+! (one extra credit point) 59.gxh4 (59.Kg2?

Rh2+! 60.Kxh2 Qxh5+ 61.Kg1 Rd4 μ) 59...Rhx4+ 60.Kg3 (60.Rhx4? Qxc2+) 60...Qxh5=;

D) 58.gxf4+?? loses to 58...Qxf4+ 59.Kh1 Qf3+;

E) 58.Qe2+! (one extra credit point). Only this move forces the opponent's king to keep moving. Black has two possibilities now, but his king remains exposed in both cases:

E1) 58...Re4 59.Qb5+ Kd4 60.Rd8+ Ke3.



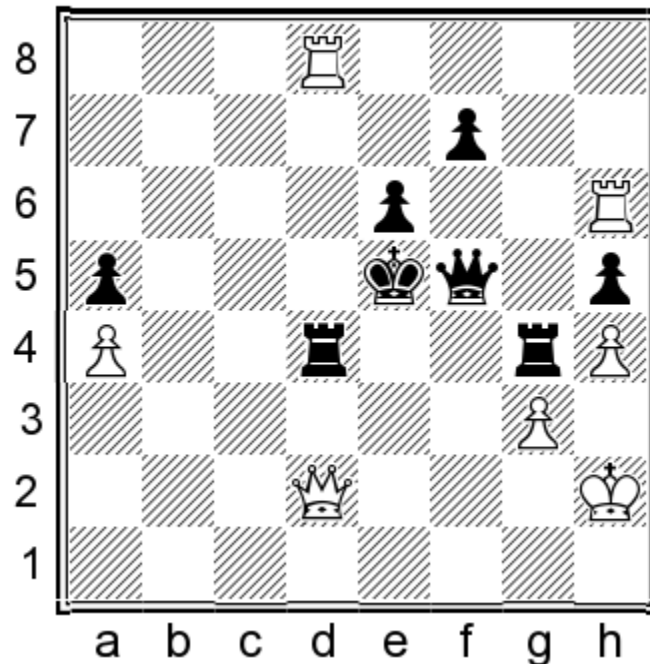
The black king looks vulnerable on White's side of the board, but can we finish him off?

E11) If 61.Qb6+?!, then 61...Kf3 62.Rd3+ Ke2 and Black is better;

E12) 61.Rd3+! Kf2 62.Rd2+ Ke1 63.Qd3!! (two extra credit points). After a series of checks, a quiet move (threatening mate in two) does the trick: 63...Rhx4+ 64.Kg1! (64.gxh4? loses to 64...Rhx4+ 65.Kg2 Qg4+ 66.Qg3+ Kxd2; 64.Kg2 Qh3+ 65.Kf3 Rhf4#) 64...Qc5+ 65.Kg2 Qc1 66.Rf2! Rh2+ 67.Kxh2 Kxf2 68.Rf6+ and White wins;

E13) 61.Qb3+!? also works, but extreme precision is required to prove it: 61...Kf2 (61...Ke2 62.Qc2+ Kf3 63.Rd3+ Re3 64.Qg2#) 62.Rd2+ Re2 63.Rxe2+ Kxe2 64.Qb2+ Kd1 65.Qa1+!! (two extra credit points) 65...Ke2 66.Rf6 Qc2 67.Qf1+ Ke3+ 68.Kh3.

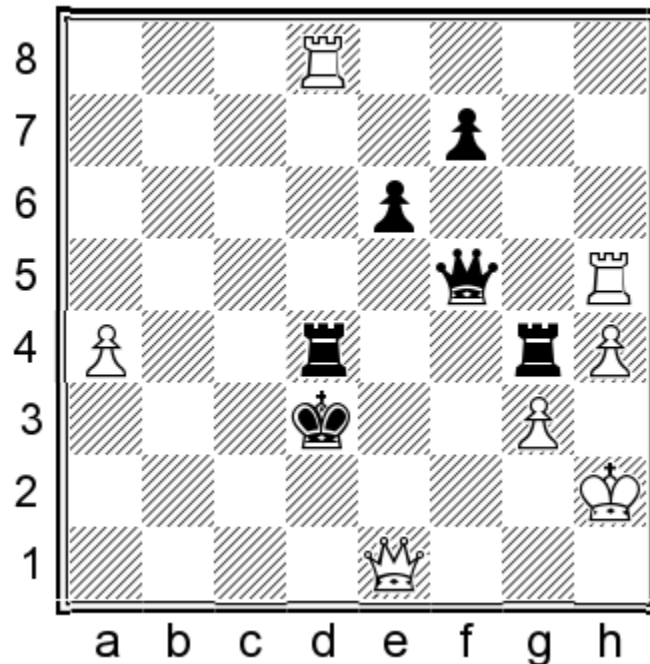
E2) 58...Kd6 59.Qd2+! (59.Qa6+ Ke5 60.Qxa5+?! may not be enough because it won't be possible to include the g8-rook in the attack (60.Qe2+! transposes back to the winning position): 60...Ke4 61.Qe1+ Kf3 62.Qd1+ Ke3 63.Rxg4 Rf2+! 64.Kg1 hxg4 65.Rh5! Qxh5 66.Qb3+ Kd2 67.Qb2+ Kd3 68.Qxf2 Qa5²) 59...Rd4 (59...Kc7 60.Qd8+ Kc6 61.Qc8+ Kb6 62.Qb8+ Kc5 63.Qc7+ Kd4 64.Rd8+ +-) 60.Rd8+ Ke5.



White succeeded in bringing his rook into the attack. But the path to victory remains narrow: 61.Qxa5+! (one extra credit point; White doesn't succeed with 61.Qe1+ Qe4 62.Rxh5+ f5 63.Qxa5+ Rd5= or 61.Qe2+ Qe4 62.Rxh5+ f5=) 61...Ke4 (if 61...Rd5, then 62.Rxd5+ exd5 63.Qc3+ Rd4 64.Qb2! wins. 63...d4 also doesn't help due to 64.Qe1+ Kd5 65.Rxh5! Qxh5 66.Qa5+) 62.Qe1+! (62.Rxd4+?! Kxd4 63.Qb4+ Ke3 and Black is still in the game).

E21) If the king steps on the f-file, 62...Kf3, the skewer motif kicks in: 63.Rxd4 Rxd4 64.Rf6! (one extra credit point) 64...Rd2+ (64...Qxf6 65.Qf1+) 65.Qxd2 Qxf6 66.a5 with a winning queen endgame. Alternatively, 63.Rf6!? also wins after 63...Rxd8 64.Rxf5+ exf5 65.Qf1+ Ke4 66.Qe2+ Kd5 67.Qd3+ Rd4 68.Qxf5+, but not 63.Qc3+? Ke2=;

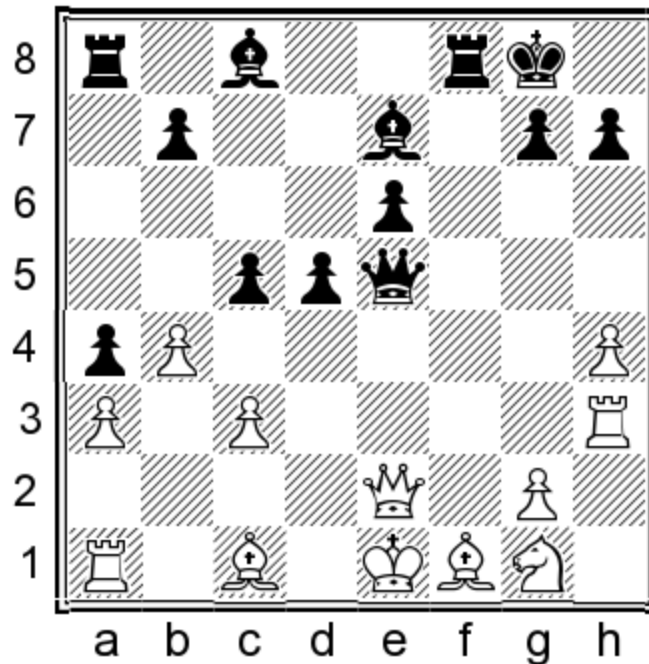
E22) 62...Kd3 63.Rxh5!! (one extra credit point).



The most beautiful win, utilizing geometric motifs to exploit the weak black king: 63...Rxh4+ (63...Qxh5 64.Qd1+ Ke3 65.Rxd4) 64.Rxh4 Rxd8 65.Rf4 Rh8+ 66.Kg1 Qc5+ 67.Kg2.

White also has the more prosaic 63.Rc8!? (or 63.Rb8) 63...Rc4 64.Rhh8!! (64.Qd1+ Kc3 65.Qc1+ Kd3 66.Qb1+ Ke3 67.Qb3+ Qd3=) 64...Rgd4 65.Rxc4 Kxc4 (65...Rxc4 66.Rd8+-) 66.Rc8+, winning.

Your score = extra credit



Recommended pre-thinking time: 5-10 minutes (2100-2300 = 10 minutes; 2300+ = 5 minutes). Recommended time control: 30 min + 5 sec.

SOLUTION

Tactical Training Position – Exercise 3-

A) 18...Bxh4+?!

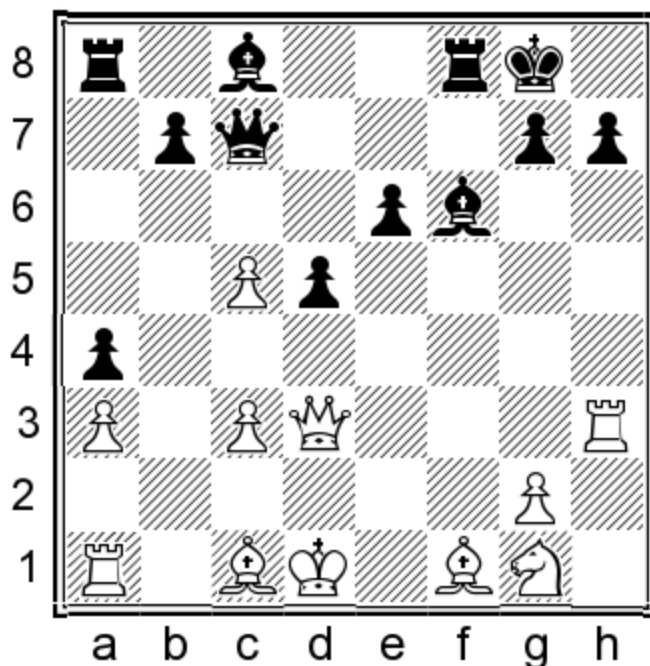
This wastes an important tempo. The h-pawn is not worth it.

19.Kd1

A1) Now, 19...Qf6? was Shirov's choice in the game Anand-Shirov, New Delhi/Teheran 2000 (1-0, 41). However, this allowed White to consolidate with 20.Nf3! (one extra credit point) 20...Qxc3 21.Bb2 Qb3+ 22.Kc1 e5 23.Rxh4 Bf5 24.Qd1 and Anand soon won the game;

A2) 19...Qxe2+ 20.Bxe2 Bf6 21.bxc5 e5 22.Rh5 and White is better;

A3) 19...Bf6 20.bxc5 (20.Qxe5 Bxe5 21.Bb5 cxb4 22.axb4 Rf2 with compensation) 20...Qc7 21.Qd3!.



Here, we see one of the reasons why taking the h4-pawn was not a good idea. Black needs to lose a tempo on 21...g6, when White reduces his lag in development with 22.Be3² .

B) 18...Qd6?!

Not the best square for the queen.

19.Bg5! cxb4

Black cannot avoid the trade of bishops: 19...e5?! 20.Rf3 Bf5 21.Qf2 Be4 22.Rxf8+ Rxf8 23.Nf3± .

20.axb4

20.cxb4 e5 21.Rf3 Bf5 is unclear.

20...e5 21.Re3

White is gradually untangling his clumsy pieces. Black's compensation is very iffy here.

21...Bxg5

21...e4 22.0-0-0! a3 23.Kb1± .

22.hxg5 Bd7 23.Qd2²

C) 18...Qxe2+?

Not a good idea. Black doesn't have full compensation for the piece in the endgame that arises after:

19.Bxe2 e5 20.Rh1 Bf5 21.bxc5 Bxc5 22.Nf3

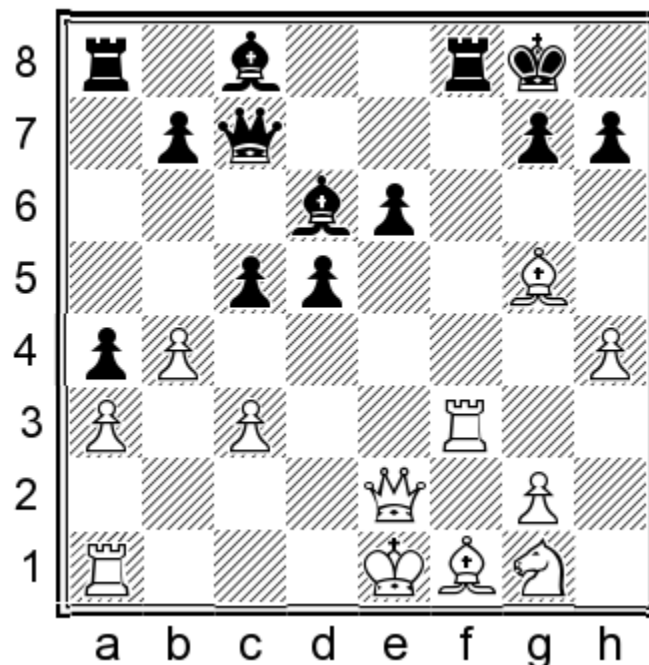
D) 18...Qc7!

Black should keep the queens on. It is the only way to exploit White's lag in development and justify the material deficit.

19.Bg5

The best consolidating attempt (19.Rf3 Bxh4+μ ; 19.Nf3 e5−+).

D1) 19...Bd6! (one extra credit point) is the most unpleasant move for White, making it difficult to simplify the position: 20.Rf3 (20.bxc5 Qxc5 21.Qe3 Qc7 22.Rf3 Rxf3 23.Qxf3 h6 24.Bd2 Bd7 25.Ne2 Rf8³ ; 20.Nf3 e5−+).



The rook was in trouble on h3, so this move is virtually forced, prolonging White's lag in development. Black can exploit this with a nice tactic: 20...cxb4! (one extra credit point; the alternatives are

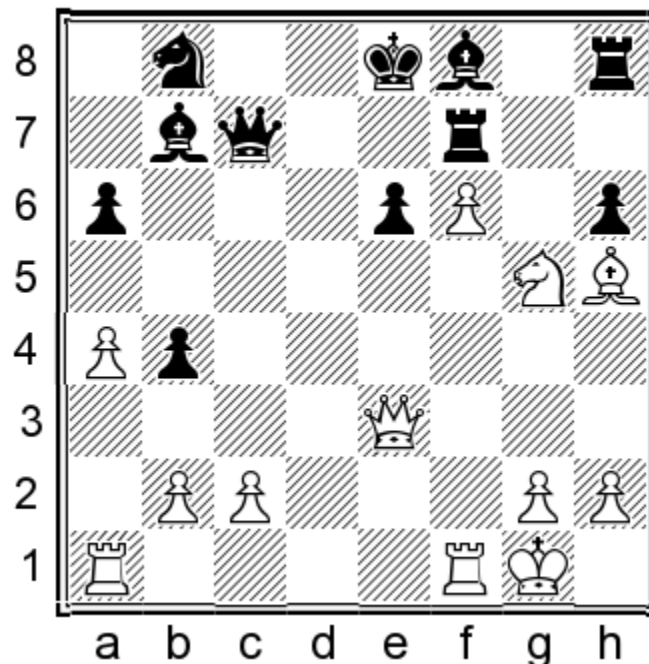
less convincing: 20...Bd7 21.Qd2! Bc6 unclear, and 20...Bg3+?
21.Kd2±):

D11) 21.axb4 Bd7 (21...Rxf3 22.Qxf3 Bxb4 23.Ne2 Bd6
24.Nd4! Bd7 25.Nb5 Bxb5 26.Bxb5 unclear) 22.Qd2 Bxb4 23.Ne2
Bd6³;

D12) 21.cxb4 Rxf3 22.Qxf3 Bxb4+! (one extra credit point)
23.Kd1 (23.axb4 loses to 23...Qe5+) 23...Bd6³ .

D2) 19...e5!/? is a natural alternative. Black keeps the initiative:
20.Rf3 (20.Bxe7 Qxe7 21.Rf3 Bf5 transposes to the main line)
20...Bf5! 21.Bxe7 (21.Qd2 Bxg5 22.hxg5 d4 23.cxd4 cxd4 24.Rc1
Qd6 is unclear) 21...Qxe7 22.bxc5 (22.Qf2 Be4 23.Rxf8+ Rxf8
24.Nf3 d4 , unclear) 22...Qxc5 23.Qe3 d4 24.cxd4 exd4 25.Rc1
Qa5+ 26.Qd2 Rae8+;

D3) 19...Bxg5 20.hxg5 e5 21.Re3 e4 is unclear.
Your score = extra credit



Recommended pre-thinking time: 10 minutes. Recommended time
control: 45 min + 5 sec.

SOLUTION

Tactical Training Position – Exercise 4-

Black has two interesting options in this sharp position:

A) 21...hxc5!

This is best, objectively speaking.

22.Qxe6+ Kd8 23.Rad1+

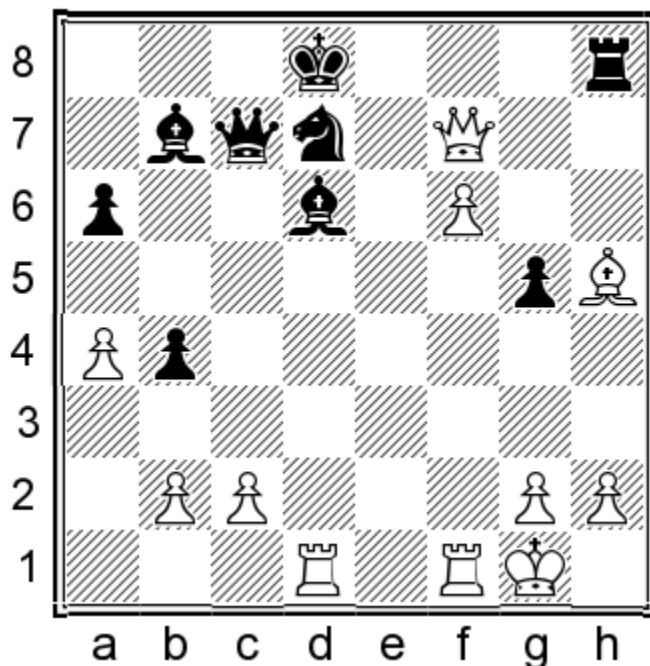
Otherwise, Black takes the advantage after 23.Qxf7 Qxf7 24.Bxf7 Bc5+ 25.Kh1 Bd6 or 23.Rfd1+ Nd7 24.Qxf7 Bc5+ 25.Kh1 Kc8.

23...Nd7

23...Bd6 24.Rxd6+ Rd7 is refuted by 25.Qe7+! Kc8 26.Bg4 Qc5+ 27.Rf2.

24.Qxf7 Bd6!

One extra credit point. 24...Bc5+ loses to 25.Kh1 Kc8 26.Rf5.



Only this move keeps Black afloat. White has many ways to deal with the 25...Bxh2+ threat:

A1) 25.Rxd6!? Qxd6 26.Rd1 Qc5+ 27.Kh1 Bc6 28.Qg7 (28.Bf3 Qe5 29.Qe7+ Kc8! 30.Qxe5 Nxe5 31.Bxc6 Nxc6 32.Rd5=) 28...Rhx5 29.Rxd7+ Bxd7 30.f7 Rxh2+ 31.Kxh2 Qd6+ is equal;

A2) 25.Rf5!? Qxc2 (25...Bxh2+? 26.Kf1 Kc8 27.Qe6 Qc6 28.Qxc6+ Bxc6 29.f7+-) 26.Rf2 Qc5 unclear;

A3) 25.Kh1 Qxc2 (25...Qc6 26.Rf2 Qe4 27.Rfd2) 26.Rg1 unclear;

A4) 25.Qe6? Bxh2+ 26.Kh1 Be5!³;

A5) 25.Rf2! might be the best practical try: 25...Bc5 (25...Bxh2+? loses to 26.Kf1 Kc8 27.Qe6) 26.Qg7. Black will lose the rook on h8 now; the only issue is whether he will have enough on the other side of the board to compensate for this loss. 26...Bxf2+ 27.Kf1! (one extra credit point; 27.Kxf2 allows the opponent to force a draw with 27...Qc5+ 28.Ke1 Re8+! (one extra credit point) 29.Bxe8 Qe3+ 30.Kf1 Bxg2+ 31.Kxg2 Qe4+! 32.Kf2 Qf4+ 33.Ke2 Qe4+ 34.Kd2 Qf4+) 27...Qc4+ 28.Rd3 Bd4 29.Qxh8+ Kc7 with mutual chances.

B) 21...Bc5

This also leads to complicated play, and it's not easy for White to refute it.

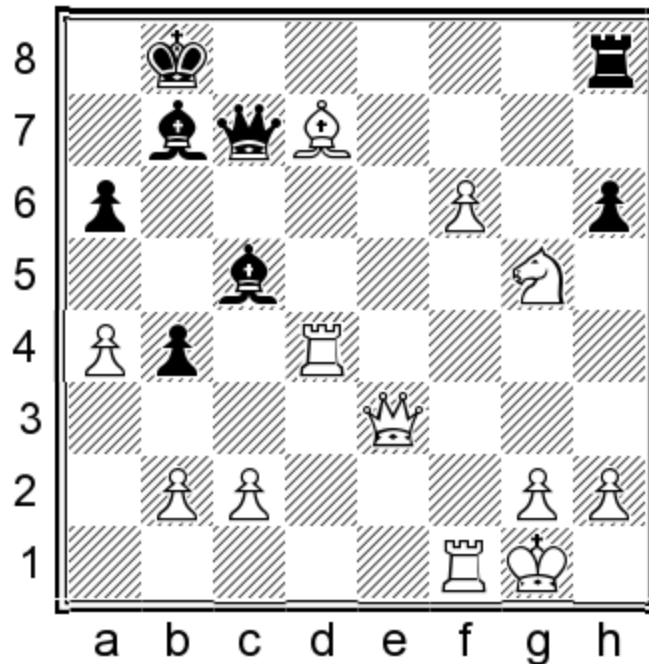
22.Bxf7+ Kd7

22...Kf8 23.Nxe6+ Kxf7 24.Nxc5+-.

23.Rad1+ Kc8

23...Kc6 loses to 24.Qxc5+! Kxc5 25.Nxe6+.

24.Bxe6+ Nd7 25.Bxd7+ Kb8 26.Rd4



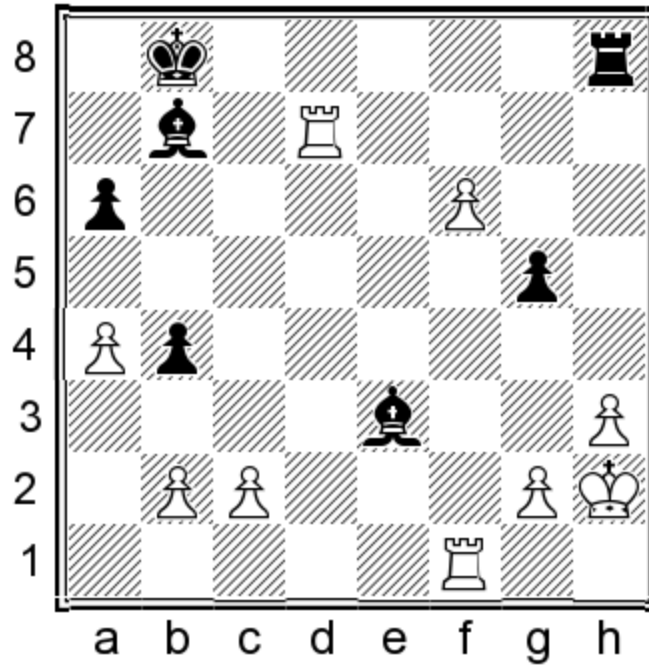
White has saved his queen, but the position remains tricky.

26...hgx5

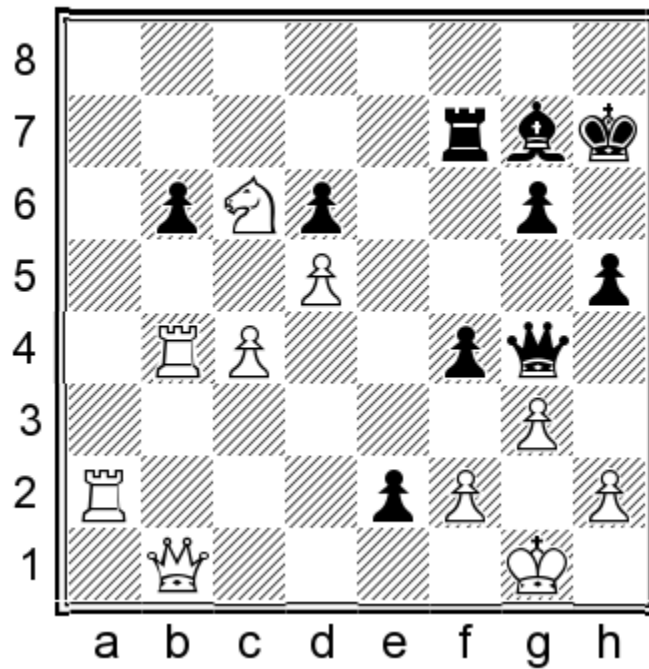
26...Qxd7 loses to 27.Qe5+ Qc7 28.Qxc7+ Kxc7 29.Ne6+. Now, White has two ways to defend h2, but only one works:

B1) 27.Bh3 is inferior due to 27...g4! (one extra credit point; 27...Rxh3 28.gxh3 Qc6 29.Qg3+ Ka7 30.c3 and White wins) 28.f7 gxh3 and Black has enough counterplay to survive: 29.f8Q+ (29.Qe8+ loses to 29...Qc8 30.Qe5+ Ka7) 29...Rxf8 (29...Bxf8 30.Qe8+ Qc8 31.Qe5+ Ka7 32.Qxh8 Qxc2 33.Qxh3 Bc5 34.Qg4! Qxb2 35.Rfd1 a5 36.h4 is unclear) 30.Rxf8+ Bxf8 31.Qe8+ Qc8 32.Qxc8+ Bxc8=;

B2) 27.h3! (one extra credit point) 27...Qxd7 28.Rxd7 Bxe3+ 29.Kh2.



This endgame is winning for White, thanks to the strong f-pawn:
 29...Bf4+ (29...Rf8 30.c3+-) 30.g3 Bc8 31.gxf4! (one extra credit point)
 31...Bxd7 32.fxg5 Bxh3 33.Rf2.
 Your score = extra credit



Recommended pre-thinking time: 5-10 minutes (2100-2300 = 10 minutes; 2300+ = 5 minutes). Recommended time control: 25 min + 5 sec.

SOLUTION

Training Position – Exercise 5-

The starting position is tricky because Black can combine the mating threats ...f3, ...Qg4-h3-g2/f1 with promotion of the pawn. White's extra rook may or may not play a role, depending on his next move.

A) 39.c5

This move contains a very similar idea to the best move, 39.Rb3, but:

39...bxc5 40.Re4 Qh3!

(one extra credit point) This move doesn't work in a similar position in the 39.Rb3 line. Things are only starting to get interesting after:

41.f3

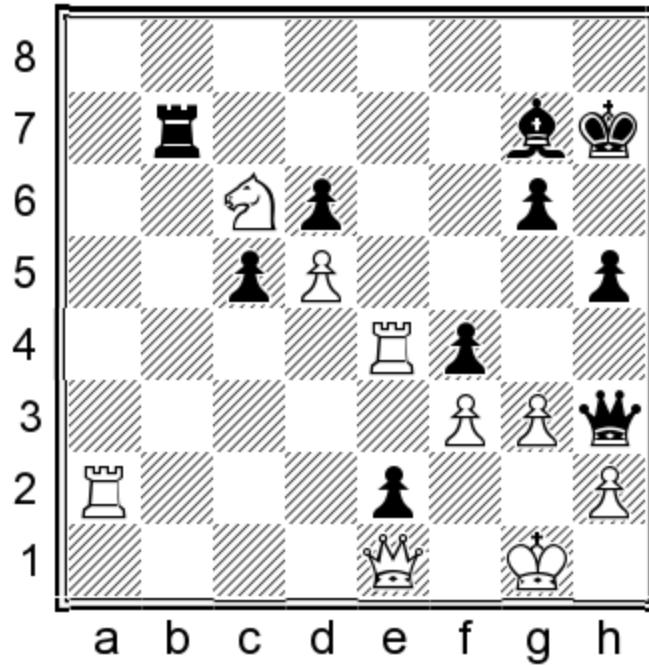
41.Raxe2 f3 42.Qf1 Qxf1+ 43.Kxf1 fxe2+ 44.Kxe2=.

41...Rb7!

41...fxg3 42.Rexe2 Rxf3 43.Rg2+-.

42.Qe1

42.Qxb7 Qf1#.



Black saves the day with an impressive series of deflection shots:

42...Bc3! 43.Qc1 Bb2!

One extra credit point. The bishop and pawn are untouchable.

44.Rxb2 Rxb2 45.Re7+ Kg8 46.Re8+ Kf7 47.Re7+ Kg8 48.Qe1 fxg3 49.hxg3 Rb1 50.Qxb1 Qxg3+ 51.Kh1 Qh3+=

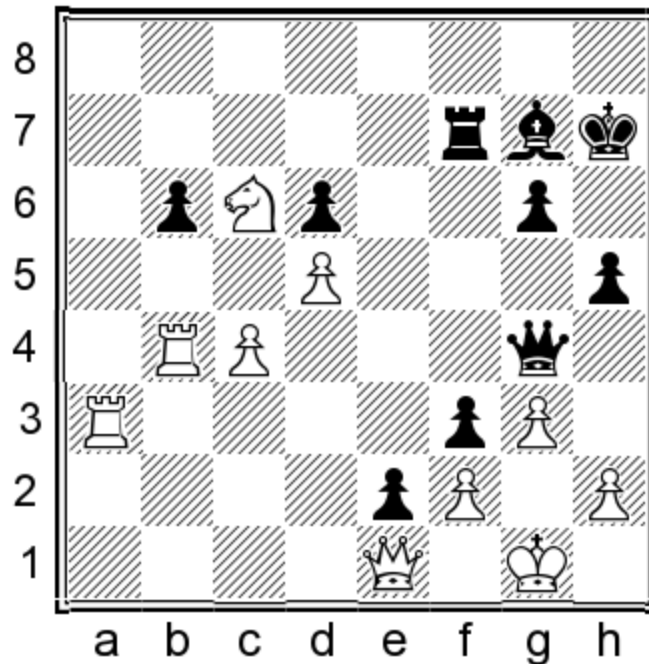
B) 39.Ra3

An inferior way to cover the third rank. 39.Qe1 f3 40.Ra3 transposes to this line.

39...f3

39...fxg3 40.Rxg3 Bc3 41.Rxg4 hxg4 42.Rxb6 e1Q+ 43.Qxe1 Bxe1 44.Rb2±.

40.Qe1



40...Bh6!

(one extra credit point). White cannot ignore the 41...Bd2 threat, forcing him to give back the rook (other options are considerably worse: 40...Qh3 41.Rxf3 Rxf3 42.Qxe2± and 40...h4 41.c5+-):

41.c5 Qh3 42.Rxf3 Rxf3 43.Re4²

C) 39.Rxe2?

This is too panicky:

39...Qxe2 40.Qf1 Qd2 41.Rxb6 fxc3 42.hxc3 h4³

,

D) 39.Rxb6??

An outright blunder:

39...f3 40.Ra3 Qxc4!

(one extra credit point) A shocking reply. White's position is losing despite the extra rook because of the permanent threats to his king. If 40...Qh3, White gets counterplay with 41.Rxf3 Rxf3 42.Rb7.

41.Qe1 Qxd5 42.Nb4 Qf5

E) 39.Rb3!!

The best continuation. White brings the passive rook back in the defense while keeping the other on the second rank.

39...f3 40.Re3!

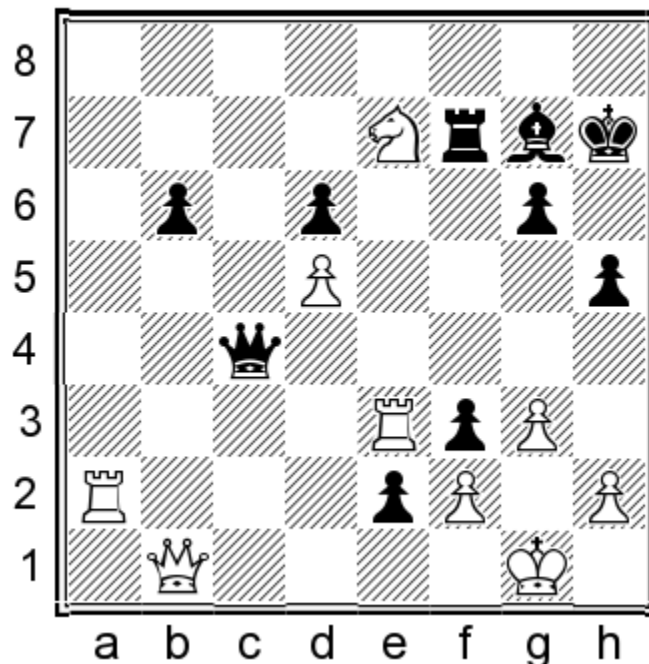
Two extra credit points. The rook assumes an important defensive position, controlling both black pawns. However, it will also play a significant role in the counterattack. On the other hand, 40.Rxf3 Rxf3 41.Rxe2 is the wrong time to neutralize the pawns because of 41...Rxc3+! 42.hxc3 Qxe2=.

After the text, Black has several possibilities in response:

F1) If 40...Qh3, White has a decisive advantage after 41.Rxf3 Rxf3 42.Rxe2;

F2) 40...Bh6 41.Re6! Qh3 42.Qxg6+ Kh8 43.Qxh6+ Kg8 44.Re8+ Rf8 45.Rxf8#;

F3) 40...Qxc4! (one extra credit point) is the trickiest continuation: 41.Ne7! (one extra credit point; 41.Re6 Rf5 42.Ne7 is a less accurate way to attack due to 42...Qd4! 43.Rxe2 fxe2 44.Rxe2 Rf6=).



position after 41.Ne7

Black gets a reminder that his king can also become a target!

41...Rf6 (41...Rxe7 42.Rxe7 Qxd5 43.Raxe2! fxe2 44.Rxe2+-).

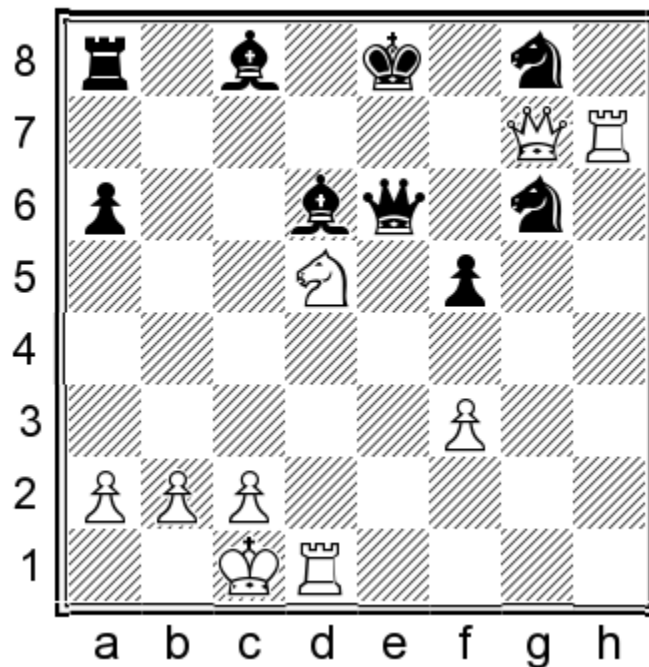
White could still go wrong here, but he has two winning continuations:

F31) 42.Nxg6? Rxc6 43.Re6 leads to a fascinating line that ends in a perpetual: 43...Qg4 44.h3 e1Q+! 45.Qxe1 Qxh3 46.Of1 Rxc3+! (one extra credit point) 47.fxg3 Bd4+ 48.Rf2 Qxc3+ 49.Kh1 Qxf2 50.Qd3+ Kh8 51.Rh6+ Kg7 52.Qg6+ Kf8 53.Qxd6+ Kg8 54.Rg6+ Bg7;

F32) 42.Re4!. This precise move cuts off the black queen from the g4- and h3-squares, removing his most dangerous threat. 42...Qc3 43.h4. The king is finally safe, and White should be able to convert his big material advantage;

F33) 42.Ra1!?, winning.

Your score = extra credit



Recommended pre-thinking time: 10 minutes. Recommended time control: 35 min + 5 sec.

SOLUTION

Training Position – Exercise 6-

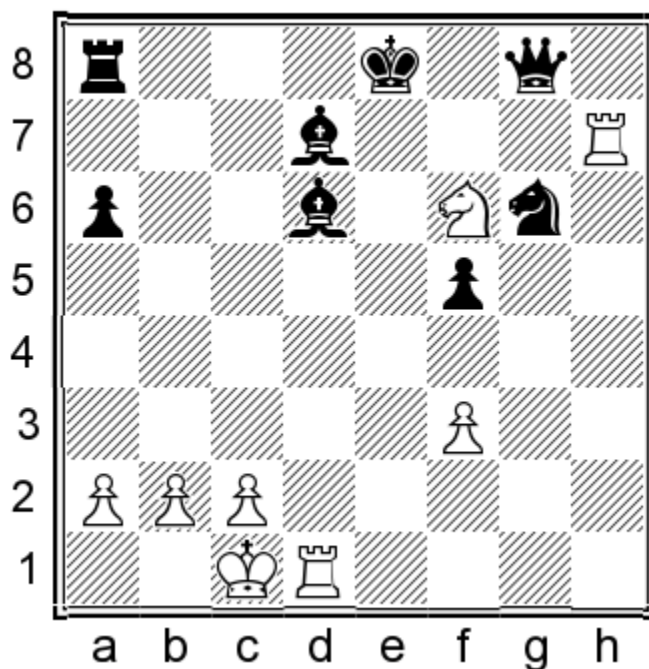
In a typical Sicilian mess, Black is defending since his king is attacked from all directions. Fortunately, he has enough pieces around it to keep the balance.

Let's start with the ways Black can go wrong here.

A) 25...Bd7?

This is met with a nice refutation:

26.Qxg8+! Qxg8 27.Nf6+



Black loses a lot of material whichever way he chooses to move his king.

A1) 27...Kf8 28.Nxd7+ Ke8 29.Nf6+ Kf8 30.Nxg8 Kxg8 31.Rb7 with a winning endgame;

A2) 27...Kd8 28.Rxd7+! (28.Nxg8 is more technical) 28...Kc8 29.R1xd6 Qh8 (29...Qf8 30.Nd5!) 30.Rh7!.

B) 25...N6e7?!

This is the wrong knight to place on e7:

26.Nxe7 Nxe7

26...Bxe7 doesn't work now because of 27.Rh8 Qe3+ 28.Kb1 Be6
29.Rxg8+ Bxg8 30.Qxg8+ Bf8 31.Qg6+ Ke7 32.Qd6+ Kf7
33.Qd5+.

27.Rh8+ Kd7 28.Rh6 Qe3+ 29.Kb1 Qc5 30.Qd4±

;

C) 25...Be5?

This does nothing to prevent White's main threat:

26.Nc7+ Bxc7 27.Qxc7+-

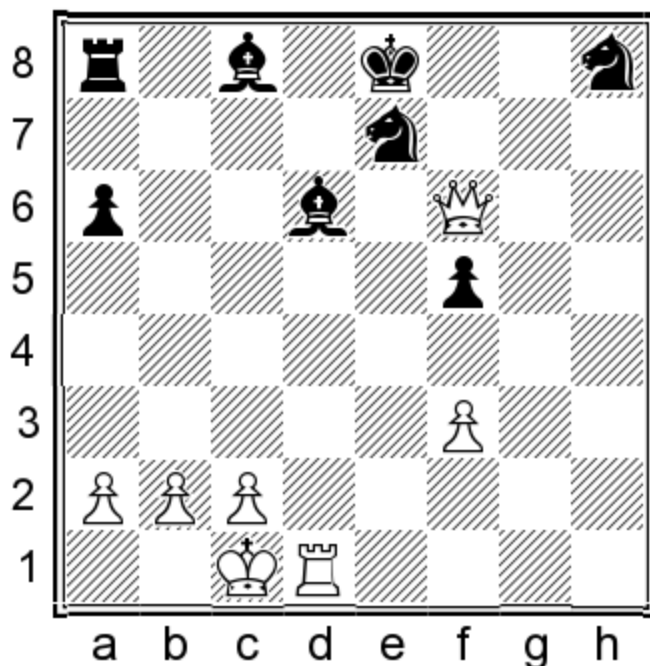
D) 25...N8e7

This is one of two moves that successfully deal with White's Nd5-c7+ threat. White has two major ways to continue his attack:

D1) 26.Rh8+!? leads to a forcing line where White obtains a queen for several black pieces: 26...Nxb8 (26...Kd7 27.Nxe7 Nxe7 28.Rh6 Qe3+ 29.Kb1 Qc5 30.Qd4 Kc7 31.Qxd6+ Qxd6 32.Rdxd6 Bd7 33.b3±) 27.Nf6+

D11) 27...Kd8 28.Rxd6+ (28.Qxh8+? Ng8!! (one extra credit point) 29.Nxg8 Kc7 and Black wins) 28...Qxd6 29.Qf8+ Kc7 30.Ne8+ Kc6 31.Nxd6 Kxd6 32.Qxh8 Bb7 is simplified and roughly equal since Black will be in time to coordinate his pieces against the mighty queen;

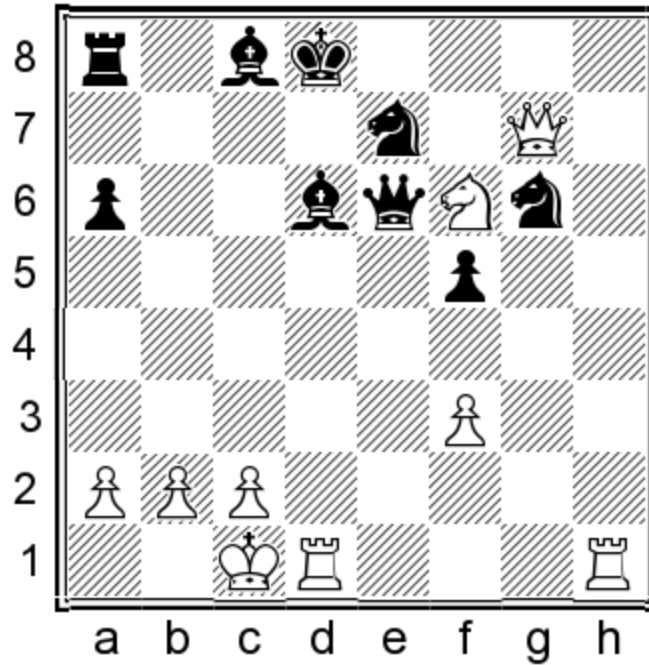
D12) 27...Qxf6 28.Qxf6.



A very unusual material balance. Black only needs to coordinate his forces to keep the king safe. White doesn't have enough material to checkmate him. 28...Bf4+ 29.Kb1 Nhg6 30.Re1 Be5 31.Rxe5 Nxe5 32.Qxe5 or 28...Nf7 29.Rxd6 Nxd6 30.Qxd6, both with equality.

D2) 26.Nxe7? loses to 26...Bxe7;

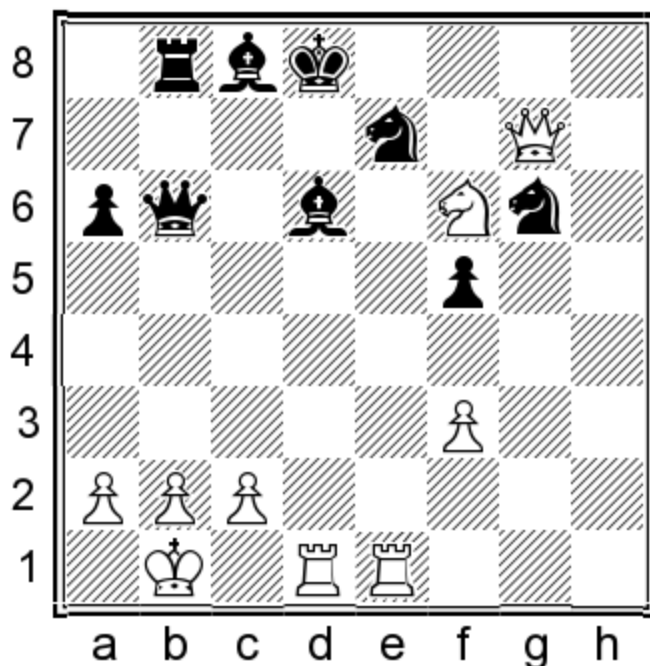
D3) 26.Nf6+ Kd8 27.Rhh1! (one extra credit point). Connecting the rooks on the first rank is the best way to keep the attack going. As a side note, 27.Qf7!? is a good alternative. Black should keep the tension with 27...Qe5! (one extra credit point) 28.Kb1 Rb8 29.b3 Rb7∞. 27...Qxf7? is worse because of 28.Rxf7 Kc7 29.Ne8+ Kd7 30.Nxd6.



position after 27.Rhh1

D31) Black can keep the balance with 27...Qe3+! 28.Kb1 Qc5! (one extra credit point). Black has maneuvered his queen from the danger zone on the e-file. The position remains complicated, with chances for both sides. I will give a few sample lines here: 29.Rd3 Rb8 30.Rhd1 Rb6 31.Nd5 Rc6! (31...Nxd5 32.Rxd5 Qb4 33.a3!+-) 32.Rc3 Qb5 is unclear; 29.Rh6 Be6 30.Rxg6 Nxc6 31.Qxc6 Kc7 32.Ne8+ Rxe8 33.Qxe8 is equal; 29.Rhe1 Ra7! gives Black counterplay.

28...Qb6 is less accurate due to 29.Rhe1 Rb8 (29...Ra7? doesn't work because of 30.Qxc6! (one extra credit point) 30...Nxc6 31.Re8+ Kc7 32.Nd5+)



position after 29.Rb8

30.Ne8!! (two extra credit points). This move forces the elimination of one of the black knights, which reduces his defensive flexibility:
30...Kxe8 31.Qxg6+ Kd7 32.Qf6;

D32) 27...Bb7!?! leads to very double-edged play: 28.Rhe1 (28.Rxd6+ Qxd6 29.Rd1 Qxd1+ 30.Kxd1 Bxf3+, unclear) 28...Ne5 29.f4 (29.Rxd6+ Qxd6 30.Rd1 Qxd1+ 31.Kxd1 Bxf3+ 32.Kc1 N5g6 is unclear) 29...Nd3+! (two extra credit points; attack is the best defense!) 30.cxd3 Qxa2 31.Qf8+ Kc7 32.Rxe7+ Kc6! 33.Qf7 Qa1+ 34.Kc2 Qa4+.

E) 25...a5!?

This is the other good option for White in the starting position.

26.Rhh1!

(one extra credit point)

Sometimes, you need to take a step back to make two forwards. As I noted in a similar position in the 25...N8e7 line, connected rooks are a potent attacking force.

The point is that 26.Nc7+ Bxc7 27.Qxc7 can now be met by 27...Ba6! with mutual chances, whereas 26.Nf6+ Qxf6 27.Qxg8+ Nf8 28.Rxd6 Be6 looks okay for Black.

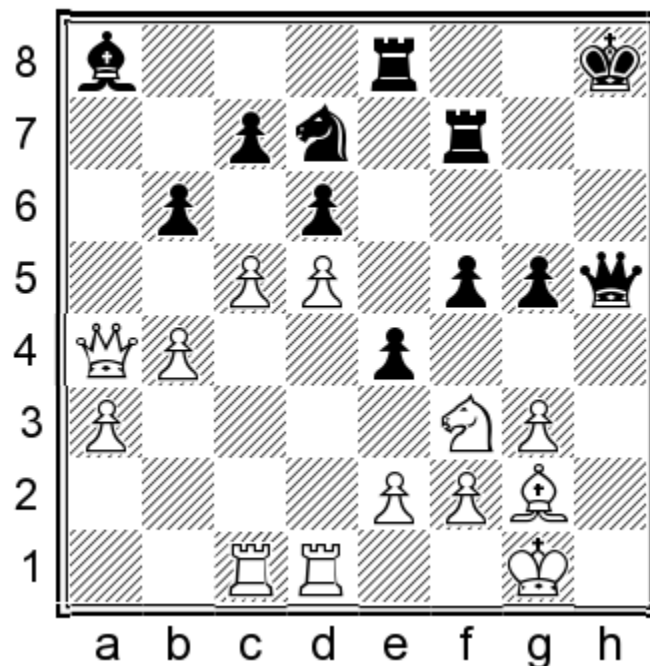
26...Be5

26...N6e7 allows 27.Rhe1 Qh6+ 28.Qxh6 Nxh6 29.Nf6+ Kf7 30.Rxd6 and White is winning.

27.Nc7+ Bxc7 28.Qxc7 N6e7 29.Qd8+ Kf7 30.Rh7+ Kg6 31.Rdh1! Qe3+ 32.Kb1 Kf6 33.Rh8

Black can hold on, according to the computer, but this would be a difficult task in a practical game.

Your score = extra credit



Recommended pre-thinking time: 5-10 minutes (2100-2300 = 10 minutes; 2300+ = 5 minutes). Recommended time control: 25 min + 5 sec.

SOLUTION

Training Position – Exercise 7-

The position is very double-edged. Black hopes his kingside attack will compensate for his desperate situation on the queenside. Let's see what White can do about it:

A)

Inaccurate is

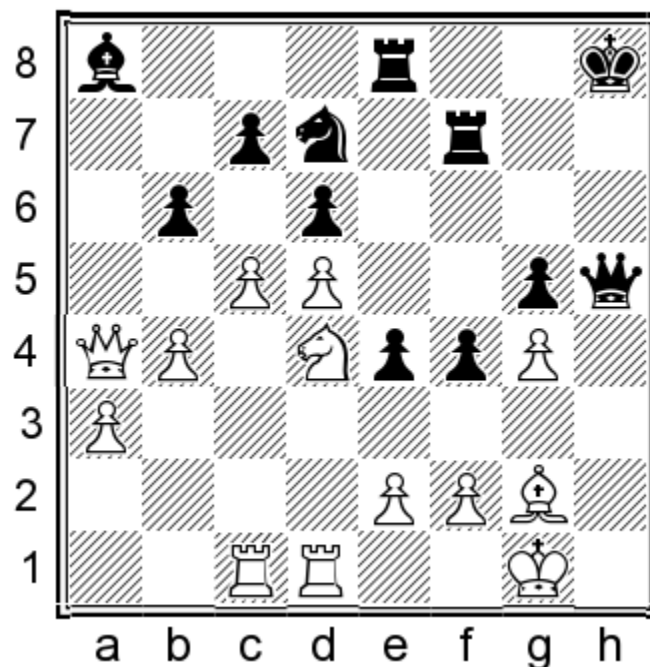
31.Nd4?! f4

Black tried bringing his bishop into the game with 31...Bxd5? but that was a big mistake: 32.cxd6 cxd6 33.Nxf5!+- Risting-Ioannidis, Porto Carras 2018 (1-0, 45), and so is 31...dxc5 due to the same 32.Nxf5±.

32.g4!

(one extra credit point)

This is the only move that avoids an immediate onslaught. We should keep the position on the kingside as closed as possible.



32...Qxg4 33.cxd6 cxd6 34.f3 Qh5

34...exf3 35.exf3 Qh5 36.Re1 is equal.

35.Nf5!

With an unclear position. 32.cxd6? loses to 32...fxg3 33.fxg3 Rh7 34.dxc7 Qh2+ 35.Kf1 Rf8+ 36.Nf3 exf3 37.exf3 Bb7 and 32.Rc3 to 32...e3.

B) 31.c6

Thus, White buries the bishop on a8. However, it also means that White cannot use the c-file for counterplay. The arising battle is difficult to evaluate after 31...Nf6 32.Nh2 Qxe2 33.Re1 Qh5 34.Qd1 or 32...Rh7 33.Nf1 f4 34.b5!?! (34.Qb3 is unclear) 34...Qxe2 (34...f3 35.exf3 exf3 36.g4! Qxg4 37.Qxg4 Nxc4 38.Bxf3+-) 35.Re1.

C) 31.cxb6

An inferior way to open the c-file compared to 31.cxd6.

31...exf3 32.Bxf3

32.exf3 cxb6 wins for Black.

32...g4 33.bxc7 Bb7 34.Bg2

The difference is minimal compared to the main line: the black pawn is on d6 instead of b6. However, since the main battle occurs in the center, leaving Black with a pawn on b6 is more useful.

34...f4!?!

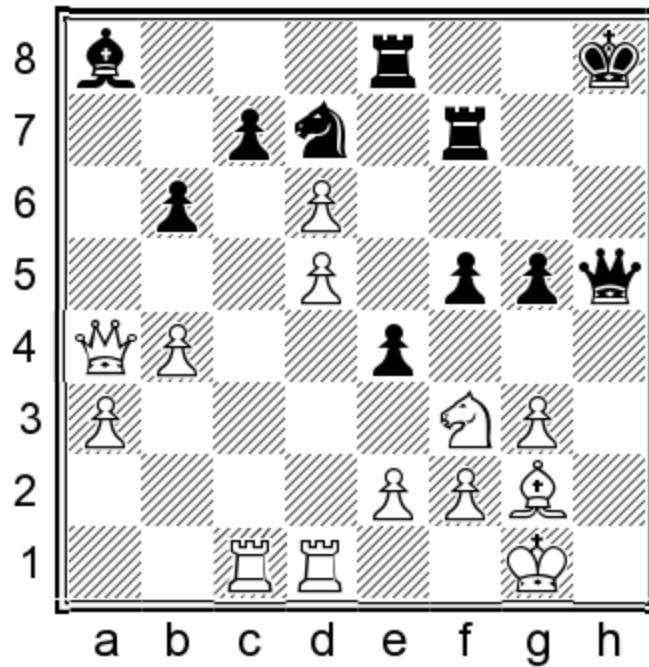
34...Bc8 35.e3 is also unclear.

35.gxf4 Nf6

unclear.

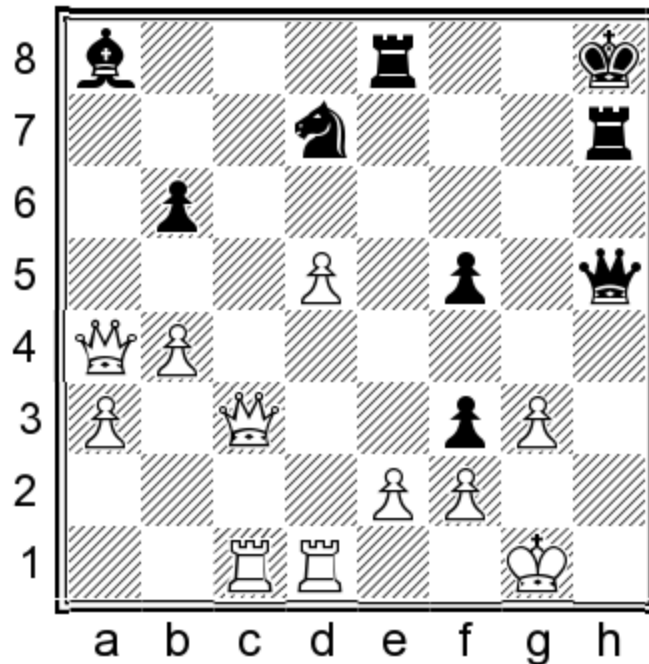
D) 31.cxd6!

It turns out that White has time to follow his queenside agenda despite the danger hanging over his kingside.



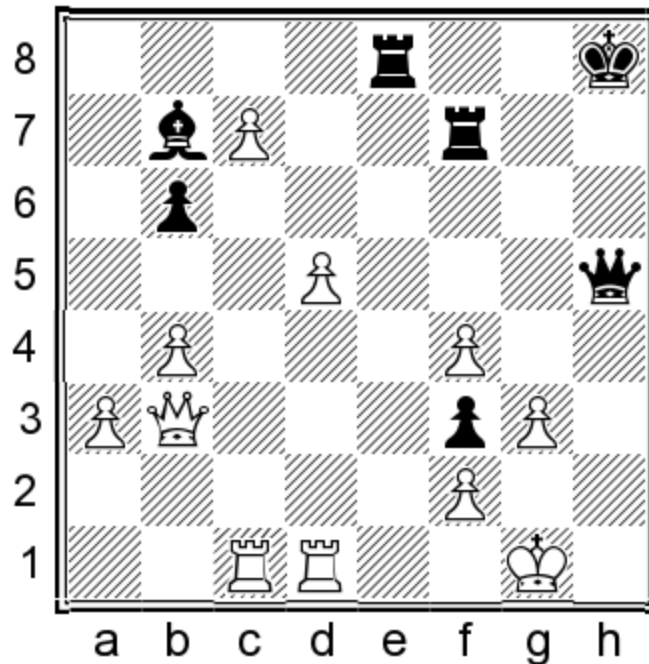
D1) 31...exf3 32.Bxf3 g4 33.dxc7! (one extra credit point). White is fully committed to his queenside plan.

D11) In case of 33...gxf3, White promotes: 34.c8Q, and if Black goes all-in with 34...Rh7 (34...Rxc8 35.Rxc8+ K g7 36.Qxa8+-) White puts his second queen to good use: 35.Qc3+! (one extra credit point; 35.Qxe8+? Qxe8 is unclear),



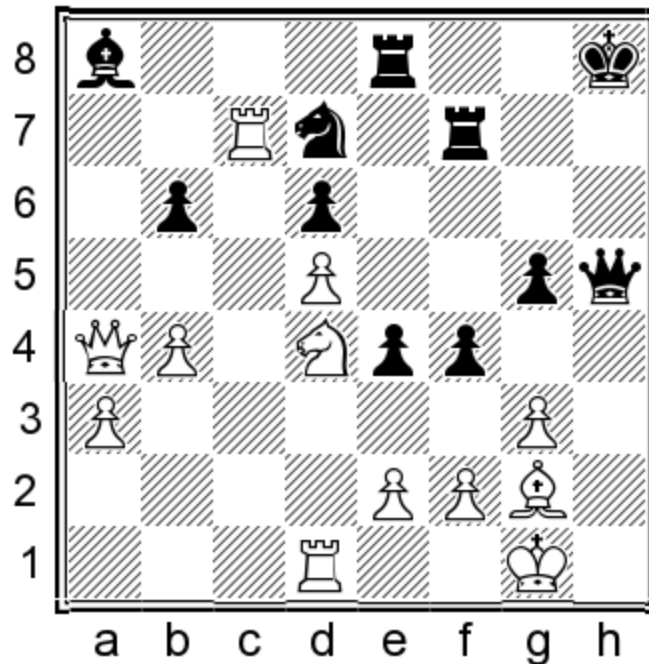
35...Kg8 36.Qxf3 Qh2+ 37.Kf1 and the black attack reaches a dead end;

D12) 33...Bb7 34.Bg2 f4 35.Qb3! (one extra credit point; 35.gxf4 Nf6±). The queen gets back in the defense in the nick of time. White has four pawns for a piece, and the one on c7 is worth gold. Black has one last shot at attacking the white king before it's too late: 35...f3 (35...Rh7 36.gxf4 g3 37.fxg3 Qh2+ 38.Kf1 Nf6 39.Qb2 Qxg3 40.Rd3+-) 36.exf3 Ne5 (36...gxf3 37.Rd4! Kg8 38.Rh4+-) 37.f4 Nf3+ 38.Bxf3 gxf3.



Things look scary around the white king, but he has a good antidote for the opponent's attack – a counterattack: 39.Qc3+ Kg8 40.Re1! Rc8 41.Re5+- . This move would not be possible in a similar position in the C) 31. cxb6 line because the d6-pawn would cover that square.

D2) 31...cxd6 is a major alternative. White gets a better version of the 31.Nd4 line after 32.Nd4 since Rc1-c7 becomes a serious resource: 32...f4 (32...e3 33.Rc7 exf2+ 34.Kxf2 Nf6 35.Rxf7 Ng4+ 36.Ke1! Qxf7 37.Nxf5!+-) 33.Rc7! (one extra credit point).

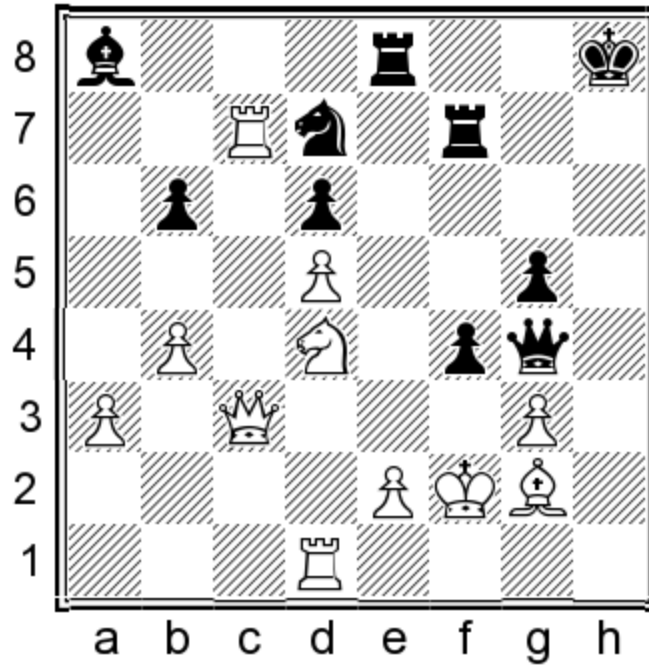


Black has many ways to continue the attack. Here are a few of the options:

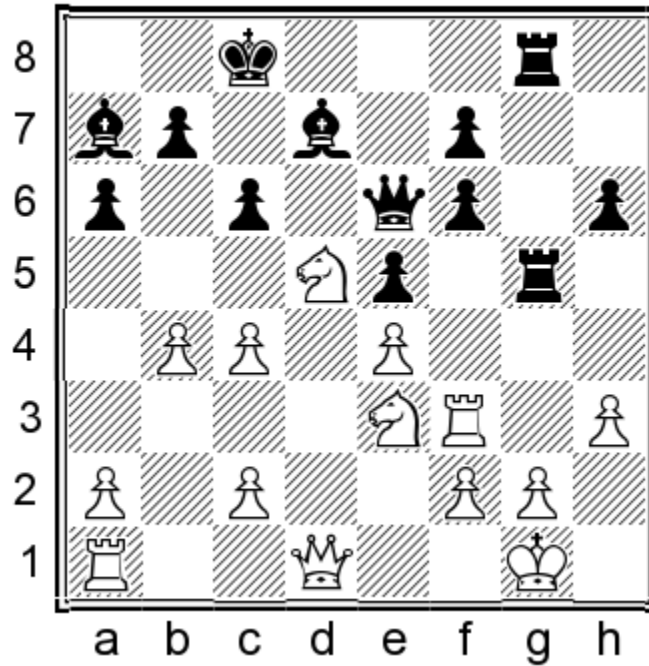
D21) 33...fxg3 34.fxg3 Rh7 is the most direct approach. But White survives the attack: 35.Rxd7 Qh2+ 36.Kf2! (36.Kf1!? Rf8+ 37.Nf3 exf3 38.Rxh7+ Qxh7 39.exf3 and White wins) 36...e3+ (36...Rf8+ 37.Ke3 Qxg3+ 38.Kd2 Qxg2 39.Rxh7+ Kxh7 40.Qd7+ and White wins) 37.Kf1 Rf8+ 38.Nf3 g4. Black has burned all his bridges in the attack, only to be brutally stopped with 39.Qxa8! (one extra credit point), which defects the rook from the f-file and attacks the h2-queen;

D22) 33...Nf6 34.g4! Qg6 35.Rxf7 Qxf7 36.Nf5 is also winning for White;

D23) 33...Qg4!/? is the trickiest attempt. White wins only if he plays 34.Qb3! (Black is fine after 34.f3 exf3 35.exf3 Qxg3 36.Rxd7 Re1+ 37.Rxe1 Qxe1+ or 34.Ne6 Bxd5! 35.Rxd7 e3! 36.Bxd5 exf2+ 37.Kxf2 Qxg3+ 38.Kf1 f3! 39.exf3 Rxf3+ 40.Bxf3 Qxf3+) 34...e3 35.Qc3! (one extra credit point) 35...exf2+ 36.Kxf2.



The white king will eventually escape via e1, and White will consolidate his positional advantage: 36...Kg8 (36...fxg3+ loses to 37.Kg1 Kg8 38.Rd3) 37.Ne6 Nf6 38.Qc2!! fxg3+ 39.Ke1.
 Your score = extra credit



Recommended pre-thinking time: 5-10 minutes (2100-2300 = 10 minutes; 2300+ = 5 minutes). Recommended time control: 35 min + 5 sec.

SOLUTION

Training Position – Exercise 8-

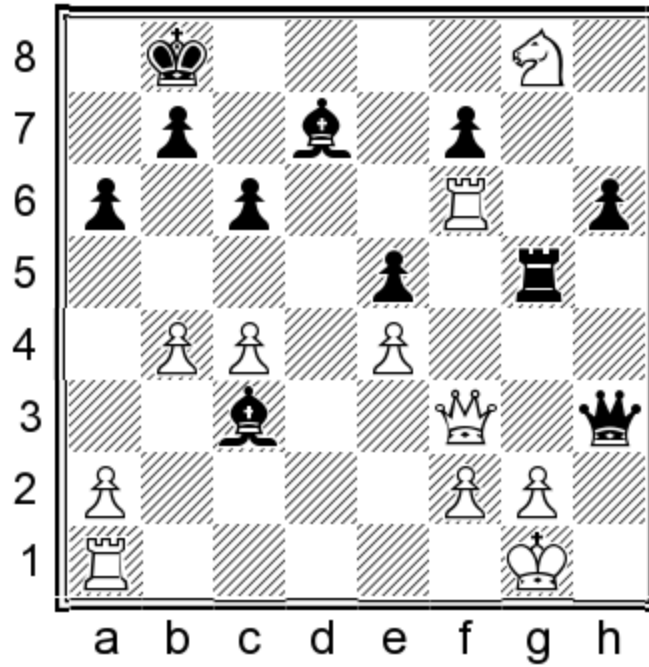
White can take the f6-pawn in one of two ways, but only 22.Nxf6! works. Let's see the alternatives first:

A) 22.Rxf6?

This most direct option is a mistake.

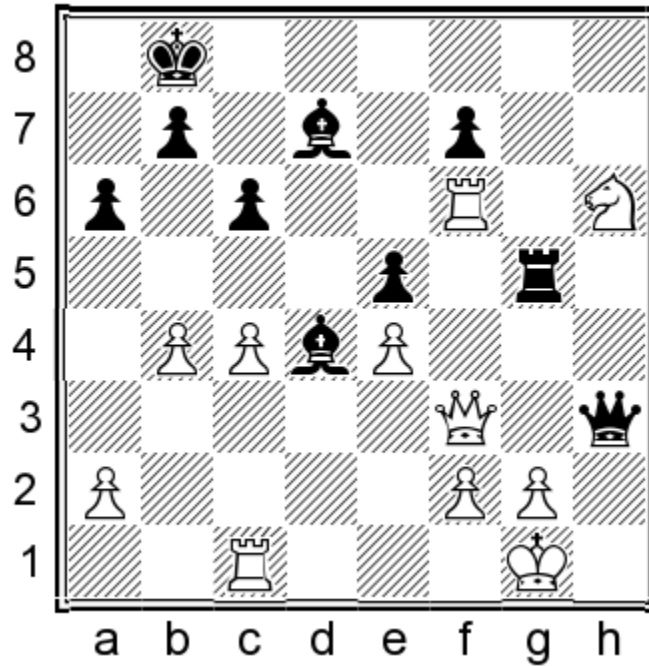
A1) 22...Qe8! (one extra credit point). Backward moves are sometimes stronger than the more aggressive options in sharp positions. Keeping the e7-square defended is important. 23.h4 R5g7!. Once again, restraint is a virtue. White loses material after 24.c5 cxd5 25.Qxd5 Be6. 23...Rxg2+?! is worse due to 24.Nxg2 Bh3 25.Kh2 Bxg2 with an unclear position;

A2) 22...Qxh3? looks very promising, but it doesn't work concretely: 23.Ne7+ Kb8 24.Nxg8 Bxe3 25.Qf3 Bd4 (25...Rg3 loses to 26.fxe3) 26.c3! (one extra credit point) 26...Bxc3.



White has repelled a direct attack, and now he has the upper hand.
The game could continue:

A21) 27.Rc1 Bd4 (27...Bxb4 28.Nxh6 Qh4 29.g3 Bc5 30.Rc3
Rxc3+ 31.Qxc3 Qxf6 32.Nxf7 Bd4 33.Rd3+-) 28.Nxh6.



It seems like White is completely winning now, but Black can still stir up some trouble with 28...Rg3! (one extra credit point).

Fortunately for White, he has 29.Nf5! (one extra credit point), forcing simplification into a better endgame: 29...Rxf3 30.gxh3 Rxf2 31.Kh1 Be6;

A22) 27.Rd1!?! Rxg8 28.Qxh3 (28.Rxd7? Qxd7 29.Qxc3 Qd1+ 30.Kh2 Qh5+ 31.Qh3 Rxg2+! 32.Kxg2 Qg5+ 33.Qg3 Qxf6³) 28...Bxh3 29.Rd3! (one extra credit point) 29...Bxg2 (29...Rxg2+ 30.Kh1+-) 30.Rxc3 Bxe4+ 31.Kh2 Bg6 with a better position for White.

B) 22.h4

The intermediate option, played in Safarli-Kourkoulos-Arditis, Vrnjacka Banja 2023 (0-1, 33).

22...R5g6

22...R5g7 23.Nxf6 Bxe3 24.Nxg8 Bf4 will be similar to the main line.

23.h5 Rg5

Now, instead of 24.Rxf6? Qe8 25.c5 cxd5 26.exd5 Bg4!, which led to a lost position for him, White should have played:

24.Nxf6 Bxe3 25.Nxg8 Bf4

But he likely missed a strong resource:

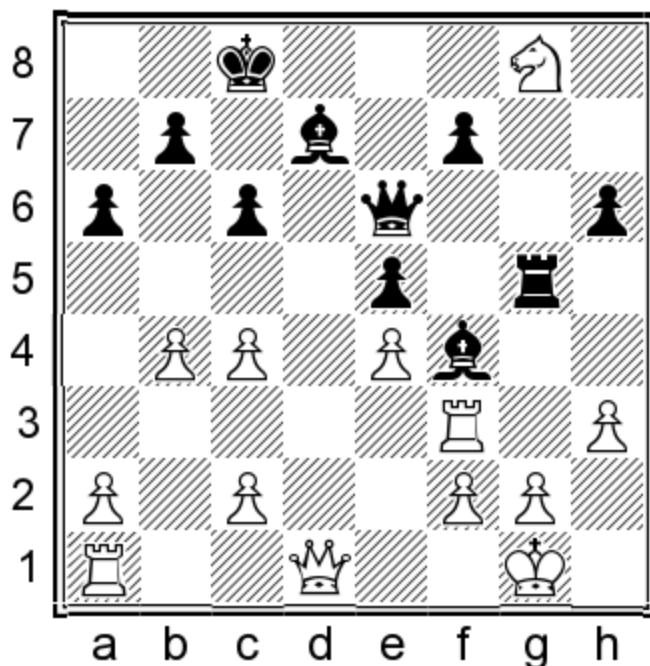
26.b5!!

(two extra credit points) This gives him enough counterplay on the queenside. A similar idea works well for White in the 22.Nxf6 line;

C) 22.Nxf6!

Black's hand is forced now:

22...Bxe3 23.Nxg8 Bf4



The knight is trapped on g8. White can console himself by getting a lot of pawns for it after 24.Nxh6. However, a stronger solution exists:

24.b5!!

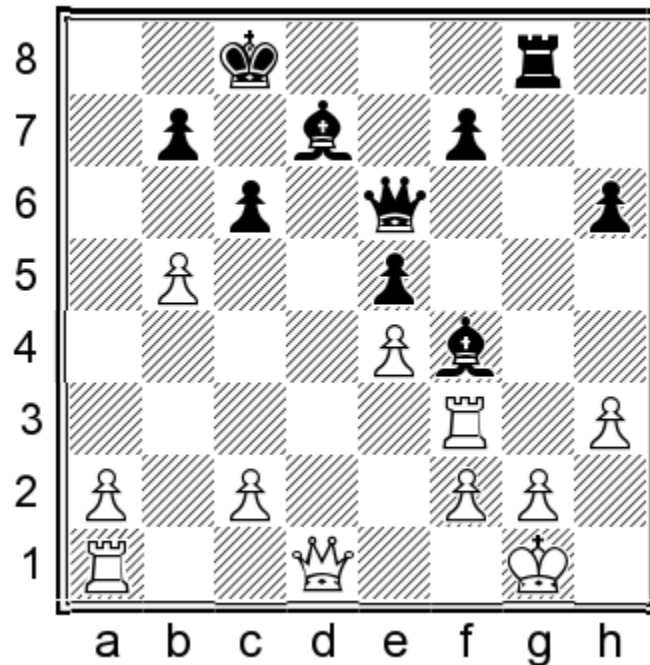
Two extra credit points. White starts attacking the black king out of nowhere, forcing the opening of the files around it. I should mention that there is nothing wrong with 24.Nxh6 Qxh6 25.Qd3, when White consolidates his kingside. This rare material imbalance is difficult to evaluate, but White shouldn't be worse due to his excess pawns.

Black can open any of the a-, b-, or c-files in response to 24.b5, but White gets the initiative either way:

C1) In case of 24...cxb5 25.cxb5 Bxb5, White wins brilliantly: 26.Rc3+ Bc6 27.Rxc6+! (one extra credit point; the g8-knight might be trapped, but it's still alive!) 27...bxc6 (27...Qxc6 28.Ne7+) 28.Qd3! Rxc6 29.Qxa6+ Kd8 30.Rd1+ Ke7 31.Qa3+! (one extra credit point);

C2) 24...Rxc6 25.bxc6 bxc6 26.Rb1 Qg6 27.g3+-;

C3) 24...axb5 25.cxb5 Rxc8 (25...cxb5 26.Ra3! Kc7 27.Qe1! Rxc8 28.Rd1! with an attack).



position after 25...Rxc8

Black has captured the knight and is hoping to attack along the g-file. However, White gets ahead with 26.Ra3! Kc7 27.b6! (one extra credit point) and Black will need to commit resources to his king's defense. For example: 27...Qe7 28.Qd3 Be6 29.Qc3 Bc4! 30.Rd1 Ba6 31.g3. White is better.

Your score = extra credit

Total extra credit points earned for Tactical Training Positions = extra credit

Total scores and grading scale

1) Total points for the FHT section = /27 points

The grading scale for the FHT section:

Your total score Corresponding Elo rating

0-13 pts Below 2100

14-18 pts 2100-2250

19-23 pts	2250-2400
24-27	2400+

2) Total points for Tactical Analysis exercises = /109 points
Total extra credit points for Tactical Analysis exercises = extra credit

Total score for Tactical Analysis section = points

The grading scale for the Tactical Analysis section:

Your total score Corresponding Elo rating

0-54 pts	Below 2100
55-75 pts	2100-2250
76-97 pts	2250-2400
98 pts or more	2400+

3) Total extra credit points for Tactical Training Positions = extra credit

4) Total points for Chapter 3 exercises = /136 points

Total extra credit points for Chapter 3 exercises = extra credit

Total score for Chapter 3 = points

The grading scale for Chapter 3:

Your total score Corresponding Elo rating

0-67 pts	Below 2100
68-94 pts	2100-2250
95-121 pts	2250-2400
122 pts or more	2400+

Chapter 4

Middlegame

Training

By contrast to the previous one, this chapter mainly deals with positional play in the middlegame. When examining typical middlegame mistakes of ambitious tournament players in Chapter 1, I pointed out the lack of strategic thinking as a big drawback. The bulk of the material in this chapter is geared toward helping you get used to this ‘slower’ kind of thinking in the middlegame. You will still need to calculate variations to find the right solutions to the exercises in this section, but the tactical content will be much less than in Chapters 2 and 3. Instead, the more abstract skills will become vital here, such as:

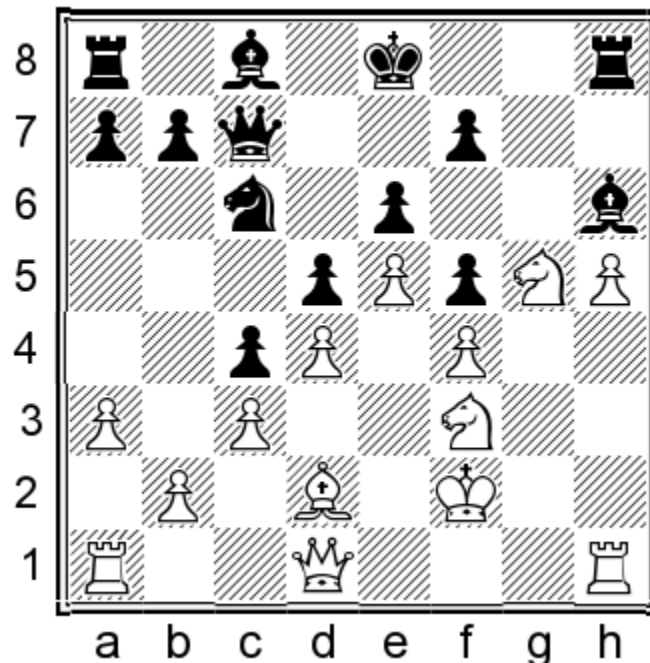
- planning a few moves ahead
- exploiting the opponent’s weaknesses
- finding better squares for your pieces
- preventing the opponent’s positional ideas

The first study activity, Find a Mini-plan (FMP), presents 30 exercises from 15 game fragments, where you will be tasked with finding the best positional solution. This is a practical exercise that directly applies to real game scenarios. Following this, you will have the opportunity to tackle another 30 middlegame exercises in five Middlegame Simulations. This chapter doesn’t include a Solutions section, as all exercises and solutions are integrated within

the game text. I will illustrate the similarities and differences between these two study methods in the upcoming examples.

Let's start with the FMP exercise.

FMP – Example 1



White is considerably better in this French middlegame. He has more space and an outside passed pawn. However, Black's blockade on the kingside looks formidable. Your task is to find the best plan for White to progress in this closed position.

In the Exercises section, you will see the following instructions before each exercise:

EXERCISE 1: Please suggest a mini-plan to improve White's position.

Please note that the solutions will follow immediately in the text. To fully engage with the problem-solving process, I suggest you cover the next moves with a sheet of paper or another object to avoid accidentally seeing the solution before you've had a chance to solve it.

And the best mini-plan is:

19.Ke3!

(two points), clearing the e1-h4 diagonal to improve his bishop. Meanwhile, the king is perfectly safe on e3.

Of course, I will also provide reasonable alternatives, which can sometimes be just as good as the main solution. In this case, 19.Be1!? Bd7 20.Ke3 (two points) is equivalent to the main line. In cases when two consecutive moves of the mini-plan are interchangeable, you get full credit for the exercise, whichever move you choose.

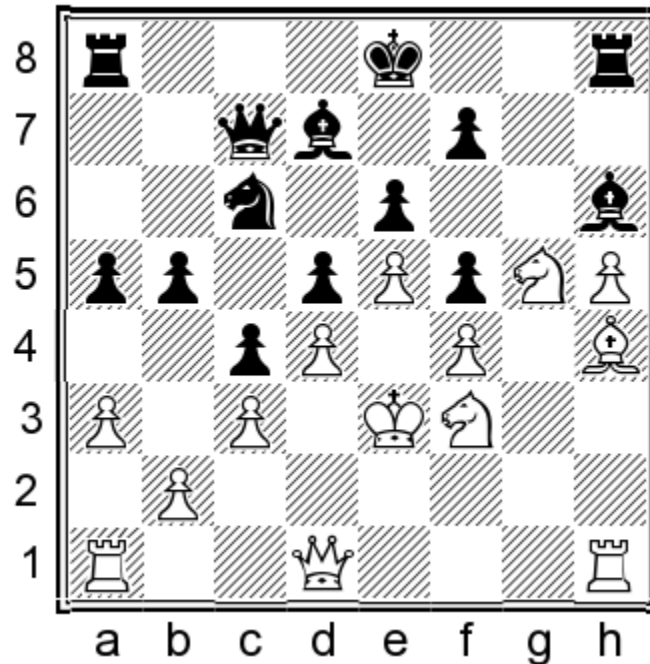
19.Ke2!? (two points) also earns full credit as long as you intended the same plan for the white bishop. The fact that the king is a little more in the way of White's other pieces on e2 than on e3 doesn't make a significant difference.

Apart from the bishop maneuver, White has a few more reasonable mini-plans. 19.Qg1!? (one point) is a tricky tactical idea, preparing 20.Nh7 and 21. Nf6+. Black has only one move to stay afloat: 19...Ne7 (it is not possible to prepare queenside castling with 19...Bd7 due to 20.Nxf7! Kxf7 21.Qg6+ Kf8 22.Qf6+, whereas 19...Rg8 runs into an emphatic refutation: 20.Nxe6!). If Black passes the first test, White still needs to demonstrate a convincing mini-plan. It's not too late to go for the bishop maneuver to h4 at some point.

In the original game Annapureddy-Melamed, Canberra 2024 (1-0, 47), White played 19.Be3 and then maneuvered his knight to c2 after 19...b5 20.Ne1!? a5 21.Nc2 (one point) in anticipation of Black's ...b4 break. This plan is slightly worse than the text, but it still leaves the door open for the correct bishop maneuver, so you get partial credit for suggesting it.

The same goes for attempting to control the g-file with 19.Qc2 Bd7 20.Rag1± (one point). White will eventually need to transfer the bishop to h4 to make progress.

19...Bd7 20.Be1! b5 21.Bh4 a5



We have transferred the bishop to the desired square, virtually preventing the opponent from castling queenside, but what should we do next? Your second task is to find a new mini-plan to improve White's position further. That means that even if you didn't spot the bishop maneuver to h4 in the first exercise, you get a second chance to get credit for this example. This will be the case in all but the first few game fragments in the Exercises section. Some fragments contain up to three exercises.

EXERCISE 2: Please suggest a mini-plan to improve White's position.

22.Nh3!

This knight retreat allows White to position his bishop to the powerful f6 outpost, significantly improving his chances of a kingside breakthrough.

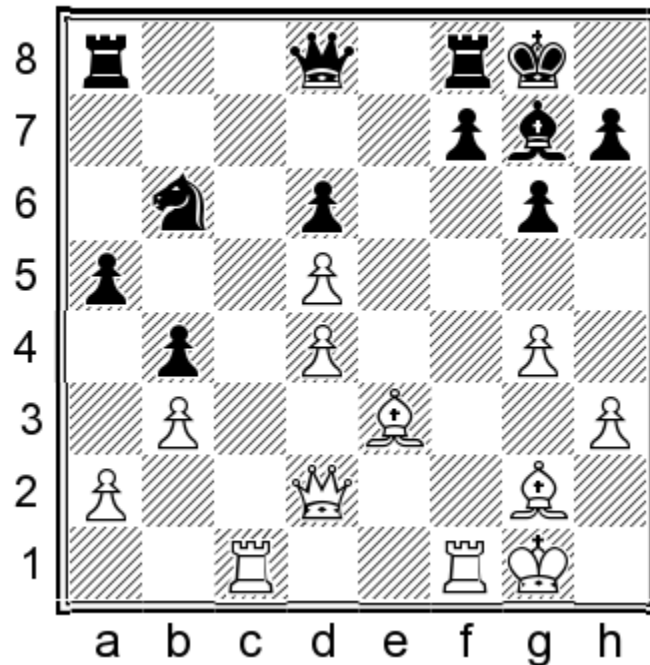
22...Ne7 23.Bf6

One point. After this, we can bring the rooks to the g-file, and Black's kingside blockade will not hold much longer. In this case,

alternatives get no credit because this mini-plan should be straightforward enough.

Your score = /3 points

FMP – Example 2



EXERCISE 1: Please suggest a mini-plan to improve Black's position.

20...Nc8!

Two points. This move is not apparent, but it is possible to find it if you ask yourself **three positional questions** (per GM Jacob Aagaard):

1. What does the opponent want?
2. Where are the weaknesses?
3. What is the worst-placed piece?

The answers to these questions are:

1. It's important to prevent White from infiltrating the c6-square with his rook;
2. White has weaknesses on d4 and c3;

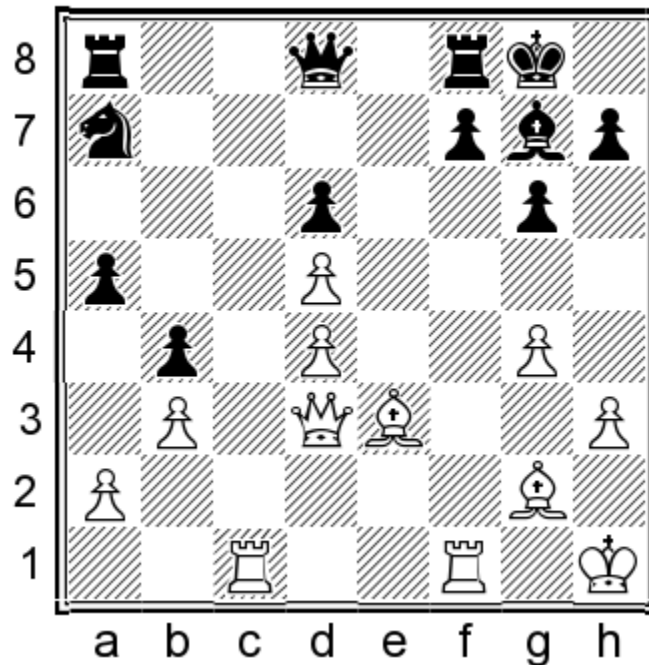
3. The black knight's future on b6 is bleak.

I strongly recommend using this practical checklist whenever you encounter a challenging position. These three questions often provide valuable insights into the critical aspects of the position.

Alternatively, 20...a4 (one point) is an interesting attempt to obtain counterplay, but White can ignore it with 21.Rc6!, continuing with his main plan of attacking the isolated d6-pawn (21.Qxb4 is possible, but the queen attracts unnecessary attention after 21...Rb8): 21...axb3 22.axb3 Rb8 23.Bf4 Nc8. This move holds Black's position together, but this is a much more passive proposition than the text.

Lastly, it makes sense to put the rook on the open file with 20...Re8, but after 21.Rc6 Black still needs to play 21...Nc8! (one point).

21.Kh1 Na7 22.Qd3



EXERCISE 2: Please suggest a mini-plan to improve Black's position.

22...Rb8

One point. Black prepares ...Na7-b5 in the most efficient way.

A) Preliminary 22...Re8!? also works as long as the plan is to prepare ...Nb5 shortly: 23.Bf2 Rb8 (one point);

B) Preparing the knight jump to b5 with the queen, 22...Qd7 (no credit), is slightly inaccurate because it allows 23.Rc6!. Accepting the exchange sacrifice is not good, and 23...Rab8 24.Ra6 makes things unnecessarily complicated;

C) 22...Qb6 (no credit) is even worse: 23.Rc6! Nxc6 24.dxc6 and the protected c-pawn fully compensates for the sacrificed exchange. This exercise reminds us of the crucial aspect of chess – the need to consider the opponent’s ideas and plans when forming your own strategy. Chess is a game for two, and your opponent’s moves can significantly impact your reply.

23.Bf4

23.Rc6 Nb5!³.

23...Nb5

Black has a pleasant positional edge now, although a draw was soon agreed in Cheparinov-Chigaev, Skopje 2019 (1/2-1/2, 25).

Your score = /3 points

Middlegame Simulation

In *How to Study Chess on Your Own*, I shared my personal experience with the ‘Simulation’ method, also known as ‘Solitaire Chess’ or ‘Guess the Move’. This study method, which involves guessing your next move as you replay a master game, best simulates the conditions of playing a real game. If you have never done this, I recommend incorporating it into your training plan because it’s an excellent way to practice a variety of chess skills. The ‘purest’ way to do a simulation is to guess every move of the game, except perhaps the opening, which can be quickly played through. I used this format for Middlegame and Endgame Simulations in the first Workbook volume. However, some readers

found guessing every move in a printed book impractical compared to doing these exercises using chess software.

In this volume, I decided to modify the exercises to make them more accessible, allowing you to focus on the key moments of the game. Instead of guessing every move of the featured game, you only have to do it in **five to seven critical moments per simulation**. We will focus on the most instructive junctions, and you will not need to guess simple moves, automatic captures, moves with many equivalent alternatives, etc., as was the case previously. I have highlighted every critical moment with a diagram, a brief explanation, and instructions about who it is to play. The solution in the text will follow right after the question, just like in the FMP game fragments, providing you with immediate feedback and learning opportunities.

I will also comment on the moves between the exercises to help you follow the flow of the game and make stronger connections, just as I did with FMP fragments. Another issue I wanted to avoid with this format is that consecutive diagrams from the same game can give clues about the solution of the preceding exercise(s) if you don't solve them in order of their appearance (as was the case with similar exercises in Volume 2 of the Workbook). That shouldn't be a problem when you move through the game 'chronologically', without knowing anything about the next exercise. I prefer this format because it allows you to study the game or a game fragment as a whole instead of a loosely connected collection of exercises from the same game.

As you can see, there are many similarities between the two types of exercises in this chapter, but the main difference is that the exercises in Middlegame Simulations require a broader set of skills than those in FMP. You will not only look for the best mini-plan or maneuver in the critical moments of the simulations. Sometimes, the best move is a correct piece trade decision, a subtle intermezzo, or even a

tactical shot. In other words, you need to use all your capabilities to find the best move in a simulation, just like in a real game.

Here is one example of how that works.

Middlegame Simulation – Example Dragan Solak 2635

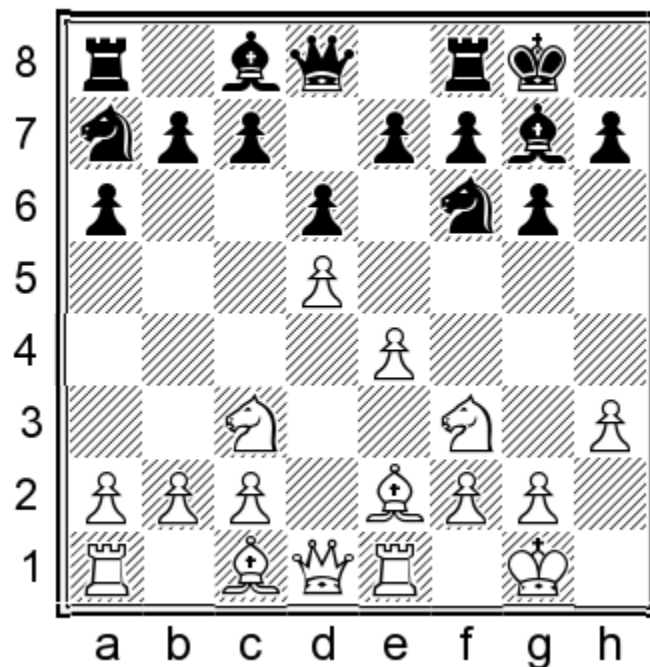
Magnus Carlsen (2857)

Baku Olympiad 2016

1.e4 d6 2.d4 g6 3.Nc3 Bg7 4.Nf3 a6 5.Be2 Nf6 6.0-0 0-0 7.Re1 Nc6 8.d5 Na7!?

9.h3

Carlsen played a provocative opening against his solid opponent.



Black's knight looks out of place on a7, but he would like to argue that it was worth provoking White to push the pawn to d5. That way, it becomes easier to attack the white pawn center and activate the important dark-squared bishop.

As the opening phase is still unfolding, it's crucial to immerse yourself in the role of a player in a real game. In this exercise, your task is to propose the best mini-plan for Black in this position. Take your time with each exercise, spending up to 15 minutes to fully

grasp the strategic nuances. This approach will deepen your understanding of the game and improve your strategic thinking.

EXERCISE 1: Please suggest the best continuation for Black.

9...b5

Two points. The move 9... b5 is the optimal choice for Black. It serves multiple purposes, threatening to undermine the e4-pawn with 10... b4 and preparing to fianchetto the second bishop, which was previously limited on the c8-h3 diagonal. This move earns you the maximum score of two points, indicating a perfect solution.

If you opted for a King's Indian type of structure with 9...e5 (one point), you would get partial credit. While this is a reasonable approach, White enjoys a pleasant edge thanks to the space advantage, as in the following game: 10.a4 Bd7 11.Be3 Nc8 (Malakhov-Mchedlishvili, Doha rapid 2016 (1-0, 36)) 12.a5.

Alternatively, it is possible to undermine the white pawn center with 9...c6 (one point), but in this case, White can prevent the move from the game with 10.a4! cxd5 11.exd5 Bd7 12.Be3, keeping the black queenside pieces cramped.

9...e6 (one point) 10.a4 exd5 11.exd5 Bd7 12.Be3 is similar to the previous line, with the only difference being that the e-file is open instead of the c-file. This move also deserves partial credit since White keeps a stable space advantage.

10.Bf1 Bb7 11.a4

This move may not have been necessary. White would have kept a slight edge with the simple developing move 11.Bg5. For example, 11...c6 12.dxc6 Nxc6 13.Nd5 leads to a fairly typical Sicilian Dragon middlegame.

11...b4 12.Na2 a5

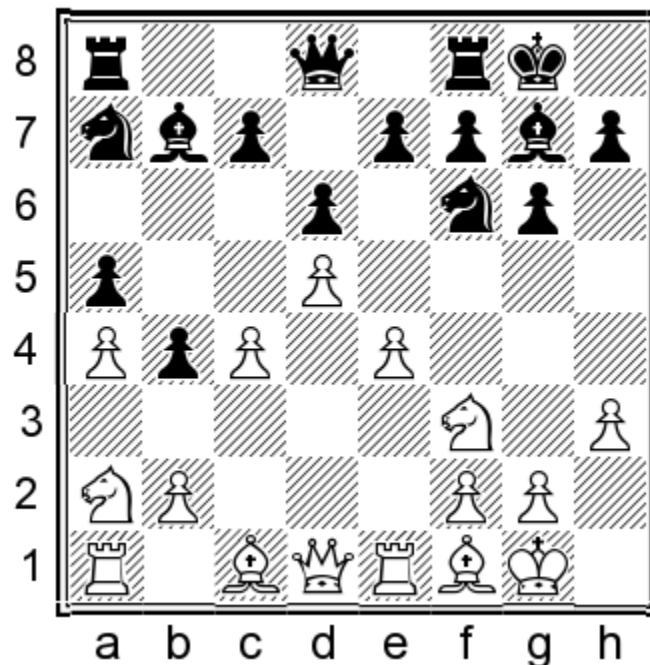
The misplaced knight on the rim is not a minor detail. While it may not seem significant at first, its placement becomes a crucial factor

in the game's dynamics, especially considering the serious position error on the next move.

13.c4?

13.c3 was required, practically forcing Black to play 13...c5 when he loses the potential to undermine the d5-pawn. The white position still looks a bit more comfortable after 14.Bf4.

White hoped to solidify his pawn center with this move but misjudged the position. Your second exercise is to find a way to prove him wrong.



EXERCISE 2: Please suggest the best continuation for Black.

13...e6

Two points. This is a critical moment to disrupt the white center while his pieces are still undeveloped.

A) 13...Nd7 (one point) is a viable option, as it opens the dark-squared bishop and sets up a potential King's Indian attack type of position after 14.Rb1 e5! (one point; but not 14...Nc5?! (no credit) 15.Be3²). In this case, I sometimes award conditional full credit, meaning you only get full credit if your first move and its follow-up

are correct (1+1 points out of 2 possible points). If only the first move is correct, but you played it with the wrong idea, you get partial credit (1 out of 2 points in this case). The game could continue 15.Bg5 f6 16.Be3 f5!³ since 17.Ng5?? loses to 17...f4;

B) The immediate 13...e5 (one point) is less precise due to 14.Be3 when Black needs to halt the queenside with 14...c5 (14...Nd7?! is too slow here due to 15.Nc1 f5 16.Nb3 and White will push c4-c5 soon), giving his opponent time to consolidate and prepare against ...f5 with 15.Bd3, Nc1, etc.;

C) The other way to undermine the center, 13...c6 (no credit), doesn't work nearly as well as 13. ...e6 due to 14.Bg5 h6 15.Bh4, and it will be very difficult to play ...e6 later without creating serious weaknesses in the black position.

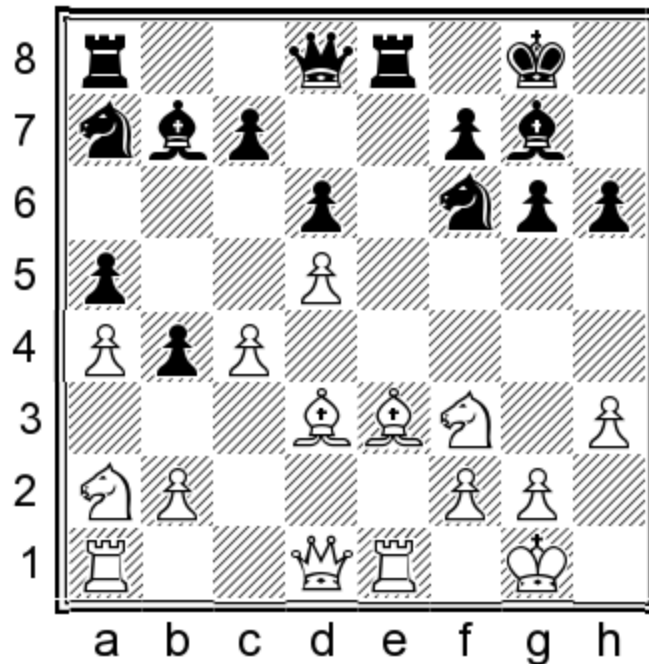
14.Bg5

14.dxe6?! would have been a poor decision because 14...fxe6 opens many squares, files, and diagonals for the black pieces.

14...h6 15.Be3 Re8 16.Bd3?

A serious mistake. There was no need to waste time on protecting this pawn. White had to activate his misplaced knight with 16.Nc1 at once. The e4-pawn was indirectly protected since 16...Nxe4 meets 17.Bxa7 with the following forcing line leading to complications: 17...Bxb2 18.Bd4! Nc3 19.Qd2 Bxa1 20.Qxh6 e5 21.Ng5 Qf6 22.Qh7+ Kf8 23.Be3.

16...exd5 17.exd5



Black has successfully opened the e-file, but new positional measures are required to improve the position further.

EXERCISE 3: Please suggest the best continuation for Black.

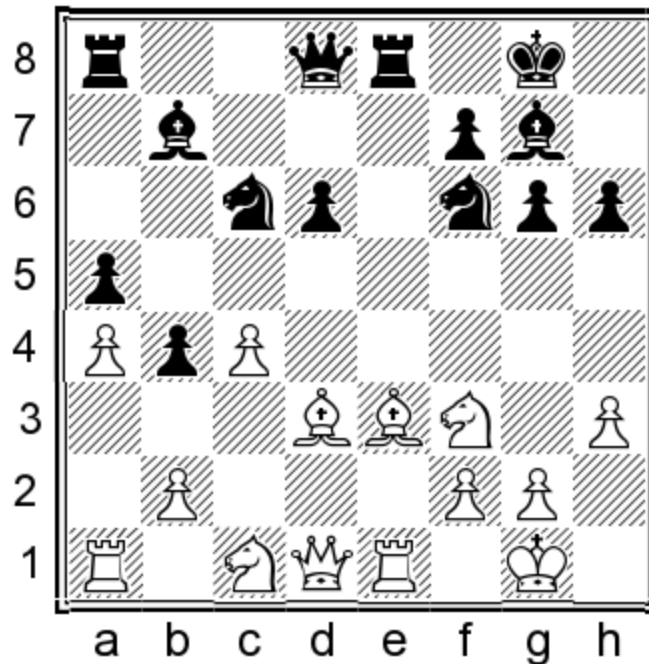
17...c6

Two points. We should take advantage of an opportunity to blow up the pride of the opponent's position, his pawn center. The fact that we will have a backward pawn on d6 is irrelevant in this case. Giving the a7-knight and the b7-bishop some breathing room is more important.

A) 17...Nd7 (one point), opening the long diagonal, is a good idea, but it misses the point. Even after 18.Qd2 Qf6 19.Rab1, Black should push 19...c6 to avoid having issues with a lack of space. However, this is a worse moment to do it compared to move 17 because White can keep the pawn on d5 with 20.Bf1 etc.;

B) 17...c5? (no credit), on the other hand, is a poor positional decision. White will have a considerably easier game than Black due to his extra space. For example: 18.Qd2 Kh7 19.Nc1 Nc8 20.Ne2.

18.dxc6 Nxc6 19.Nc1



Solak finally brings his knight into the game, but it's too little, too late. Carlsen's pieces are fully mobilized for the middlegame battle, ready to take the initiative.

EXERCISE 4: Please suggest the best continuation for Black.

19...Nd7!

Three points. The most potent idea among many reasonable options. This move wins a tempo to open the dark-squared bishop and prepares to exchange White's most important defensive piece, the f3-knight.

A) 19...Ne4!?! (two points) looks good, but it completes only the first part of the two-fold plan above. While Black has a clear advantage after 20.Rb1 Nc5 21.Bf1, it is more static than the one Carlsen achieved in the game;

B) 19...Rc8 (two points) is another reasonable candidate move, looking to put pressure on the c4-pawn; 20.Nb3 Nd7 and Black is better;

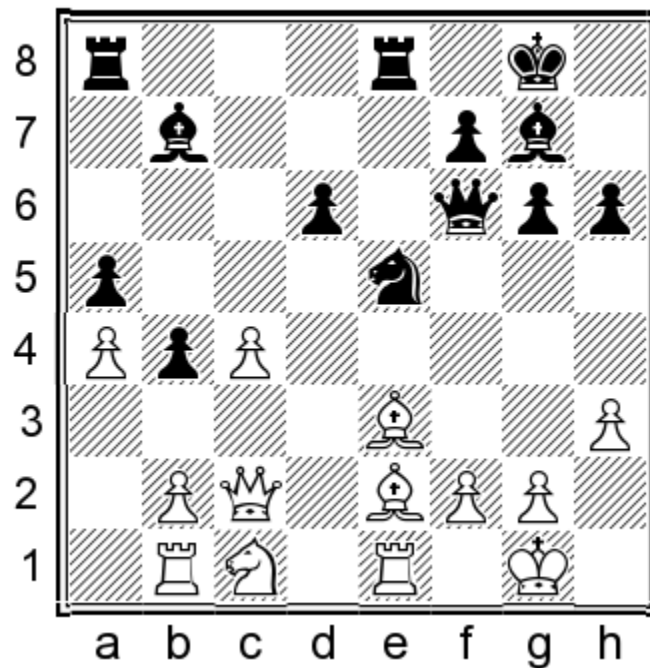
C) 19...Nh5 (one point) is also similar to the other two knight moves, although after 20.Rb1 Qf6 21.Qd2, it becomes clear that h5 is the least promising square for this knight;

D) Finally, as tempting as it may be to open the center with 19...d5? (no credit), it's too early for that due to 20.Nb3 dxc4 21.Bxc4 and the weakness of the c5-square is a serious issue for Black here.

20.Qc2 Qf6 21.Rb1

Black won another tempo to activate his queen as an appetizer, and now he proceeds to the main course:

21...Nce5! 22.Nxe5 Nxe5 23.Be2



The trade on e5 has helped Black swap one of his superfluous knights for the opponent's more important knight. After that, the difference between the activity of the white and black minor pieces has become even more glaring. Black has a much better knight, and his fianchettoed bishops also beat the opponent's 'centralized' bishops. How can Black best capitalize on these positional advantages?

EXERCISE 5: Please suggest the best continuation for Black.

23...d5!

Three points. It might seem paradoxical to play this move since the c4-pawn is such an easy target. However, Carlsen realizes that the white queen is the main target on the c-file, not the pawn. By opening the c-file, he ensures that the opponent cannot properly consolidate with Nb3, and this becomes a game of cat-and-mouse.

A) 23...Qh4! (three points) was just as strong and probably the simplest solution. Black simultaneously threatens ...Be4 and attacks the c4-pawn. After 24.Ra1 Rec8, White loses a pawn, and his position remains terrible;

B) 23...Bc8 (two points) prepares to transfer the bishop to f5. Black is still likely to capture the c4-pawn for free after 24.Ra1 Bf5 25.Qd1 Rec8;

C) The immediate 23...Rec8 (one point) is sensible but less accurate than its alternatives due to 24.Nb3 Nxc4 25.Bxc4 d5 26.Nc5. Now, you need to find 26...Rxc5! 27.Bxc5 dxc4 (one point) to justify your idea. Black has massive compensation for the exchange due to his fantastic pieces. The only issue is that there is no need to imbalance the position as Black can get a winning position with simpler methods;

D) By the way, the reason Black needs to put the e-rook on the c-file instead of 23...Rac8? (no credit) is that it leaves the a5-pawn hanging after 24.Nb3.

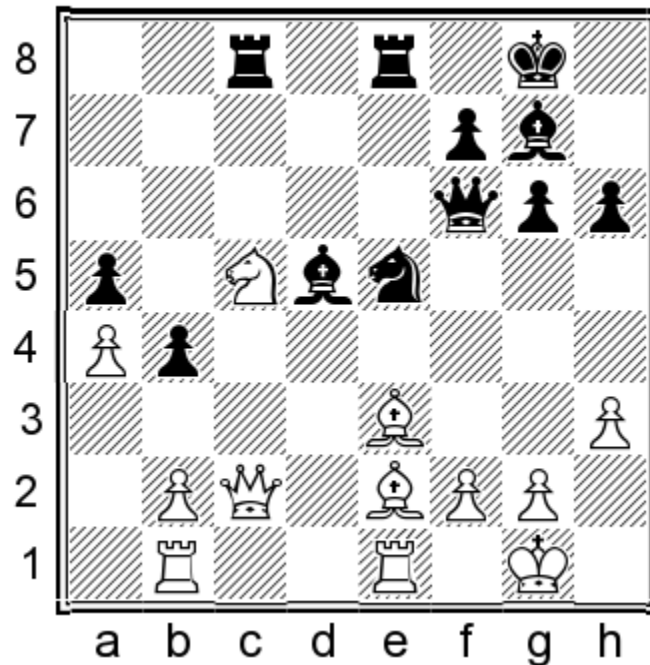
24.cxd5

White would have liked to play 24.c5 instead, but 24...d4! 25.Bxd4 Qg5 throws a spanner in the works.

24...Bxd5 25.Nb3 Rac8 26.Nc5

White's attempt to remain active won't work. However, even in case of 26.Qd1, his position would be strategically losing after

26...Red8 27.Nd2 Nc4! 28.Bxc4 Bxc4. Black's bishop pair runs the show.



EXERCISE 6: Please suggest the best continuation for Black.

26...Bf8

Two points. In most middlegame exercises, you will usually look for a positional solution. However, this critical position also shows that you should keep your tactical radar on when looking for the best move during a simulation. We can draw a parallel with FHT exercises, where you also don't know at which exact move you should look for a tactic. Recognizing a moment to strike tactically is essential in practical play and can be trained. Here, Black sets up a simple pinning tactic, but the complexity of tactical ideas will increase in other games. The common thread with all of them is that **tactics flow from a good strategic build-up.**

26...Nd7 (one point) is also possible, counting on the fact that the endgame that arises after 27.Nxd7 Rxc2 28.Nxf6+ Bxf6 is close to winning due to Black's complete positional domination. Still, more convincing ways exist to exploit the pin on the c-file.

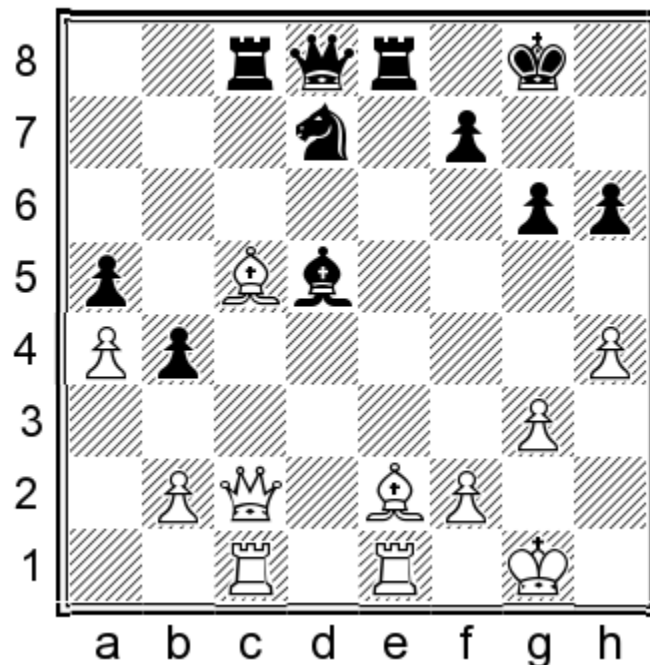
27.Rbc1

The attempt to get out of the pin with 27.Qd2 fails to 27...Rxc5
28.Bxc5 Bxc5 29.Qxd5 Bxf2+.

27...Bxc5 28.Bxc5 Qg5!

The final precise move. Carlsen wants to secure the d5-bishop before going ...Nd7. This move allows him to win a tempo for that purpose. In case of 28...Nd7, White could still try to fight with 29.Qd2, although the outcome would probably be the same eventually.

29.g3 Nd7 30.h4 Qd8!



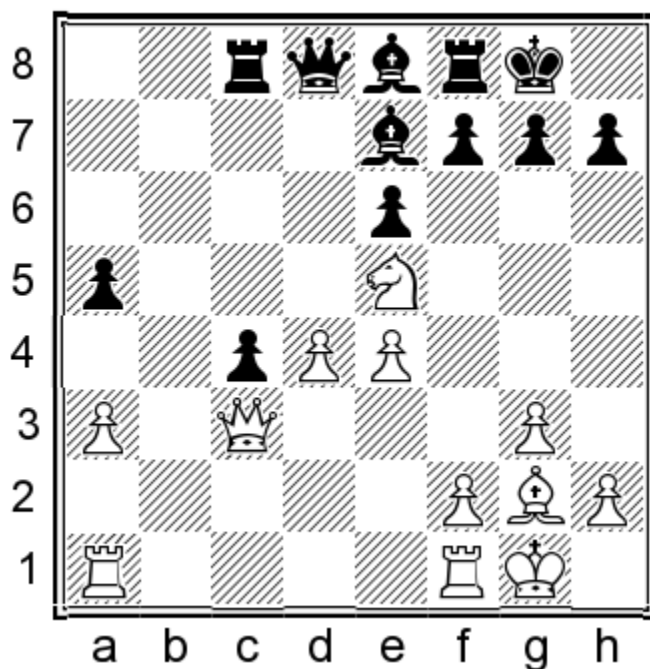
After this move, it becomes clear that White cannot escape the pin he got himself into. Counterattacking the d5-bishop doesn't work due to 31...Nxc5, so Black wins a full piece. Solak could have resigned here, but he kept playing until checkmate, probably by inertia.

**31.Bb5 Rxe1+ 32.Rxe1 Rxc5 33.Qd2 h5 34.Qd4 Qf6 35.Qe3 Bc6
36.Qe8+ Nf8 37.Qc8 Rc2 38.Bxc6 Qxf2+ 39.Kh1 Qxe1#**

Your score = /14 points

Exercises with Solutions

Find a Mini-plan Exercises



EXERCISE 1: Please suggest a mini-plan to improve Black's position.

SOLUTION

– Middlegame fragment 1-

22...Ba4!

Two points. This is the most convincing continuation. Placing the bishop on the solid b3-outpost allows Black to support his passed pawn while it blocks the b-file and takes away the d1-square from the white rooks.

A) 22...Bd6 (one point) 23.Nf3 Ba4! 24.Rfc1 Bb3 25.Nd2 a4 is a slightly worse version of the main idea;

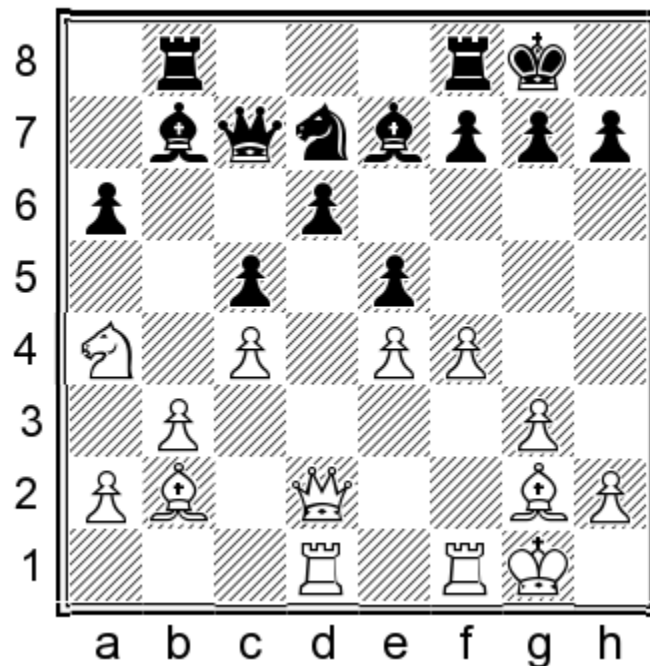
B) 22...Bb5 23.Rab1 Ba6 (one point) is not the best way to support the c-pawn because the bishop is not placed so well on a6 as on b3: 24.Rfc1 with an unclear position;

C) 22...f6 23.Nf3 Bg6 (one point) is another sound plan, activating the bishop on the other flank. However, after 24.Bh3, Black will have to deal with a weak e6-pawn.

23.Rfc1Bb324.Bf1Bf6

Nice prophylaxis. The c4-pawn is safe because of the pressure on the d4-pawn. Black eventually converted his positional advantage in the game Bosiocic-Kryvoruchko, Germany Bundesliga B 2017/18 (0-1, 42).

Your score = /2 points



EXERCISE 2: Please suggest a mini-plan to improve White's position.

SOLUTION

– Middlegame fragment 2-

21.Bc3!

Two points. This elegant bishop maneuver is White's best continuation. The bishop wants to go to a5, from where it controls crucial squares on the a5-d8 diagonal and limits Black's active possibilities on the queenside.

A) 21.Nc3 (one point) is reasonable and natural but less impactful than the game continuation. Black can prepare the queenside expansion (...a5-a4) with 21...Bc6 and after 22.Nd5 Bxd5 23.Qxd5 he can use the a5-square as a springboard for counterplay with 23...Qa5. This line shows why 21.Bc3 is a better option;

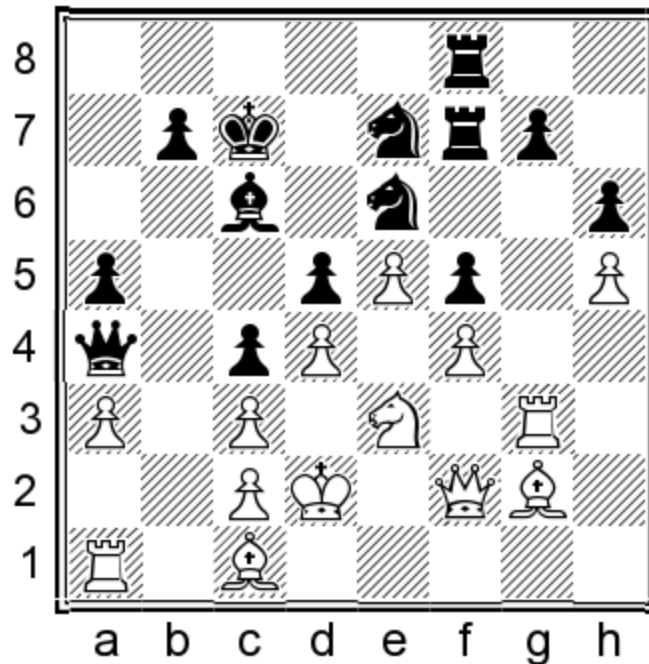
B) 21.Bh3?! Bxe4 22.Bxd7 Qxd7 23.Nxc5?? (no credit) is an attempt to finish the game by tactical means, but this idea fails to 23...Qa7;

C) Another forcing option, 21.fxe5?! Nxe5 22.Bxe5 dxe5 23.Qd7 (no credit), also fails to impress after 23...Rbc8.

21...Bc6 22.Ba5 Qb7 23.Nc3

White recentralized the knight only after taking care of the opponent's queenside counterplay. The remainder of the game Carlsen-Rapport, Wijk aan Zee 2019 (1-0, 40) was a vintage Carlsen performance that you should check out if you are not already familiar with it.

Your score = /2 points



EXERCISE 3: Please suggest a mini-plan to improve White's position.

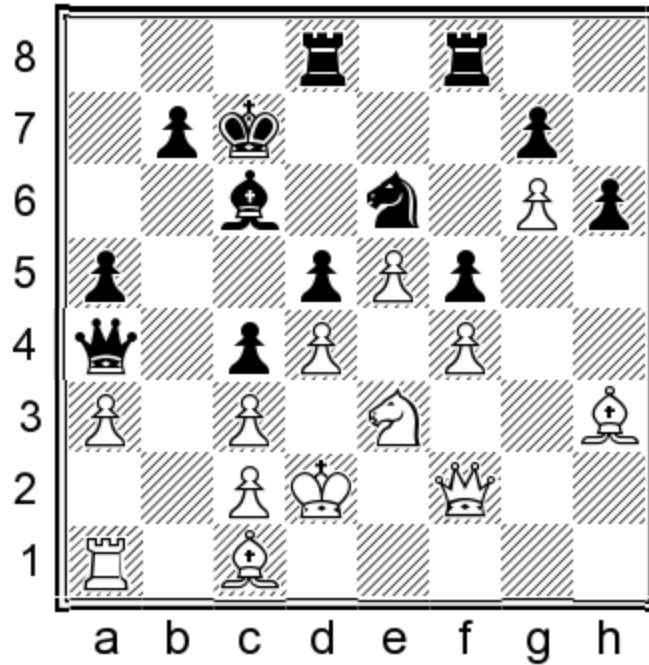
SOLUTION

- Middlegame fragment 3-

29.Nd1!

Two points. The purpose of this maneuver is to expel the black queen from a4 so that White can get more space for his other pieces.

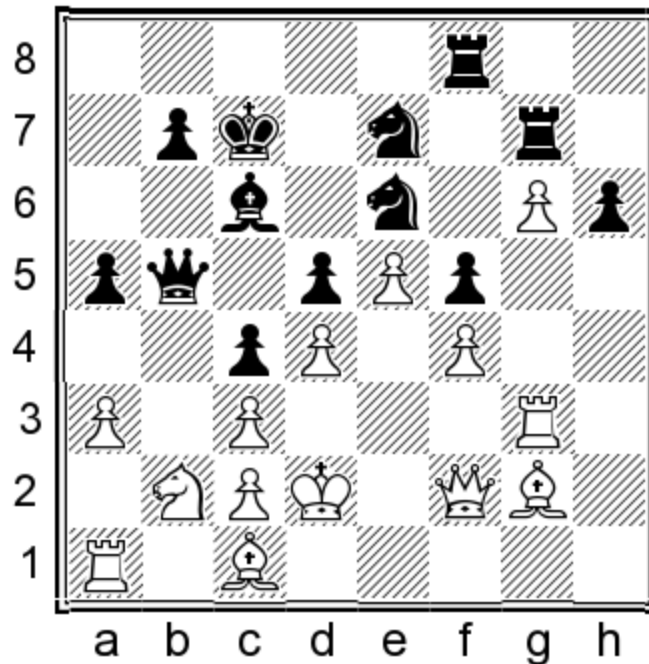
29.Rg6!? Nxg6 30.hxg6 Rd7 31.Bh3 (one point) is an interesting alternative, trying to break through on the other flank. However, things are not so simple after 31...Rdd8! (one extra credit point) because taking on f5 immediately with either piece gives Black good counterplay.



analysis diagram

Instead, White should secure his king first with 32.Kd1! (32.Nxf5?! Bd7; 32.Bxf5?! Rxf5! 33.Nxf5 Rf8) 32...Be8 33.Bxf5 Rxf5 34.Nxf5 Bxg6 35.Nd6. White is better, but this is messier than 29.Nd1. When we have a positional advantage, it's usually better to go for a simple plan instead of a complicated one.

29...g5 30.hxg6 Rg7 31.Nb2 Qb5



EXERCISE 4: Please suggest a mini-plan to improve White's position.

SOLUTION

32.a4 Qb6 33.Nd1!

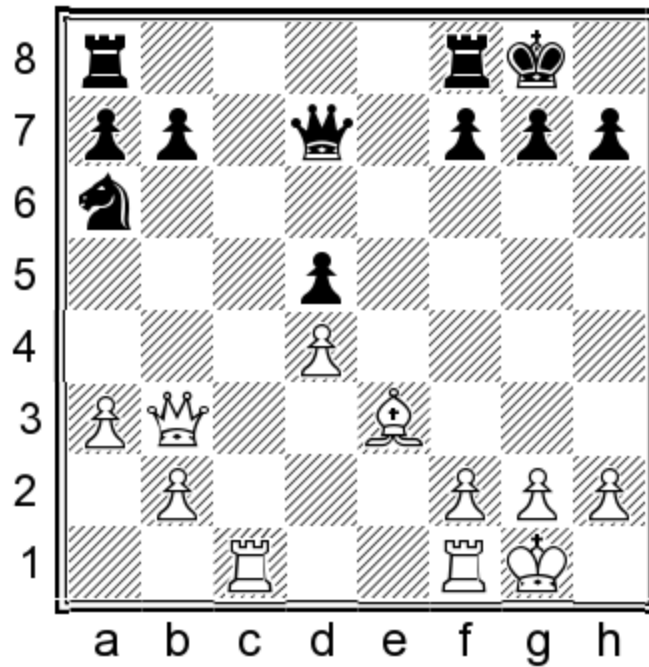
One point. The knight returns to the 'crime scene'. This move allows the dark-squared bishop to be developed on the strong diagonal a3-f8, while the knight can return to e3. White has a strategically nearly winning position. For example:

33...Rxc6 34.Ne3 Rxc3

34...Nxd4 can be ignored: 35.Rxc6 Nxc6 36.Ba3! and Black loses material after 36...Rd8 37.Bd6+ Kc8 38.Nd1.

35.Qxc3 Rg8 36.Qh4

Your score = /3 points



EXERCISE 5: Please suggest a mini-plan to improve White's position.

SOLUTION

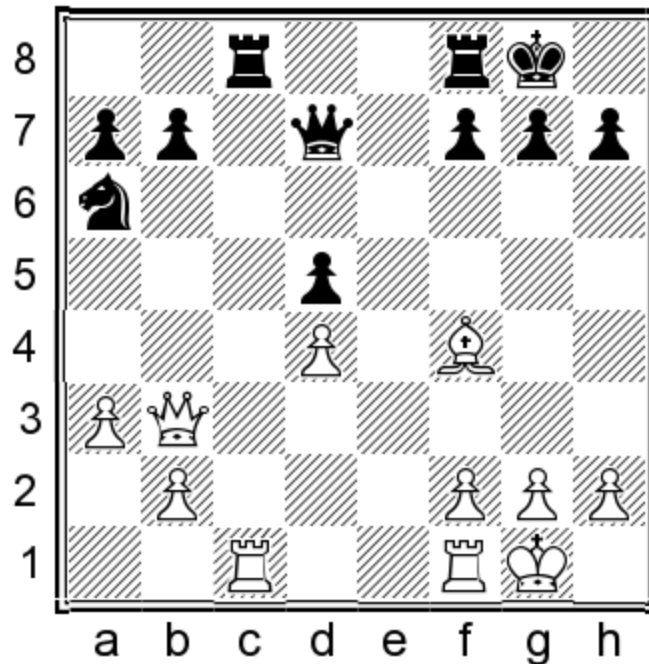
- Middlegame fragment 4-

20.Bf4!

One point. It's best to isolate the knight on the rim. Now, he cannot bring it back into the game via b8 and c6 due to the Rc7 threat.

Other moves, like 20.Rc3 Nb8! 21.Rc5 Rd8 22.Bg5 f6 and 20.Rfe1 Rac8 21.Bf4 Nb8, allow Black to achieve just that, so they receive no credit.

20...Rac8



EXERCISE 6: Please suggest a mini-plan to improve White's position.

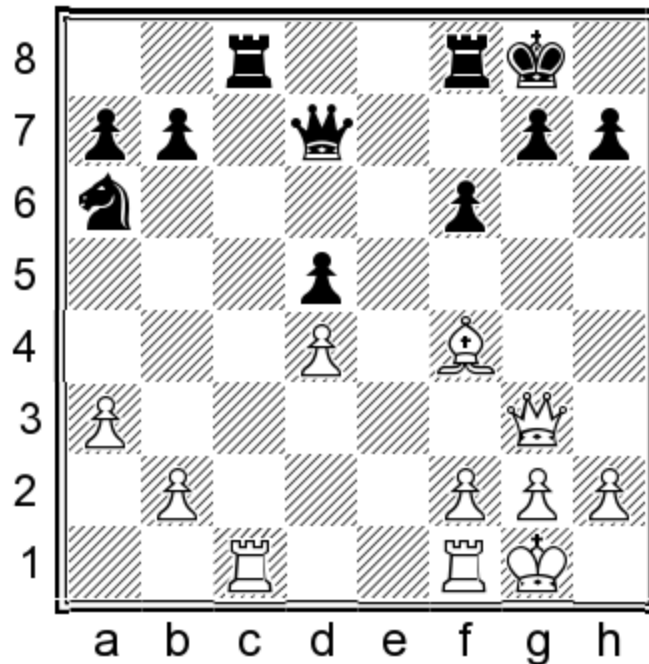
SOLUTION

21.Qg3!

One point. White continues the 'isolation' strategy, keeping the black knight out of the game. At the same time, the white queen sets its sights on the black king. 21.Rfe1 or some other non-committal move again allows 21...Nb8.

21...f6

21...Nb8 fails to 22.Rxc8! Qxc8 23.Bh6.



EXERCISE 7: Please suggest a mini-plan to improve White's position.

SOLUTION

22.h4!±

Two points. White follows the good old principle of two weaknesses. It's not enough to isolate the black knight; we need to open a new front on the other side of the board to win the game. The advance of the h-pawn aims to weaken the black king, whose defense will be shaky without a potentially important defensive piece in the black knight.

22.Rfe1 or any other non-committal move (one point) doesn't achieve much progress, and Black can keep the status quo even with a move like 22...Kf7. The game Carlsen-Wojtaszek, Krasnaya Polyana rapid 2021, continued:

22...Rxc1

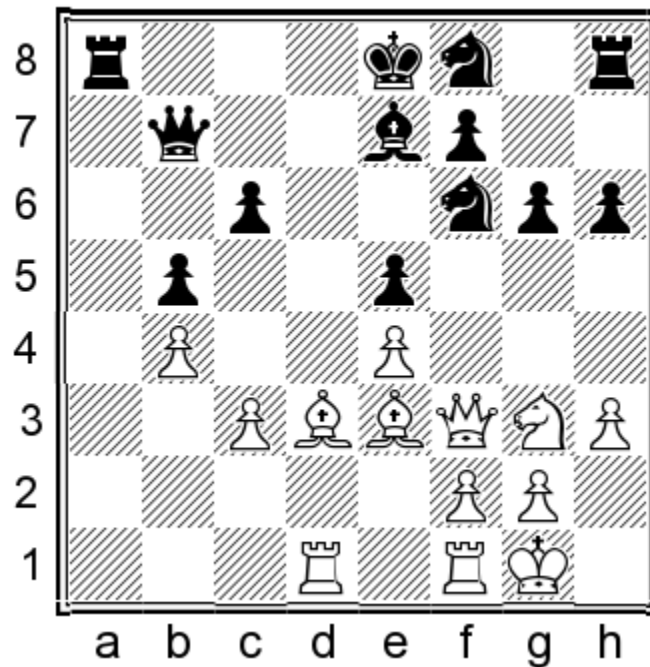
If Black tried to complicate matters with 22...Rc4, White would make a good case for the advance of Harry, the h-pawn, with 23.h5

Rxd4 24.h6 g6 25.Rfe1, with a strong initiative for the pawn due to the opponent's misplaced knight and weak king.

23.Rxc1 Rc8 24.Rxc8+ Qxc8 25.b4 b5 26.h5

And White eventually exploited the 'extra' piece in the endgame (1-0, 48).

Your score = /4 points



EXERCISE 8: Please suggest a mini-plan to improve White's position.

SOLUTION

FMP – Middlegame fragment 5-

21.Bc2!

Two points. The bishop was not particularly useful on d3, so rerouting it to the more active a2-f7 diagonal makes sense. From there, it will discourage Black from playing ...Nf8-e6 and put pressure on the vulnerable f7-pawn.

A) Fighting for the open a-file with 21.Ra1!? also gets full credit, but only if you planned to meet 21...Ne6 with 22.Bc2! (two points). Otherwise, you get partial credit (one point) for this move;

B) 21.c4 (one point) has a similar intention of activating the bishop on the a2-g8 diagonal, but Black doesn't have to cooperate: 21...Ne6! (instead, 21...bxc4 22.Bxc4 Qxb4 23.Rc1 gives White massive compensation for the pawn since Black will struggle to complete his development) 22.cxb5 cxb5 23.Qe2. This position looks great for White, but you can get extra credit for calculating further: 23...0-0! 24.Bxh6 Rfd8 (one extra credit point). Black has completed his development, and White's extra pawn is less significant with ...Nd4/...Nf4 looming;

C) The last mini-plan that deserves attention is 21.Ne2?! Ne6 22.Qg3 (no credit), looking to open the f-file with f2-f4. However, after 22...Qb8, this proves to be a faulty plan because Black can meet 23.f4 with 23...Nh5.

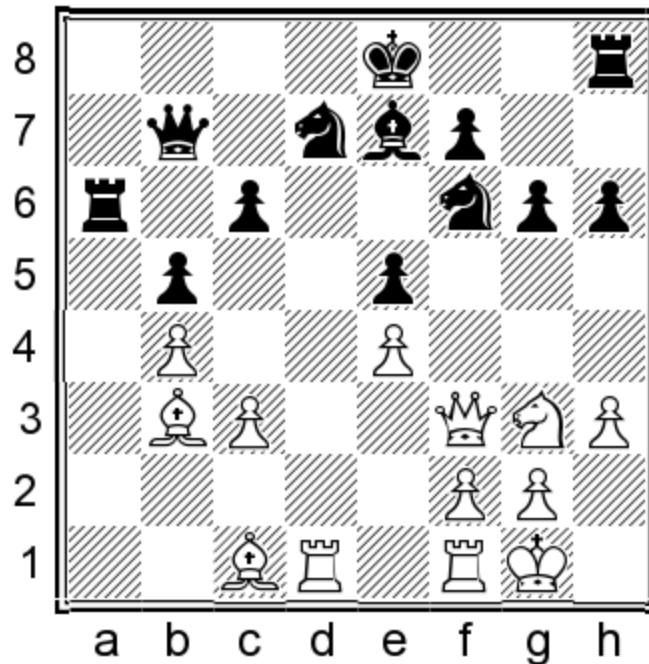
21...Ra3

This move prevents Bc2-b3 only temporarily.

22.Bc1!

The second backward bishop move in a row. However, we should not be dogmatic about it since bishops are known to be effective long-range pieces.

22...Ra6 23.Bb3 N8d7



Black gave up on the ...Nf8-e6 maneuver and moved the knight to the next available square, hoping to castle by hand via f8 and g7. White has just enough time to pose new difficulties before his opponent coordinates his forces. How would you do it?

EXERCISE 9: Please suggest a mini-plan to improve White's position.

SOLUTION

24.Qe2!

Two points. This is the most direct way to exploit the vulnerability of the f7-pawn and circumvent Black's plan to bring the king to g7. Black needs to show extreme accuracy to keep his position together after the inevitable f2-f4 break.

Opening the position with 24.c4! (two points) also makes sense. Black will find it difficult to consolidate after 24...bxc4 25.Bxc4 Rb6 26.Qb3 (or 26.Bd2!?) .

White has a few other sensible mini-plans, such as 24.Rd2 0-0 25.Rfd1 (one point), taking control over the d-file, and 24.Rfe1 Kf8 25.Nf1 (one point), rerouting the knight to the more active e3-

square. However, both plans are relatively slow compared to the first two, so they receive partial credit.

24.h4! (one point) is an interesting attacking idea suggested by my student, Alexandre Lee. Still, Black can keep it at bay with 24...h5 (the point is that castling by hand, 24...Kf8 25.h5 Kg7, runs into 26.Bxf7! Kxf7 27.hxg6+ Kxg6 28.Qf5+ Kf7 29.f4!) 25.Bg5 c5!. After the text, for example,

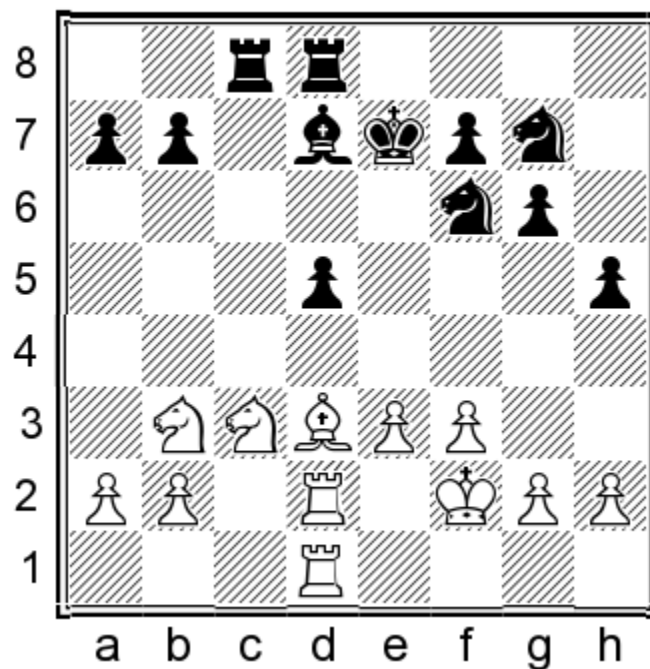
24...c5

doesn't work because of

25.c4! cxb4 26.cxb5

and White has a decisive advantage.

Your score = /4 points



EXERCISE 10: Please suggest a mini-plan to improve White's position.

SOLUTION

FMP – Middlegame fragment 6-

24.Bb1!

Two points. White starts a clever regrouping to conquer the isolated d5-pawn.

A) 24.Bc2! (two points) also gets full credit, as long as it is played with the same idea as the text;

B) 24.Na5! (one point) is an interesting attempt to provoke a weakness in the black position in case of 24...b6. However, Black can play 24...Bc6 instead, and after 25.Bc2 Ne6 26.Bb3 Rd7, White might soon find that his knight is somewhat misplaced on a5;

C) 24.Nd4 Ne6 25.Nce2 (one point) is not the right approach. White doesn't need a blocking knight on d4 since the pawn is sufficiently blocked already. Instead, he should be attacking it. After 25...Nxd4 26.Nxd4 Rc5, White has no pressure against the 'isolani', and Black has the c-file for counterplay;

D) Finally, 24.a3 Nge8! 25.Bb1 (one point) is the less accurate move order because Black is in time to obtain counterplay with 25...Nd6 followed by ...Nc4.

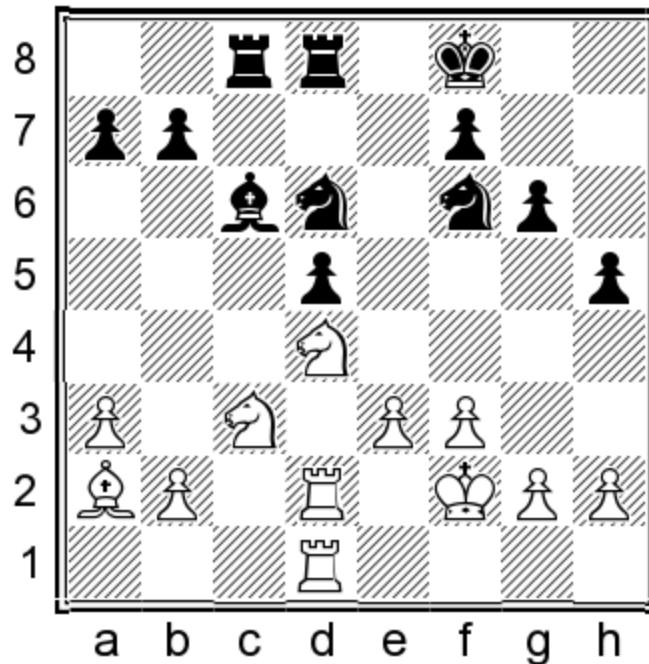
24...Bc6 25.Nd4 Nge8 26.a3

We transfer the bishop to the a2-g8 diagonal to put more pressure on the isolated d-pawn and to cover the c4-square.

26...Nd6 27.Ba2 Kf8

In the game Eljanov-Zubov, Lviv 2014, 27...Nde8 28.h4 Nc7 followed, and White capitalized on his big positional advantage with 29.e4! (1-0, 66).

We are making a slight detour for the purpose of this exercise.



EXERCISE 11: Please suggest a mini-plan to improve White's position.

SOLUTION

28.Nde2!

One point. White transfers the knight to f4, maximizing the pressure against the isolani. The more straightforward attempt 28.Nxc6!? bxc6 29.e4 (one point) also deserves attention. However, after 29...Re8 30.exd5 c5!, converting the extra pawn wouldn't be trivial because of Black's strong blockade on d6.

White has a serious advantage in the endgame. Let me give a sample line:

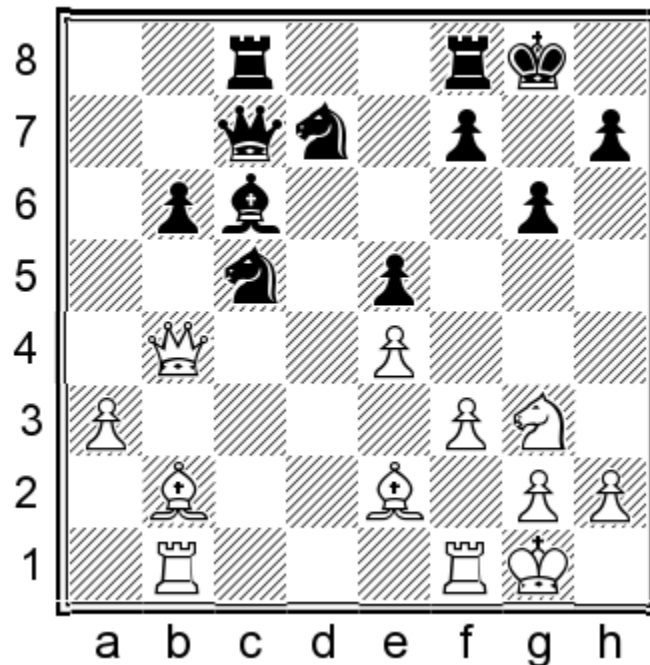
28...Ke7 29.Nf4!

29.Nxd5+? is a poor choice because it allows the opponent to obtain counterplay with 29...Bxd5 30.Bxd5 Nxd5 31.Rxd5 Nc4.

29...Nc4 30.Bxc4 dxc4 31.Rxd8 Rxd8 32.Rxd8 Kxd8 33.e4

White will centralize his king via e3 and d4, put a knight on d5, and gradually start advancing his kingside majority. Black is in for a tough defense.

Your score = /3 points



EXERCISE 12: Please suggest a mini-plan to improve White's position.

SOLUTION

– Middlegame fragment 7-

22.Bc1!

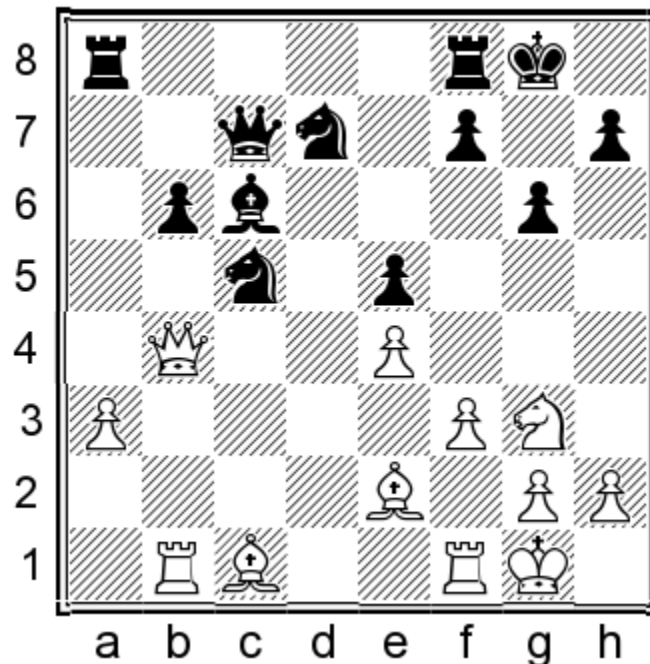
Two points. This move leaves the best impression among several promising ways to improve the white position. The bishop was jobless on b2, so transferring it to the more active c1-h6 diagonal makes a lot of sense. Moreover, this maneuver allows the b1-rook to put pressure on the b6-pawn.

A) 22.Nh1!? Ne6 23.Nf2 (two points) is another good mini-plan, improving the knight and planning to go Nf2-g4-e3-d5 at some point;

B) You also earn full credit for 22.Rfc1!? Ra8 23.Nf1 (two points), transferring the knight to e3 via a different route;

C) However, 22.Rfd1?! (one point) is an inaccurate way to achieve this since 22...Ba4! 23.Rd5 (Erdös-Zaragatski, Deizisau 2013 (1-0, 41)), 23...b5! allows Black to achieve queenside counterplay with ...Nb6, ...N/Bb3.

22...Ra8



EXERCISE 13: Please suggest a mini-plan to improve White's position.

SOLUTION

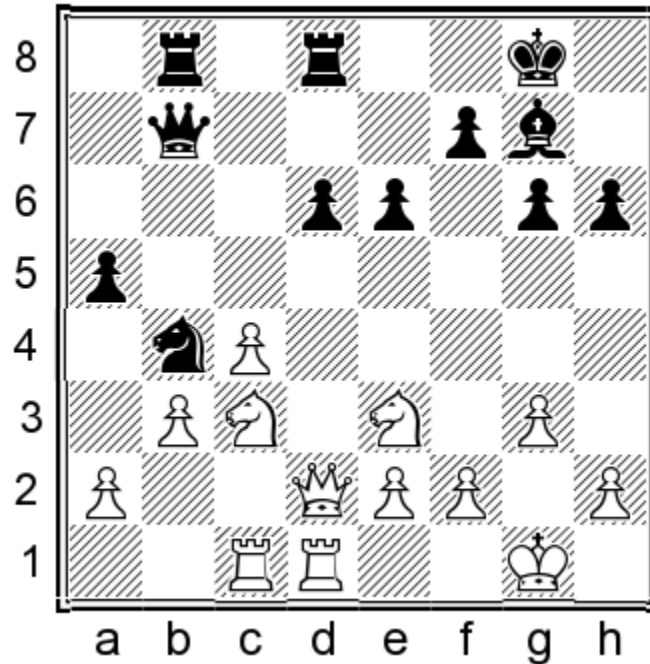
23.Bh6!

Two points. This is the best continuation, highlighting the weaknesses around the black king. 23.Be3 (one point) is not as convincing because of 23...Ra4, followed by ...Rfa8 and counterplay against the a3-pawn. The game could continue:

23...Ra4 24.Qd2 Rfa8 25.Nf5!

With a dangerous kingside attack vis-à-vis ideas like Qg5, Bc4, etc.

Your score = /4 points



EXERCISE 14: Please suggest a mini-plan to improve White's position.

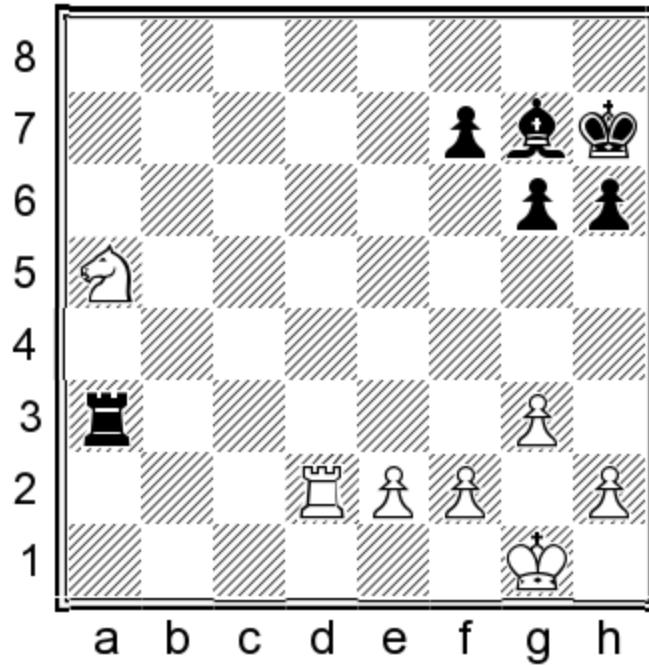
SOLUTION

- Middlegame fragment 8-

25.a4!

Two points. White's best plan at this stage of the game is to secure the powerful b5 outpost for his knight despite weakening the b3-pawn.

A) The immediate 25.Nb5 (one point) is slightly inaccurate because it allows Black to break with 25...d5! while the knight's position on b5 is still shaky. You can get extra credit for calculating a forced line of best moves for both sides: 26.a3 Nc6 27.cxd5 Qxb5 28.Rxc6 exd5 29.Nxd5 Qxc6 30.Ne7+ Kh7 31.Nxc6 Rxd2 32.Rxd2 Rxb3 33.Nxa5 Rxa3 (one extra credit point).



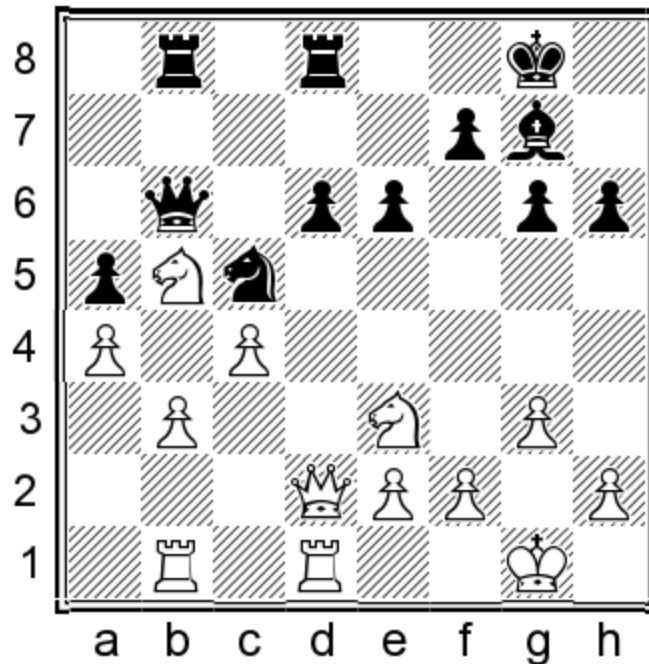
analysis diagram

As a result, we have an endgame where White can still press, but Black obviously has good drawing chances due to the simplifications;

B) The mini-plan of creating a passer on the b-file with 25.a3 Nc6 26.Rb1 (one point) is reasonable, but the downside is that the c-pawn becomes vulnerable after something like 26...Nd4 27.b4 axb4 28.axb4 Rdc8;

C) The game saw 25.Na4 (no credit), but White made no real progress after 25...Kh7 26.h4 h5! (preparing ...Bh6 in some lines) 27.Nc3 Rbc8 28.a3 Nc6 29.Rb1 Ne5 Halkias-Ivanov, Maia 2023 (1/2-1/2, 34).

25...Na6 26.Nb5 Nc5 27.Rb1 Qb6



EXERCISE 15: Please suggest a mini-plan to improve White's position.

SOLUTION

28.Ng2!

Two points. Trading the strong black knight is the key to improving White's position. Therefore, the right mini-plan is to maneuver it to d3 via g2-e1/f4 or 28.Nc2! (two points), followed by Ne1-d3.

28.Qc2 (one point), or any other reasonable move, keeps Black from pushing ...d5 but hardly improves White's position: 28...Rbc8 29.Rbc1 h5.

We don't mind it if Black pushes:

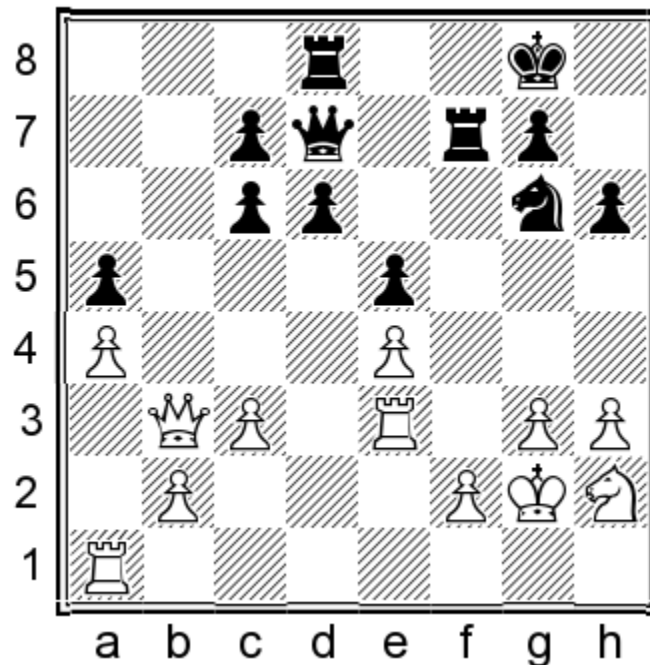
28...d5 29.cxd5 exd5

29...Rxd5 gives us the c4-outpost for the other knight: 30.Qc2 Rbd8 31.Ne3, with a decisive advantage.

30.Qf4

White enjoys a pleasant positional advantage with an extra pawn to boot. The b5-knight is untouchable, the c5-knight has been weakened, and the black d-pawn remains a long-term target.

Your score = /4 points



EXERCISE 16: Please suggest a mini-plan to improve Black's position.

SOLUTION

- Middlegame fragment 9-

21...Nf8!

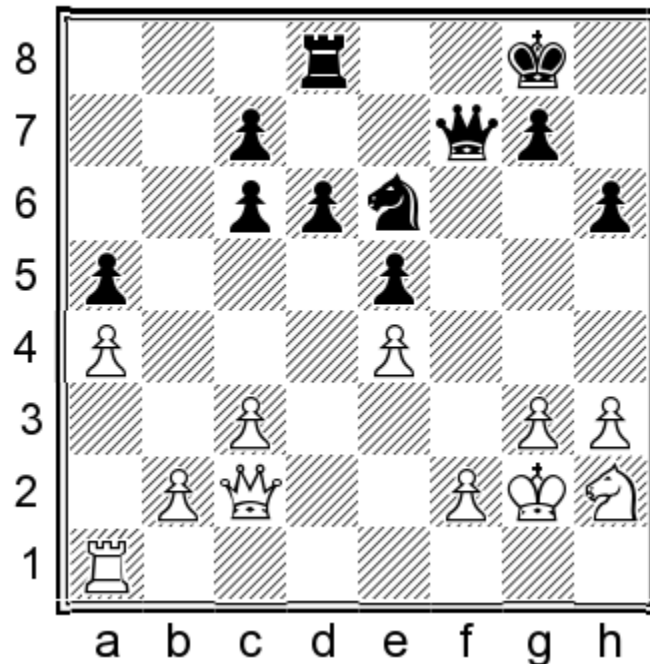
One point. The knight was misplaced on g6, so it makes sense to redeploy it to the more central outpost on e6.

21...Rdf8?! (no credit), and virtually any other move apart from 21...Nf8, allows White to trade a pair of rooks favorably with 22.Rf3 Kh7 23.Qc4 Rxf3 24.Nxf3. Black's pressure on the f-file has disappeared, which is not good news considering his compromised queenside structure.

22.Rf3 Ne6! 23.Rxf7 Qxf7

Not only has Black improved his knight, but he has also picked up a tempo because of the ...Nf4+ threat.

24.Qc2



EXERCISE 17: Please suggest a mini-plan to improve Black's position.

SOLUTION

24...Rf8!

Two points. The most precise move, preventing the opponent from activating his knight. The f-file is Black's main source of counterplay, and he should not forget this.

A) 24...c5 (one point) is the most desirable move from a positional point of view, but it allows White to recentralize his knight with 25.Nf1 c4 26.Ne3, and he is just in time to cover his weaknesses after 26...Nc5 27.Qe2! Nxe4 28.Nxc4;

B) 24...Rb8 (one point) prevents 25.b4. However, there is no need for that. White consolidates with 25.Nf3 c5 26.Nd2 Rf8 27.Rf1.

25.b4

This principled continuation has its downsides.

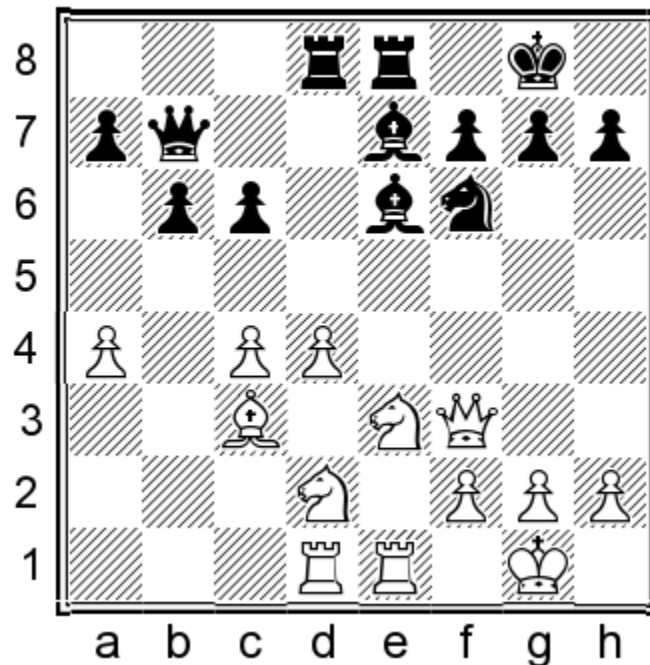
Still, the passive 25.h4 c5 isn't very appealing, whereas 25.Nf1?? is impossible due to 25...Qf3+ 26.Kg1 Ng5.

25...axb4 26.cxb4 Nd4

Black's advantage is indisputable, thanks to the knight on this dominant outpost and the absence of weaknesses.

Meanwhile, White needs to worry about protecting vulnerable pawns on f2, e4, and b4. His a-pawn doesn't pose a big enough threat to compensate for these positional disadvantages.

Your score = /3 points



EXERCISE 18: Please suggest a mini-plan to improve White's position.

SOLUTION

– Middlegame fragment 10–

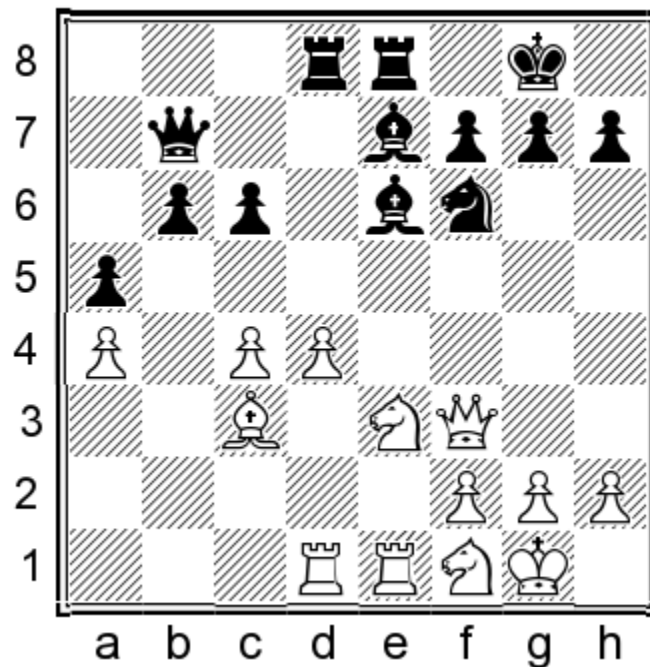
20.Ndf1!

Two points. The f5-square is a juicy spot for the white knights, but we need to maneuver the more passive of the pair there first.

A) The immediate 20.Nf5 (one point) is much less impactful. Black can simplify matters with 20...Bxf5 21.Qxf5 Bf8;

B) 20.d5?! (no credit) is premature because of 20...cxd5 21.Bxf6 Bxf6 22.cxd5 Bd7 23.Ne4 Be5. Once the center opens up, the black bishop pair is stronger than the white knights.

20...a5



EXERCISE 19: Please suggest a mini-plan to improve White's position.

SOLUTION

21.Ba1!

Two points. A good prophylactic move, avoiding the trade of bishops in case of ...Bb4. 21.Bb2!? is similar and also deserves full credit.

21.d5!? (two points) is a more direct alternative. After 21...cxd5, White can continue his plan to invade f5: 22.Ng3!. Black has to bail out with a counter-sacrifice: 22...Qa8 (22...Bb4 no longer works because White has 23.Bxf6! Bxe1 24.Nh5) 23.Ngf5 d4, but White

keeps a pleasant positional advantage after 24.Nxe7+ Rxe7
25.Rxd4.

White can deal with the 21...Bb4 threat in a couple of other ways, such as 21.Rb1 (one point) 21...Qc7 22.Ng3 Bb4! and 21.Re2 (one point) 21...Qa6!, but Black gets counterplay in both cases.

Lastly, 21.Ng3?! (no credit) ignores Black's positional threat, and the position simplifies after 21...Bb4 22.Nef5 Bxf5 23.Nxf5 Rxe1+ 24.Rxe1 Re8 as a result.

21...Qc8

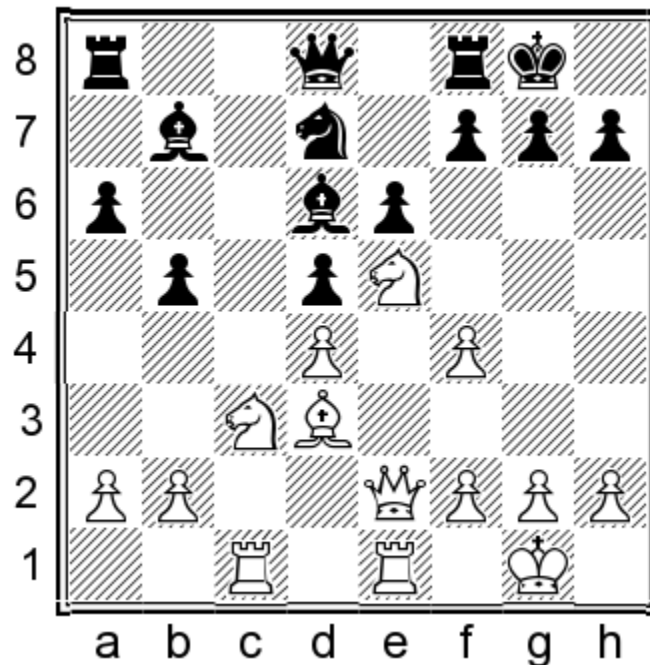
21...Bb4 can now be simply met by 22.Re2.

22.Ng3

White continues with his mini-plan. Black already has to make concessions to alleviate the deadly pressure White would exert if the knight landed on f5. For example:

22...Bg4 23.Nxg4 Qxg4 24.Qxc6

Your score = /4 points



EXERCISE 20: Please suggest a mini-plan to improve White's position.

SOLUTION

– Middlegame fragment 11-

16.Nb1!

Two points. The knight is going to be much more flexible on d2 than c3.

A) 16.g3!? Qe7 17.h4 (two points) is a good alternative, preparing a kingside attack: 17...Nf6 18.Qe3. White can approach this task gradually since Black has no counterplay in the center;

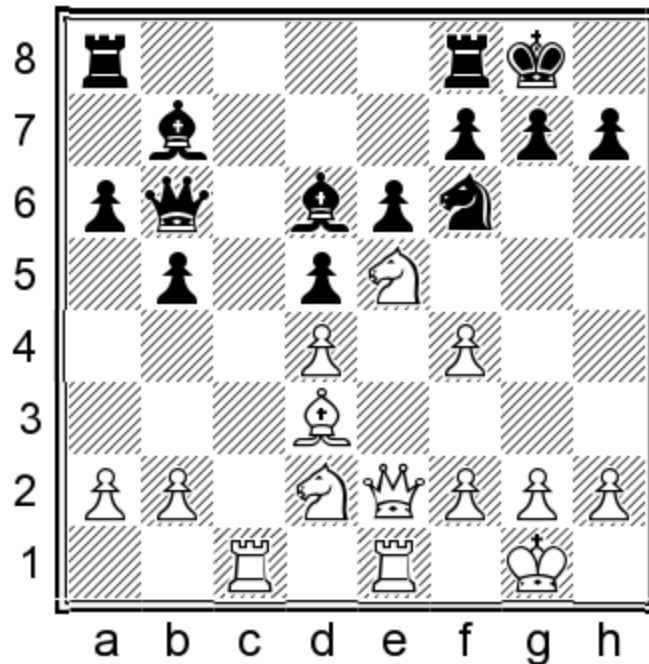
B) Transferring the queen to the kingside also makes sense: 16.Qh5 Nf6 (or 16...g6 17.Qh6) 17.Qh3 (one point), although the advance of the h-pawn (in the 16.g3 line) is a slightly more promising plan;

C) Conversely, doubling the rooks on the c-file by 16.Rc2 Rc8 17.Rec1 (no credit) is lazy planning. White hardly has any targets on the c-file, and he shouldn't be too eager to trade pieces in a position where he has a space advantage.

16...Nf6

In case of 16...Nxe5, White keeps a solid advantage with 17.fxe5 Bb4 18.Nd2 Qa5 19.Red1 since Black has a 'bad French bishop' and his kingside remains vulnerable.

17.Nd2 Qb6



EXERCISE 21: Please suggest a mini-plan to improve White's position.

SOLUTION

18.Nb3!

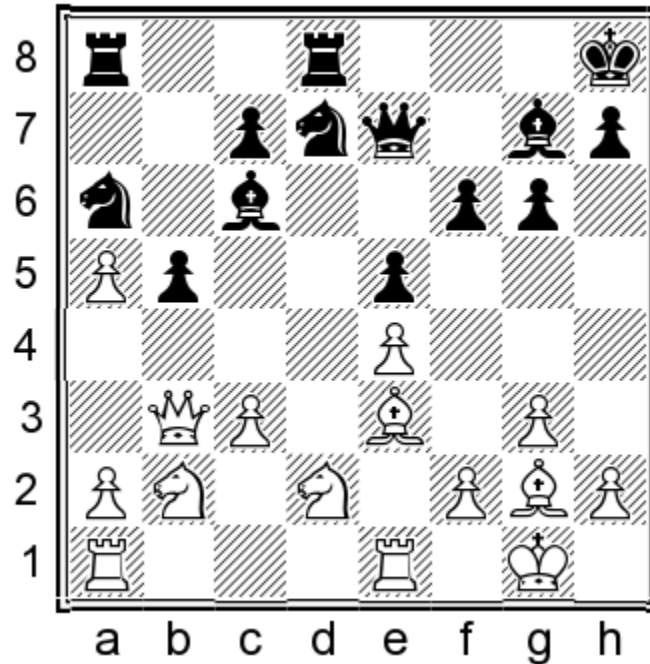
Two points. This is the best way to employ this knight. The c5-square is the main target. You also get full credit for 18.Qe3! (two points) if you intended to follow it up with 19. Nb3. The only difference compared to the text is that Black can swap the knight with 18...Bb4 19.a3 Bxd2 20.Qxd2, but even this is very pleasant for White.

18.Ndf3 (one point) 18...Rac8 19.Rxc8 Bxc8 20.Qe3 was the continuation from the original game Wojtaszek-Bacrot, Batumi 2018 (1-0, 48). Instead of exploiting the c5-square, White transferred his knight to the kingside and launched a successful campaign there. Still, Black could have defended better.

18...Rfc8 19.Qe3

And Black will find it difficult to prevent White from establishing a base on c5.

Your score = /4 points



EXERCISE 22: Please suggest a mini-plan to improve White's position.

SOLUTION

– Middlegame fragment 12-

19.Qc2!

Two points. White regroup, preparing to support his extra pawn with Nd2-b3. Another advantage of this move is that ...Na(d)c5 doesn't come with a tempo, which increases White's flexibility compared to other lines.

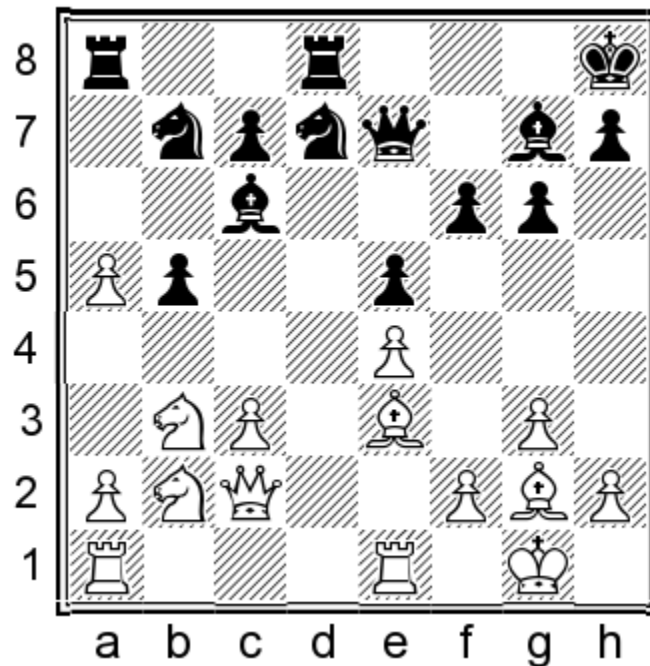
A) 19.c4 (one point) makes a lot of sense from a positional point of view, but it also gives Black some dynamic counterplay:

19...Ndc5 20.Qc2 Nb4 21.Qc3 Na4! 22.Nxa4 bxa4;

B) Alternatively, putting pressure on the b5-pawn with 19.Bf1 (one point) is a reasonable idea. The downside is that Black can use the absence of the white light-squared bishop on the long diagonal to obtain counterplay with 19...f5!?!;

C) 19.Nd3 (no credit) happened in the game Perrine-Matviishen, Philadelphia 2023 (0-1, 26). Activating the idle knight was a superficial decision because it allowed Black to regain the pawn with 19...Ndc5 20.Nxc5 Nxc5 21.Qc2 (21.Qb4 Bf8) 21...Nb7! 22.Bf1 Rxa5.

19...Nac5 20.Nb3 Nb7



Let's see what happens if Black tries to regain the pawn with the game maneuver.

EXERCISE 23: Please suggest a mini-plan to improve White's position.

SOLUTION

21.c4!

Two points. This is the best way to exploit Black's queenside weaknesses.

A) 21.Nd3 (one point) is less accurate: 21...Nxa5 22.Nxa5 Rxa5. Now 23.c4 isn't that strong anymore because Black can secure the c7-pawn with 23...Nb6;

B) 21.a6 Rxa6 22.Nd3 (one point) is a clever attempt to exploit the awkward bishop on c6. However, Black holds his ground after 22...Ra4 23.Nb4 Qe6.

21...b4

The only move, but now the b4-pawn becomes a target.

A) 21...Nxa5 fails to 22.Nxa5 Rxa5 23.cxb5 Bxb5 24.a4 Ba6 25.Qxc7;

B) 21...bxc4 22.Nxc4 and White has a decisive advantage.

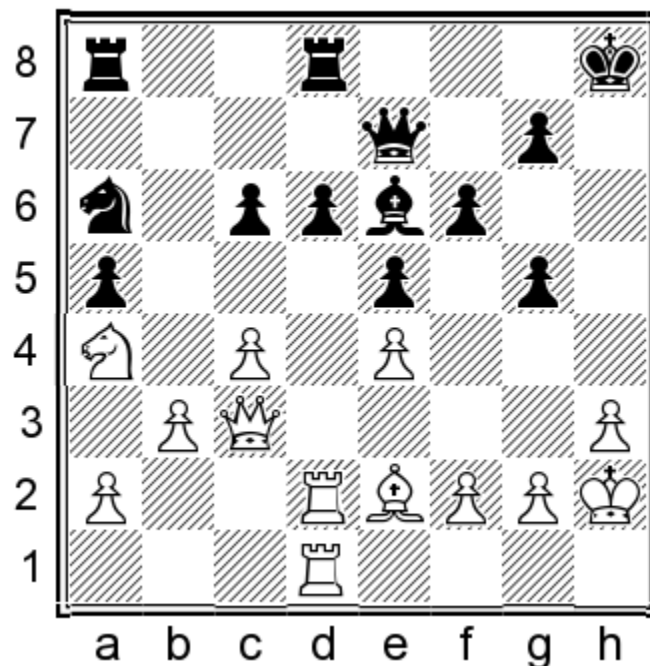
22.c5!

Cutting off the b-pawn from the queen. Alternatively, White can also encircle the weak pawn with 22.Nd3 Nxa5 23.Bd2 or 23.Nxa5 Rxa5 24.Rab1.

22...Nxa5 23.Nd3

The b4-pawn will fall, giving White a nearly winning advantage.

Your score = /4 points



EXERCISE 24: Please suggest a mini-plan to improve White's position.

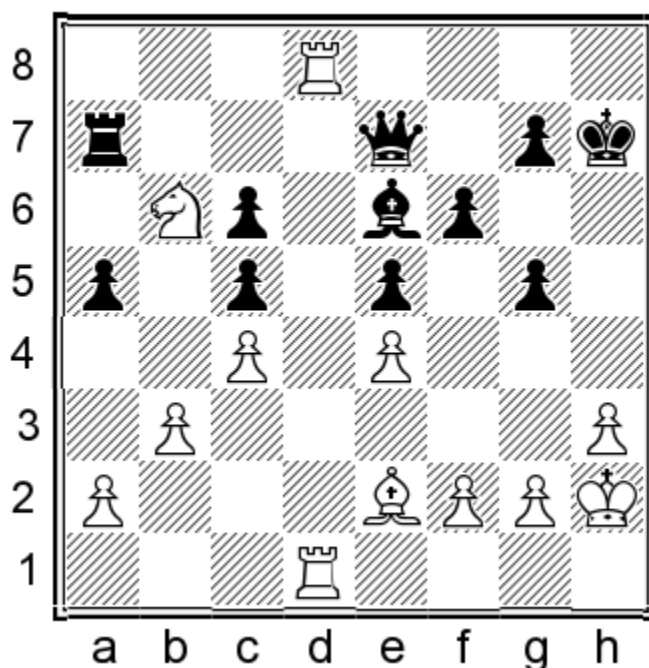
SOLUTION

– Middlegame fragment 13-

26.a3

Two points. This is the best continuation. White is in no rush to exploit the weaknesses in the black position (d6 and a5, most notably), and he slowly improves his position. The first order of business was to take control over the b4-square. After that, White can choose his further course of action based on his opponent's response.

A) You can also earn full credit for a more direct continuation: 26.Nb6 Ra7 27.Qe3! (two points; but not 27.Qxa5?! (no credit) which runs into 27...Qc7! 28.c5 Nxc5 29.Qxc5 dxc5 30.Rxd8+ Kh7 with black counterplay) and if 27...Nc5, then 28.Qxc5! dxc5 29.Rxd8+ Kh7.



analysis diagram

You can earn extra credit for correctly analyzing and evaluating the following line: 30.Bg4! Bxg4 31.hxg4 ² (one extra credit point).

The alternatives allow the opponent to escape the passive middlegame:

B) 26.c5 (one point) 26...Nxc5 27.Nxc5 dxc5 28.Rxd8+ Rxd8 29.Qxa5 Rxd1 30.Bxd1 Qd7 31.Be2 Qd4=;

C) 26.Bg4 (one point) 26...Bxg4 27.hxg4 Nc5 28.Nxc5 dxc5=;

D) 26.Qe3 (one point) 26...Nc5! 27.Nxc5 dxc5 28.Rxd8+ Rxd8 29.Rxd8+ Qxd8 30.Qxc5 Qd2 with counterplay;

E) 26.Qxa5?! (no credit) gives Black unnecessary counterplay by 26...Nc5 27.Qxd8+ Rxd8 28.Nxc5 Bg8.

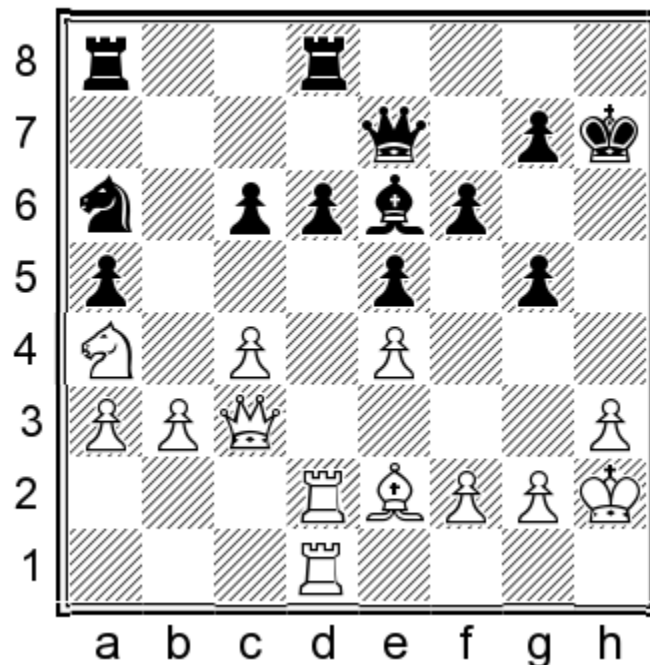
26...K

Black doesn't have many active options, so this 'pass' move makes some sense. White is better after each of the following alternatives:

A) 26...Bf7 (preparing the ...Na6-c7-e6-d4 maneuver) 27.Bg4! Nc7 28.Nb6 Rab8 29.Qxa5;

B) 26...Qc7 27.b4 axb4 28.axb4 c5 29.b5 Nb4 30.Qb3;

C) 26...Nc7 27.Nb6! Ra7 28.b4 axb4 29.axb4 Rb7 30.c5 d5 31.exd5 cxd5 32.Qf3.



EXERCISE 25: Please suggest a mini-plan to improve White's position.

SOLUTION

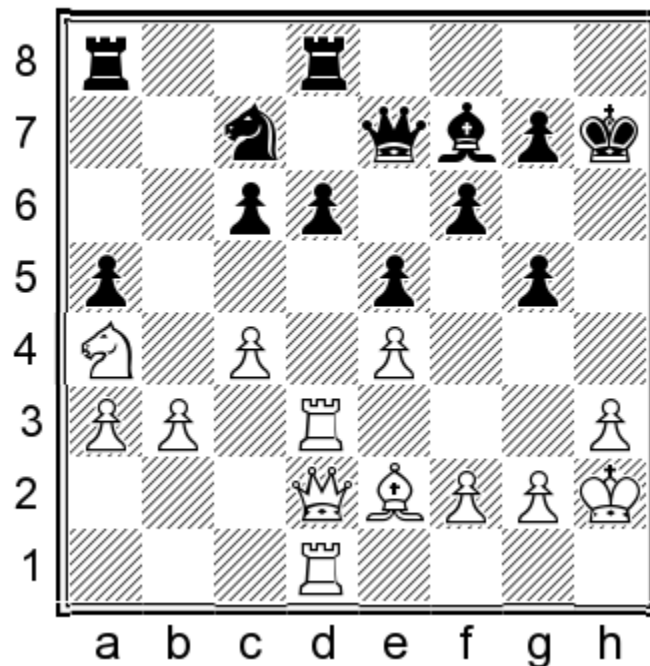
27.Rd3!

Two points. One of the points behind White's previous move was to ensure against the ...Nb4 sortie. Now, tripling of the heavy pieces on the d-file becomes a real threat for Black.

27.b4 (one point) is a reasonable continuation, but not as dangerous for Black as the text (as are the alternatives): 27...axb4 28.axb4 Nc7 29.c5 dxc5 30.Nxc5 or 29.Nb6 Rab8 30.Qe3; 27.Nb6 (one point) 27...Ra7; 27.Qxa5 (no credit) 27...Nc5 28.Qc3 Nxa4 29.bxa4 c5! with compensation.

27...Nc7 28.Qd2 Bf7!

This is a clever defense.



EXERCISE 26: Please suggest a mini-plan to improve White's position.

SOLUTION

29.Bg4!

Two points. Excellent prophylaxis. White needs to make sure Black doesn't get his knight to d4. The weak d6-pawn can wait.

A) 29.Nc5 (one point) stops 29... Ne6, but after 29...Ne8! it will probably have to retreat to a4, eventually;

B) On the other hand, the greedy 29.Rxd6?! (no credit) ignores Black's main idea 29...Ne6!. It will be difficult for White to claim a real advantage once the black knight takes control of the d4-outpost. Let's consider further possibilities for Black:

29...d5

An attempt to break free. If Black defends the d-pawn with 29...Ne8, then 30.Nb6! exploits the other weakness on a5. You earn extra credit for calculating any of the following lines before deciding on 29.Bg4: 30...Rab8 (30...Ra7 31.Nc8) 31.Qxa5 Qc7 32.c5, winning (one extra credit point).

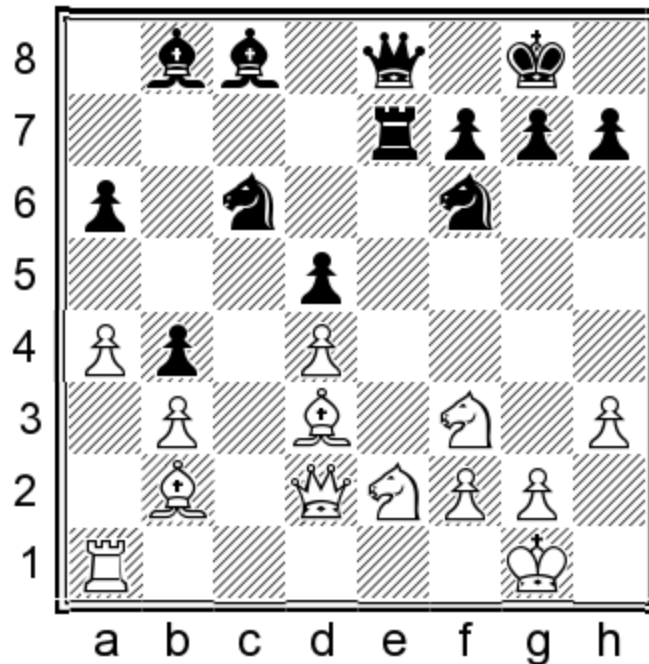
30.cxd5 cxd5 31.exd5 Qd6

The most stubborn defense, blocking the white passer and the heavy pieces that support it (31...Qxa3 allows 32.d6 Nb5 33.d7 Nd4 34.Rc3 with a decisive white advantage). Still, after...

32.Kg1

White has achieved a lot compared to the starting position, and Black is in for a difficult defense down a pawn.

Your score = /6 points



EXERCISE 27: Please suggest a mini-plan to improve White's position.

SOLUTION

– Middlegame fragment 14-

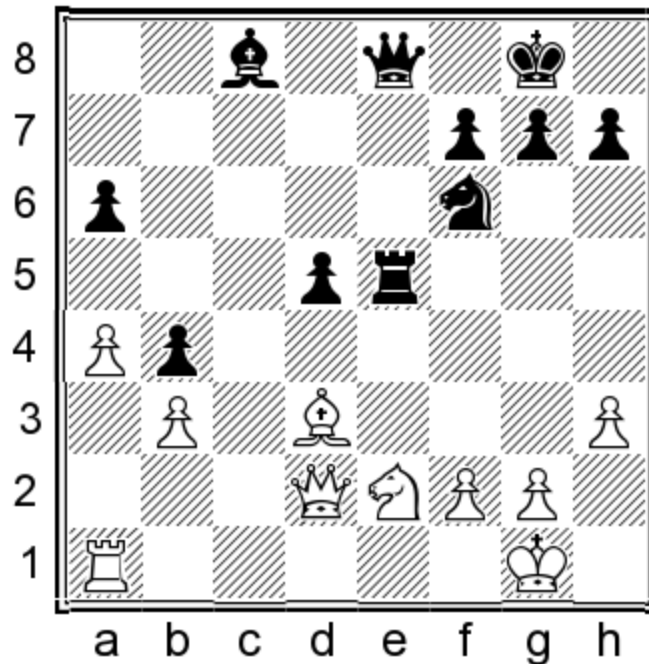
20.Ne5!

Two points. Black had threatened to take the initiative with 20...Ne4. Instead of passively reacting to this threat, White takes the initiative first with this well-timed and thematic pawn sacrifice.

A) Taking control over the c-file with 20.Rc1 (one point) is logical, but Black becomes too active after 20...Ne4 21.Bxe4 dxe4;

B) 20.Ng3 (one point) also doesn't deter Black from carrying out his main idea: 20...Bxg3 21.fxg3 Ne4.

20...Nxe5 21.dxe5 Bxe5 22.Bxe5 Rxe5



EXERCISE 28: Please suggest a mini-plan to improve White's position.

SOLUTION

23.a5!

Two points. White wants to win back the b4-pawn and put his knight on d4. However, this move shows that there is no need to rush. Fixing the pawn on a6 will come in handy in all sorts of endgames because it will highlight the passivity of the black light-squared bishop.

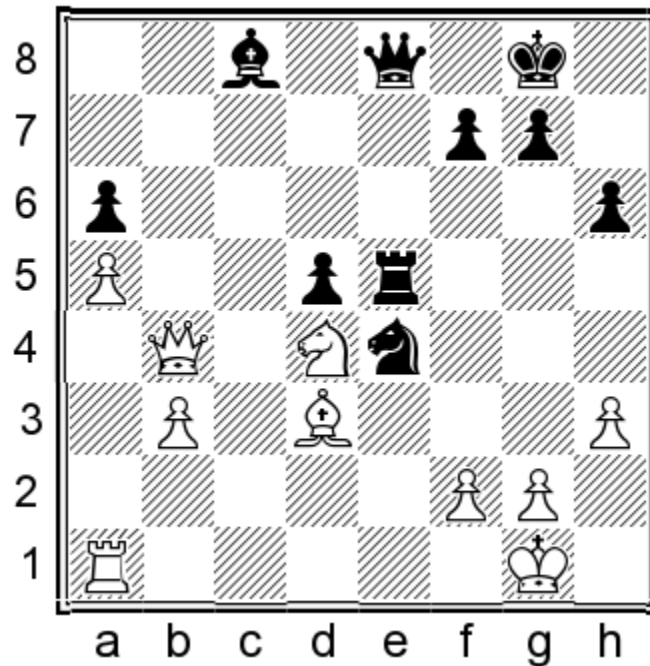
A) If 23.Qxb4 (one point) 23...Rxe2 24.Bxe2 Qxe2, the endgame is roughly balanced because Black will be in time to secure his back rank;

B) A direct attempt to play for positional compensation with 23.Nd4 (one point) is clearly imprecise compared to the game because Black can lock the queenside structure favorably with 23...a5!.

23...h6

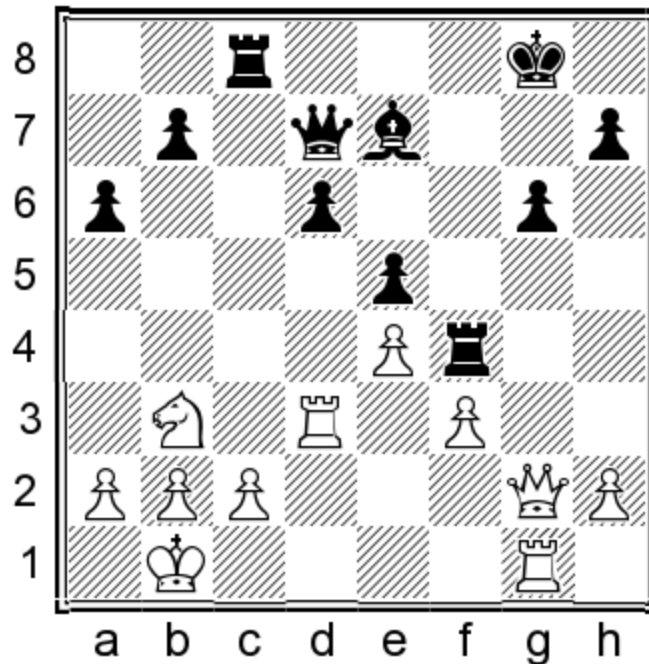
Black could have held on to his extra pawn with 23...Qe7, but he struggles to coordinate his pieces after 24.Nd4 Ne4 25.Qc1.

24.Nd4 Ne4 25.Qxb4



White has regained the sacrificed pawn with interest since Black has two potentially weak pawns on a6 and d5. Indjic-Rathanvel, Dubai 2022 (1-0, 41).

Your score = /4 points



EXERCISE 29: Please suggest a mini-plan to improve White's position.

SOLUTION

– Middlegame fragment 15–

24.a3!

Two points. This subtle move prepares the maneuver of the passive b3-knight toward its dream square d5. The knight has several possible paths to this outpost, such as c1-e2-c3 and d2-f1-e3, but the one via c1-a2-c3/b4 gives White the most flexibility. The knight will not get in the way of its heavy pieces this way. An added benefit of this move is that it prevents Black from taking the c3-square under control with ...b5-b4.

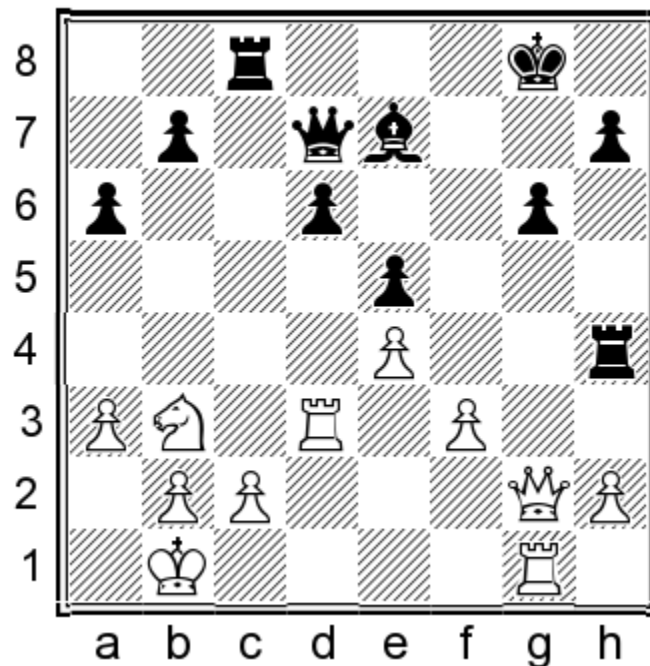
A) 24.Nc1 (one point) is very logical, preparing 25.Ne2 and 26.Nc3. However, Black can slow down this plan with 24...Rh4 25.Qe2 (25.Ne2?! is hasty in view of 25...Qh3, when White faces some issues with his h- and f-pawns) 25...Rf8. The e2-square is unavailable to the white knight now. The only way to reach c3 is via a2, and thus 26.a3! (one point) is the right continuation. You get full

credit (two points) for this exercise only if you had seen this possibility before going 24.Nc1;

B) 24.Nd2 (one point) takes the other route toward d5, but the problem is that after 24...b5 25.Nf1 Rcf8, the knight cannot go to e3 because the f3-pawn hangs. If we try the alternative route via 26.Ng3, then Black takes the c3-square under control with 26...b4! and 27.Nf5 doesn't amount to much after 27...Kh8;

C) Finally, putting extra pressure on the d6-pawn with 24.Rgd1 (one point) is a decent plan, but White still wouldn't improve his position significantly after, for example, 24...Qe6 25.Nd2 Qf7 26.Nf1 Rf8.

24...Rh4



EXERCISE 30: Please suggest a mini-plan to improve White's position.

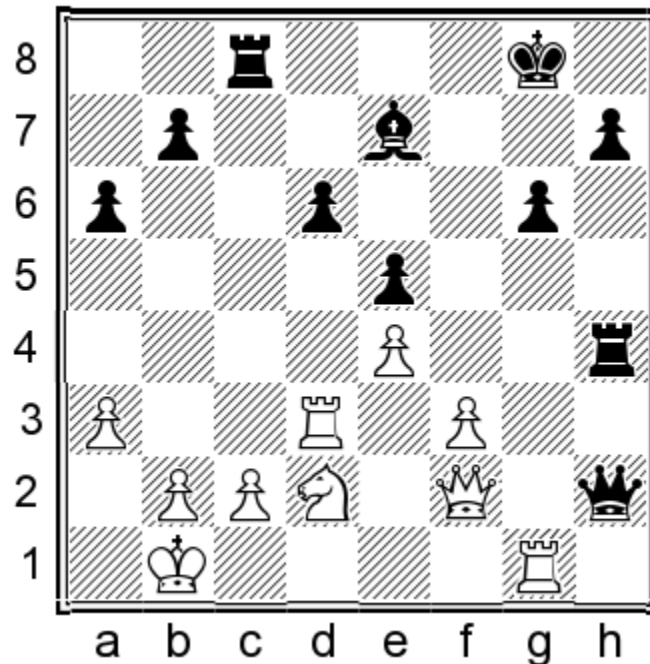
SOLUTION

Black prepares 25...Qh3, trying to create counterplay against the weak white pawns on the kingside.

25.Qe2!

Two points. Important prophylaxis. White removes his queen from the ‘trading block’ and prepares to overprotect his vulnerable pawns with Rg2/g3, depending on Black’s actions.

A) 25.Qf2! (two points) looks similar, but White has a more active defense in mind: 25...Qh3 26.Nd2! and if Black takes the pawn with 26...Qxh2,



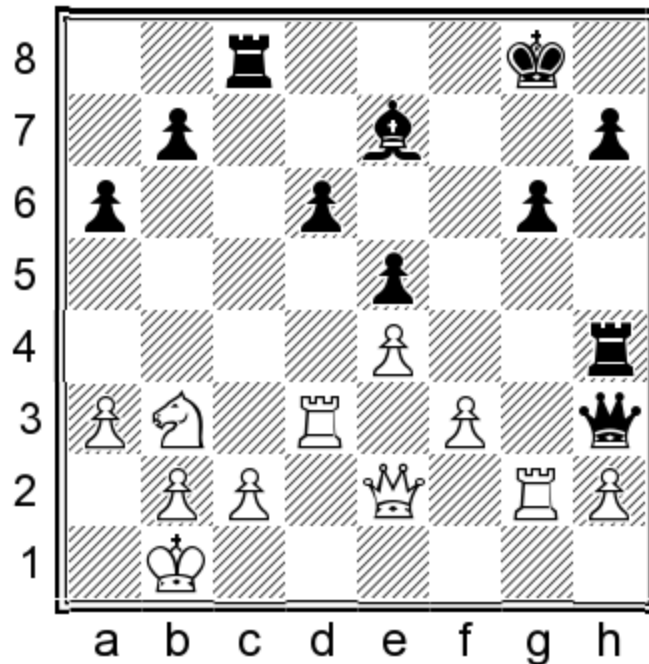
analysis diagram

27.Qb6! or 27.Qa7 threatens to wipe out his queenside;

B) 25.Nd2 (one point) is a good way to overprotect f3, and if 25...Rf8 (25...Qh3 26.Qf2! transposes to 25.Qf2) 26.Nf1 Kh8, it's not so obvious how White has made progress since 27.Ne3?! allows 27...Qh3;

C) 25.Nc1?! (no credit) is too rushed. Yes, we want to get our knight to d5 as soon as possible, but this allows Black to obtain serious kingside counterplay with 25...Qh3.

25...Qh3 26.Rg2



The kingside pawns are safe, and White is in the driver's seat since Black will find it challenging to prevent the Nb3-c1-a2-c3 maneuver.

Your score = /4 points

Total points for FMP exercises = /55 points

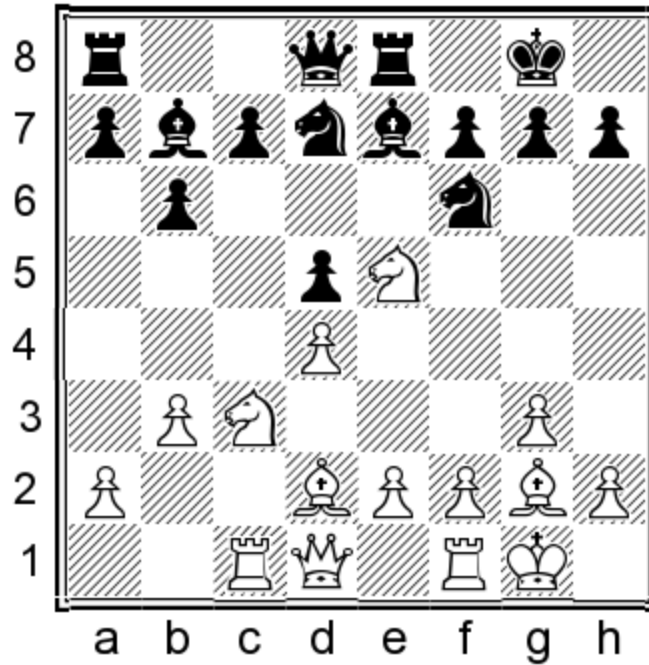
Middlegame Simulation Exercises

Middlegame Simulation – Exercise 1 Alexander Grischuk 2764

Jan-Krzysztof Duda (2748)

Hamburg 2019

1.d4 Nf6 2.c4 e6 3.Nf3 b6 4.g3 Ba6 5.b3 Bb4+ 6.Bd2 Be7 7.Bg2 d5 8.cxd5 exd5 9.0-0 0-0 10.Nc3 Re8 11.Ne5 Bb7 12.Rc1 Nbd7

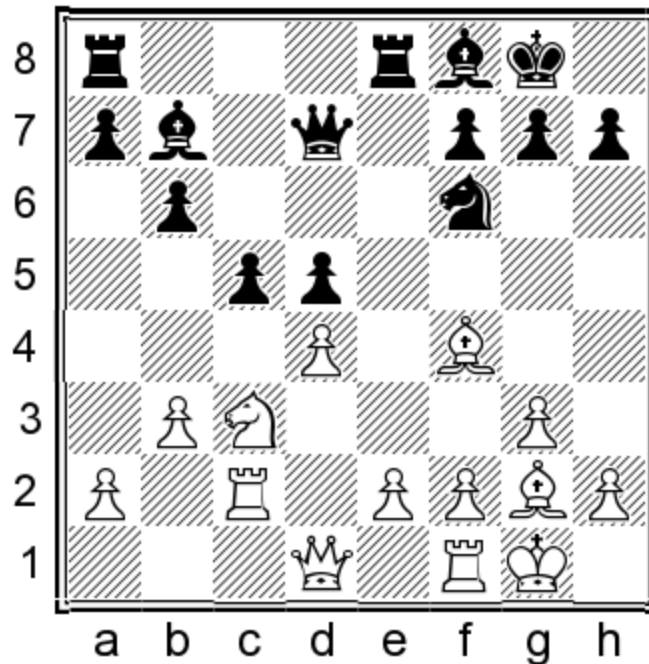


One of the modern Queen's Indian Defense tabiyas. Both sides have developed their pieces in anticipation of the ...c7-c5 break. White hopes to put enough pressure along the h1-a8 diagonal to discourage the opponent from opening the center. On the other hand, Black will do all in his power to destabilize the d4/Ne5 axis. Among several reasonable alternatives, Grischuk chooses:

13.Rc2!?

A multi-purpose move, clearing the c1-square for the Bd2-c1-b2 maneuver and preparing Rc2-d2 in the case that Black pushes ...c5. The rook would exert strong pressure on d5 from d2 after the exchange of pawns on c5.

13...Bf8 14.Bf4 c5 15.Nxd7 Qxd7



EXERCISE 1: Please suggest the best continuation for White.

SOLUTION

Black has managed to trade off the strong e5-knight. His development and piece coordination look reasonable, but so do White's. The critical question is whether White can do anything against the opponent's c5/d5-pawn center.

16.dxc5

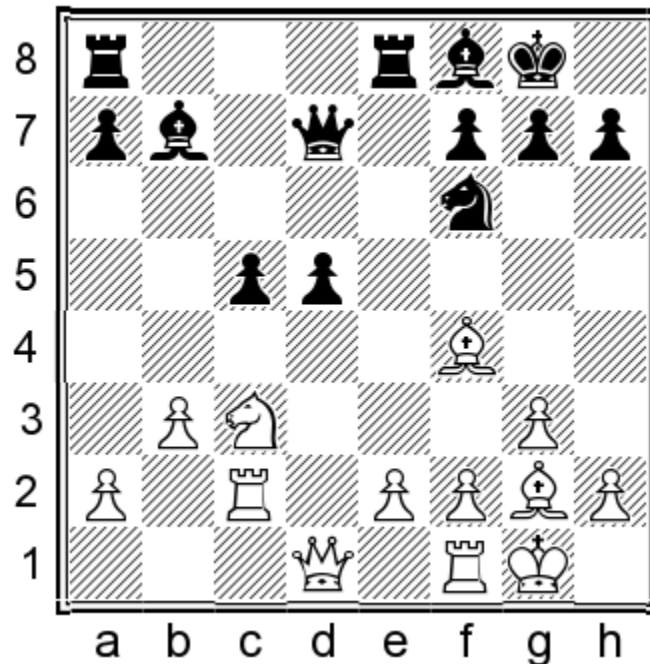
Two points. This is the right time to open the d-file because the d5-pawn is loosely defended (it has the same number of defenders as attackers). Otherwise, Black could close it with ...c5-c4.

A) 16.Bg5 (one point) allows Black to simplify matters considerably with 16...Ne4 17.Nxe4 dxe4 18.dxc5 Qxd1 19.Rxd1 Bxc5. Black looks solid enough in this endgame;

B) 16.Rd2?! (no credit) seems like a logical follow-up to White's 13th move, but it is mistimed since Black has at least two good responses: 16...c4 or 16...Rac8 17.dxc5 Rxc5.

16...bxc5

Black could also recapture with 16...Bxc5, entering ‘isolated queen’s pawn’ territory. White obtains a pleasant edge after 17.Bg5 d4 18.Bxb7 Qxb7 19.Bxf6 gxf6 20.Na4.



The central ‘hanging pawns’ structure often leads to dynamic play in the middlegame. The side with the hanging pawns typically controls more space around the central squares, giving it an edge if the opponent remains passive. However, the pawns can also become a liability if the opponent finds a way to destabilize them with his pieces or pawns.

EXERCISE 2: Please suggest the best continuation for White.

SOLUTION

17.Bg5

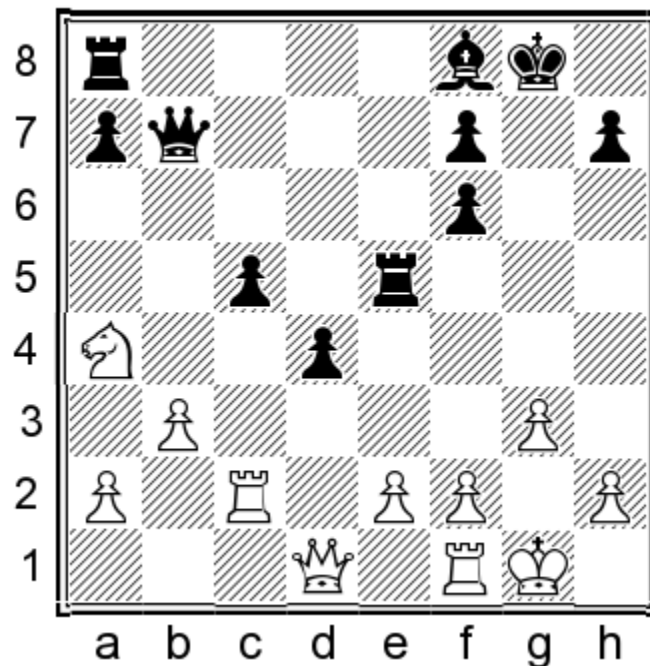
One point. This is the only advantageous way to destabilize the hanging pawns, as White simultaneously aims to inflict damage on the opponent’s kingside structure with Bxf6. The alternatives are quite poor by comparison:

A) 17.Rd2? (no credit) fails to exploit the pin on the d-file due to 17...d4, as 18.Bxb7 Qxb7 19.Na4 allows the opponent to strike tactically with 19...g5! 20.Bxg5 Ne4;

B) 17.Na4?! (no credit) stops ...d5-d4, but Black can make headway with the other pawn after 17...Rac8 18.Qc1 c4! after which he is better;

C) In case of a 'normal' move like 17.Qd3?! (no credit), Black wins a key tempo to prevent Bg5 with 17...h6! and then secures his hanging pawns with 18.Rd1 Rad8, with a significantly more pleasant position because White lacks a good plan in a position with limited space.

17...d4 18.Bxb7 Qxb7 19.Bxf6 gxf6 20.Na4 Re5



White accomplished his goal of weakening the opponent's center (hanging pawns are usually best when they are next to each other) and compromising the opponent's structure. On the other hand, Black finds comfort in the fact that he has gained even more space in the center. He hopes that this activity will compensate for his

inferior pawn structure. Still, his position provides several positional targets, so it's time for White to choose a plan.

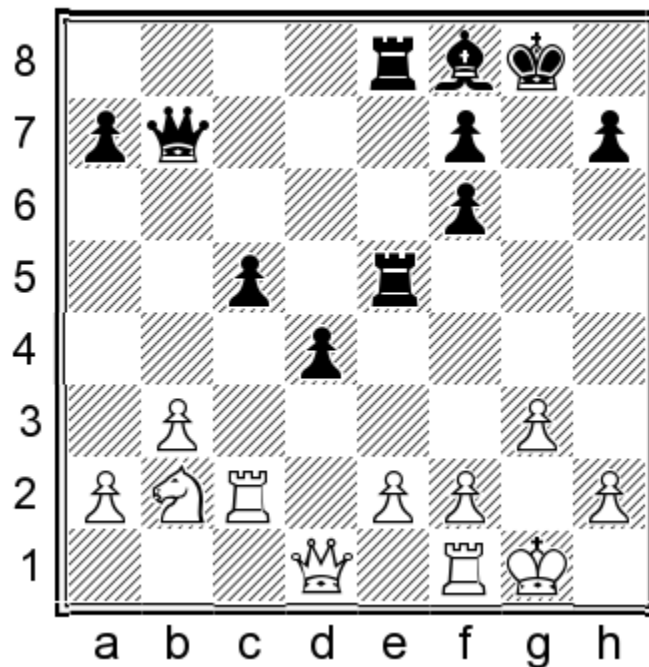
EXERCISE 3: Please suggest the best continuation for White.

SOLUTION

21.Nb2

Two points. Rerouting the knight from the rim toward the center is the best plan. White doesn't get much out of a direct attack on the c-pawn: 21.Qd3 (one point) 21...Rae8 22.Rfc1 (22.Nb2 would still be the best policy). Black can simply ignore it and play something like 22...f5, counting on his counterplay against the backward e-pawn: 23.Nxc5 Bxc5 24.Rxc5 Rxe2.

21...Rae8



Doubling the rooks on the e-file is a very logical course of action, tying the white pieces to defend the e2-pawn.

EXERCISE 4: Please suggest the best continuation for White.

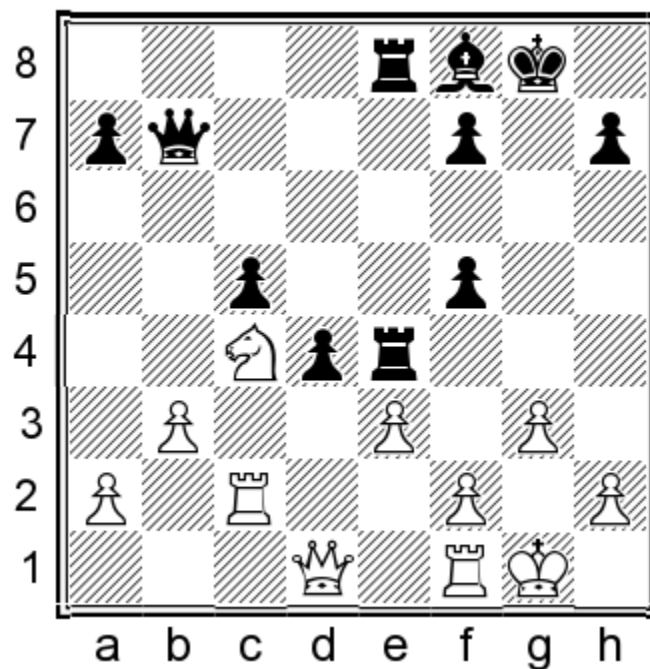
SOLUTION

22.Nc4

Two points. This is the correct square for the knight. White should temporarily abandon the plan of exploiting the backward c5-pawn. Instead, solving the issue of his backward e-pawn with e2-e3 is more pressing, and that is why 22.Nc4 is so essential. However, if you played this move without planning to follow up with e2-e3, you get only partial credit (one point) for this exercise since the e2-pawn remains a potential target for Black.

22.Nd3 (one point) is a decent alternative, but White will find it tricky to make progress while the pawn is still on e2. For example, 22...Rf5 23.Rc4 (23.Nf4 is not a stable outpost due to 23...Bh6) 23...h5! and Black is looking to keep White busy defending his kingside before he could attack the c-pawn.

22...Re4 23.e3! f5



White stabilized his positional advantage with his last move since Black can no longer exploit the weakness on e2. However, Black is relatively solid, and we must find a suitable plan to progress further. EXERCISE 5: White to play. Please suggest the best continuation.

SOLUTION

24.Qf3!

Two points. Besides solving a backward pawn issue, White's last move helped open the d1-h5 diagonal. Taking advantage of this circumstance and activating the queen makes a lot of sense. The f3-square is the most suitable outpost for its highness, as the further course of the game analysis will show. This is also where we deviate from the original game, where 24.Qh5 was played. The game continuation is hypothetical from this point. Still, I chose it over the game because it completes the 'story' of how White can gradually increase his positional advantage in the middlegame with proper maneuvering.

24.Qh5 (one point) was Grischuk's choice. This move is also quite good, and White kept a solid edge for a while after 24...Qd7 25.Rd2 Bg7 26.Rd3. However, he failed to make significant progress after that, and the game eventually petered out to a drawish endgame after the exchange on d4: 26...Qe6 27.exd4 cxd4 28.Rf3 Re2 29.Rxf5 Rxa2 (1/2-1/2, 46).

White also keeps a slight edge in case of 24.exd4 (one point) 24...Rxd4 25.Qh5 Qe4, 24.Nd2 (one point) 24...Rg4 25.exd4 Rxd4 26.Qf3 Qd7, and 24.Rd2 (one point) 24...Qd5 25.Rd3 Bg7.

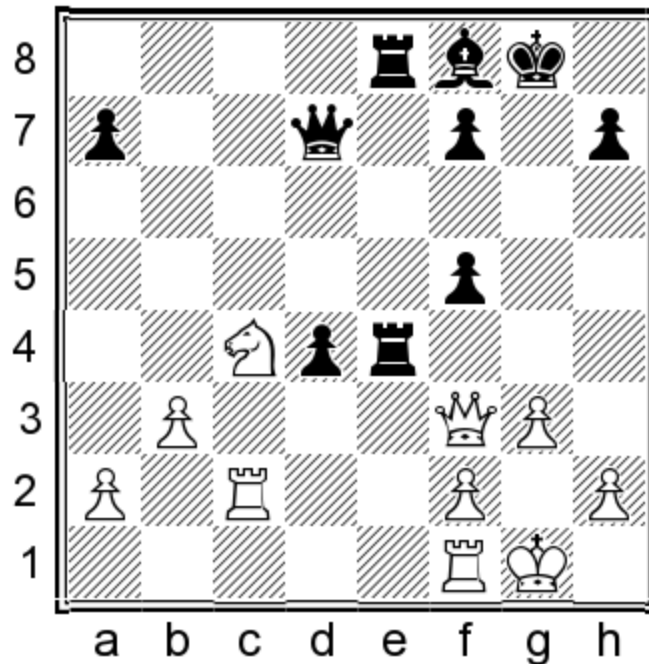
However, the game continuation is the most promising because it enables White to trade on d4 under the most favorable circumstances.

24...Qd7 25.exd4

This pawn trade was inevitable. It's best to make it sooner rather than later before Black fully consolidates.

25...cxd4

In case of 25...Rxd4, White connects his rooks with 26.Rcc1! Bg7 27.Rce1 and keeps a significant positional advantage due to the opponent's multiple pawn weaknesses.



Black has rid himself of the weakness on c5, hoping his d-pawn will be more of an asset than a liability. How should White react to this new pawn structure?

EXERCISE 6: Please suggest the best continuation for White.

SOLUTION

26.Nb2!

Two points. This knight has done some heavy-duty maneuvering over the last ten moves. Now we reroute it to establish a blockade on d3. As is well-known, knights are the best blockers of passed pawns. We can see the instrumental role the white queen plays in this plan as on f3 it adds to the control of the d3-square.

A) 26.Rd1 (one point) is also possible, but that is a less dependable way to block the pawn, even if White keeps a slight edge after 26...f4 27.Kg2;

B) 26.Rd2 (no credit) is similar but has a clear downside: it allows the opponent to activate his most passive piece with 26...Bb4 27.Rd3 Qe6 and ...Bc3 to follow.

26...Bd6 27.Nd3 Kg7 28.Rfc1

The white pieces coordinate perfectly. If we compare this position to a similar one in the 22.Nd3 line, then we can understand better why this version without the pawns on e2 and c5 is preferable for White. Both the white and black rooks have an open instead of a semi-open file here, but the key difference is that White has a clear queenside majority. That fact, paired with a rock-solid outpost on d3, gives him excellent chances in all sorts of endgames. We can stop our simulation here since this is enough to demonstrate White's excellent middlegame strategy.

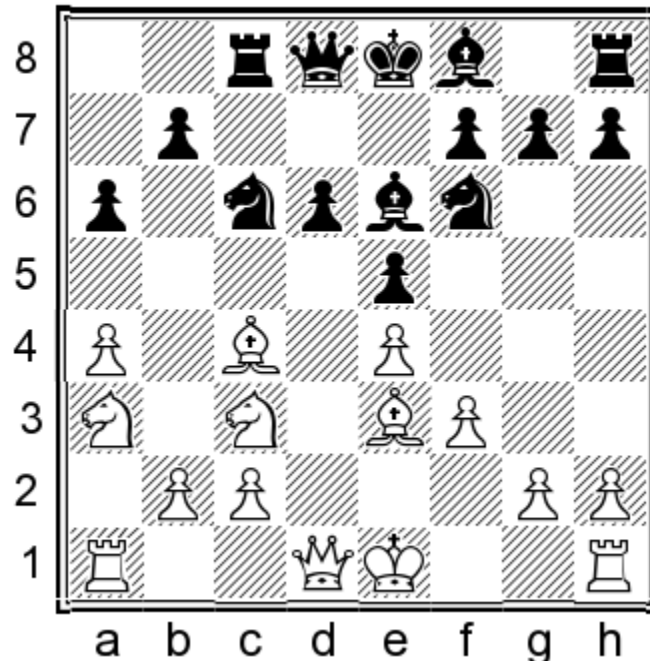
Your score = /11 points

Middlegame Simulation – Exercise 2 Joshua Friedel 2270

Davorin Kuljasevic (2381)

Heraklio World Championship U16 2002

**1.e4 c5 2.Nf3 Nc6 3.d4 cxd4 4.Nxd4 Nf6 5.Nc3 e5 6.Ndb5 d6
7.a4 a6 8.Na3 Bg4 9.f3 Be6 10.Bc4 Rc8 11.Be3**



We start with a position that still belongs to the opening stage. However, Black should already look ahead and choose a plan for the middlegame. Therefore, this is our first critical position.

EXERCISE 7: Please suggest the best continuation for Black.

SOLUTION

11...Nb4!

Two points. It is essential to fight for the d5-square in this opening variation. Black uses the fact that White cannot easily expel the knight from b4 to secure an outpost there and increase his control over the vital central square.

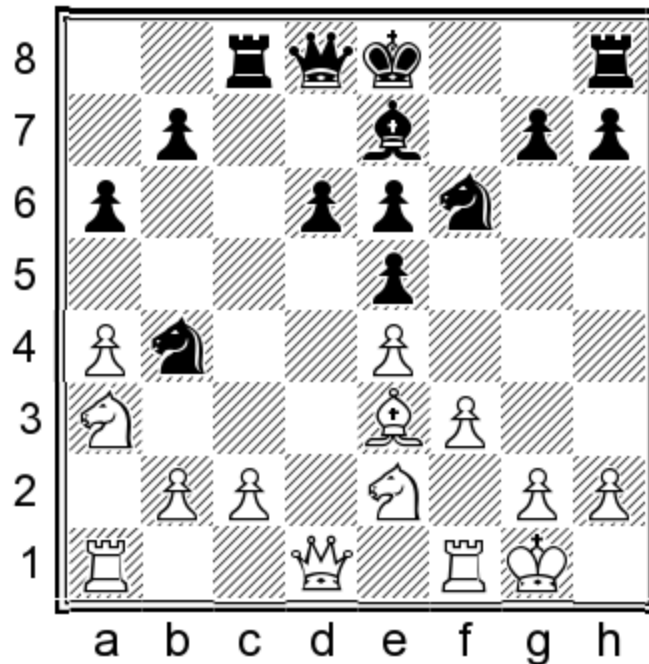
A) 11...Ne7 (one point) is the alternative way to achieve a similar goal. However, this move allows White to play more actively in the center: 12.Qd3! and if Black breaks with 12...d5 13.exd5 Nexd5 14.Nxd5 Nxd5, White gets a slight lead in development by playing 15.0-0-0! Nxe3 16.Qxe3;

B) 11...Na5 (one point) is another ambitious knight move, but White can expose its downside by playing 12.Bd5! Be7 13.0-0 0-0;

C) 11...Qa5 (one point) also takes control over d5, but after 12.0-0 Nb4 13.Bxe6 fxe6 the black queen is somewhat misplaced on a5;

D) Completing development with 11...Be7?! (no credit) would be a superficial decision because it allows the opponent to assume full control over the d5-outpost: 12.Nd5.

12.Bxe6 fxe6 13.0-0 Be7 14.Ne2



White is getting ready to push the knight from b4 with c2-c3. How should Black respond to this?

EXERCISE 8: Please suggest the best continuation for Black.

SOLUTION

14...d5

Two points. Black should make this thematic central advance before the opponent can centralize the queen's knight via c4. In case of 14...0-0 (one point), White can go 15.c3 Nc6 16.Nc4 and the position is roughly level after 16...b5.

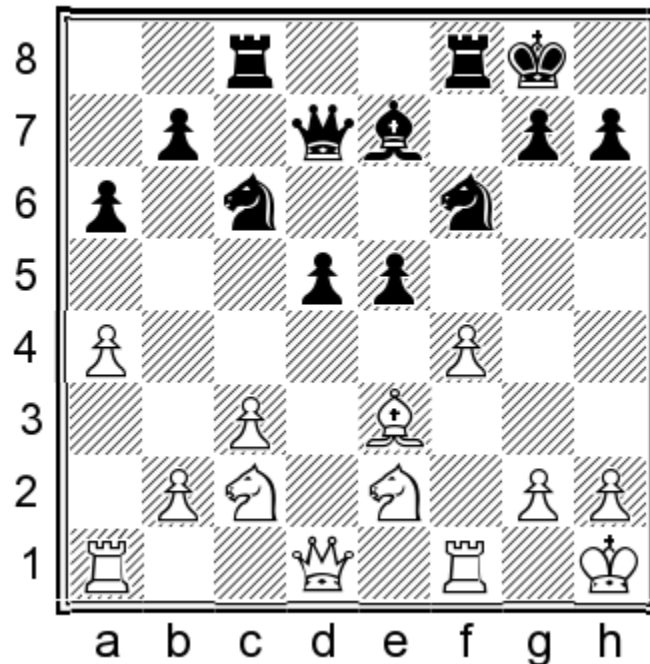
14...Qc7 (one point) is a decent alternative, but White employs the same plan: 15.c3 Nc6 16.Nc4 d5 17.Bb6, followed by Nc4-d2/e3.

15.c3 Nc6 16.exd5 exd5

The position is still approximately level, yet Black's game is slightly easier thanks to his space advantage and more effortless piece mobility.

17.Kh1 0-0 18.Nc2 Qd7 19.f4

White's first major decision in the middlegame is a somewhat nervous one. Challenging the black pawn center is natural, but this move creates several weaknesses. A non-committal waiting move like 19.Bg1 would have been a bit more prudent.



EXERCISE 9: Please suggest the best continuation for Black.

SOLUTION

19...Ne4!

Two points. Black takes advantage of the central weakness created by the opponent's previous move. The knight enjoys a dominant position on the central outpost, which will be one of the most essential positional features for the remainder of the game.

He had many good alternatives, although none is as principled as the text. The most notable among them is 19...Nh5 (one point), aiming to put pressure on the f4-pawn and force White to release the central tension. However, in this case, White could obtain counterplay with 20.Qd3!, preparing to attack the weakened d5-pawn. For example: 20...Rf7 21.Rad1 Rcf8 22.Qxd5 Qxd5 23.Rxd5 exf4 24.Bb6 with a level position.

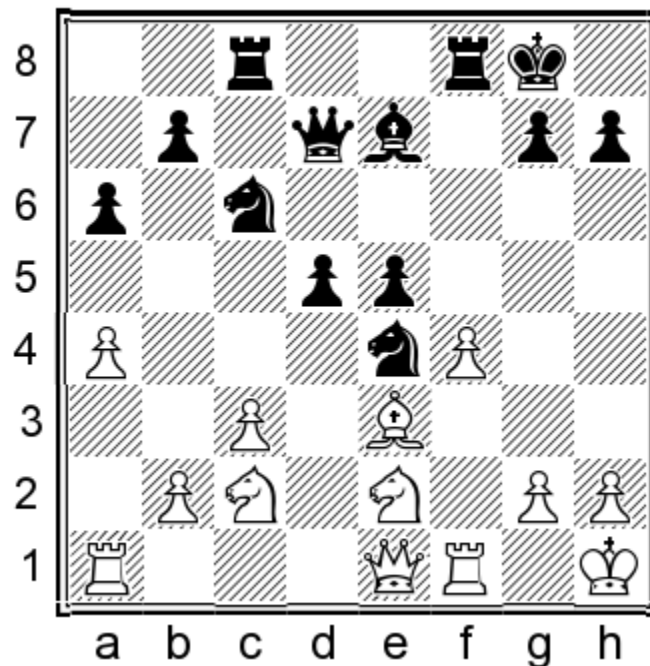
19...Rce8 (one point) also makes sense, and so does 19...Bd6 (one point), overprotecting the e5-pawn. For example: 20.Bg1 Ne7.

19...e4 (no credit) is possible, but releasing the central tension so early feels a little underwhelming, especially since Black could have used this square as an outpost for the knight.

20.Qe1?

This is a big mistake. It's not a good idea to ignore the knight on e4 and the pressure on the f-file. Your task is to figure out the best way to take advantage of this slow move.

20.Qd3 was the right move, aiming to exploit the vulnerability of the black d-pawn. Black can answer with 20...Nc5, keeping a slight edge. Nevertheless, White would still be very much in the game.



EXERCISE 10: Please suggest the best continuation for Black.

SOLUTION

20...Rf7!

Two points. This is one of the two best among several promising options. The plan is to double the rooks and maximize the pressure down the f-file to exploit the vulnerable f4-pawn.

A) 20...Na5! (two points) is also very strong, exploiting the weaknesses on c4 and b3. White has serious issues with his light-square complex. For example, 21.fxe5 Rxf1+ 22.Qxf1 Rf8 23.Qe1 Nc4 and Black will have his pick of the b2- or e5-pawn, continuing his positional dominance;

B) 20...Rf6 (one point) is a slightly worse way to double the rooks because it allows White to trade the powerful e4-knight with 21.Ng3 (since ...Bh4 is not possible here) 21...Nxc3+ 22.Qxc3 Rcf8. The pressure on the f-file is strong as planned, but White could wiggle out with 23.Qf3! exf4 24.Bd4 Nxd4 25.Nxd4 and things are not as bad as in the game;

C) Lastly, 20...Bd6 (one point) and 20...Rce8 (one point) are decent alternatives. However, in these cases, White could fix the mistake on the previous move with 21.Qd1!

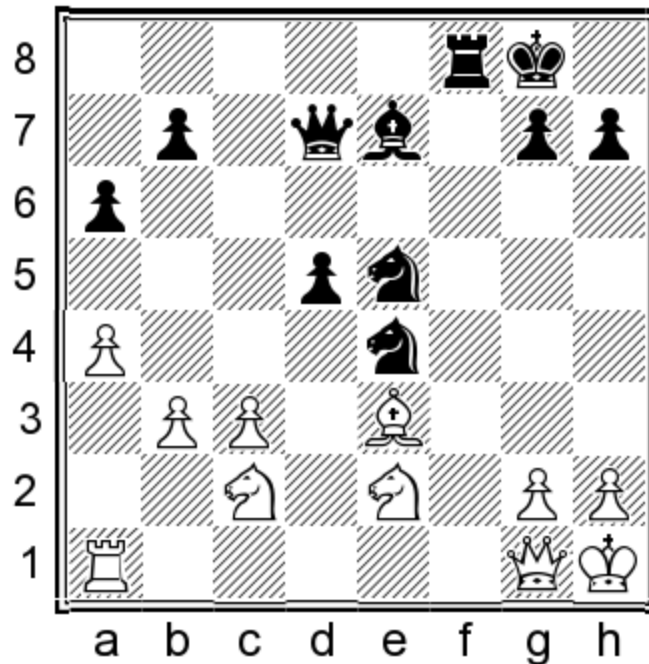
21.fxe5?!

White releases the tension first, but this trade only plays in Black's favor because his pieces stand much better.

21.Ng3 doesn't work due to 21...Bh4!, and neither does 21.Rd1 Rcf8 22.c4 because Black can play 22...d4.

Paradoxically, White's best move was 21.Qd1, showing how misguided his previous move was. Still, it might be too late for him to create counterplay against the d5-pawn because Black has a dangerous initiative on the f-file.

21...Rxf1+ 22.Qxf1 Rf8 23.Qg1 Nxe5 24.b3



White is trying to patch up the holes in his position, but there are too many. Black's pieces are in a perfect position to exploit those weaknesses.

EXERCISE 11: Please suggest the best continuation for Black.

SOLUTION

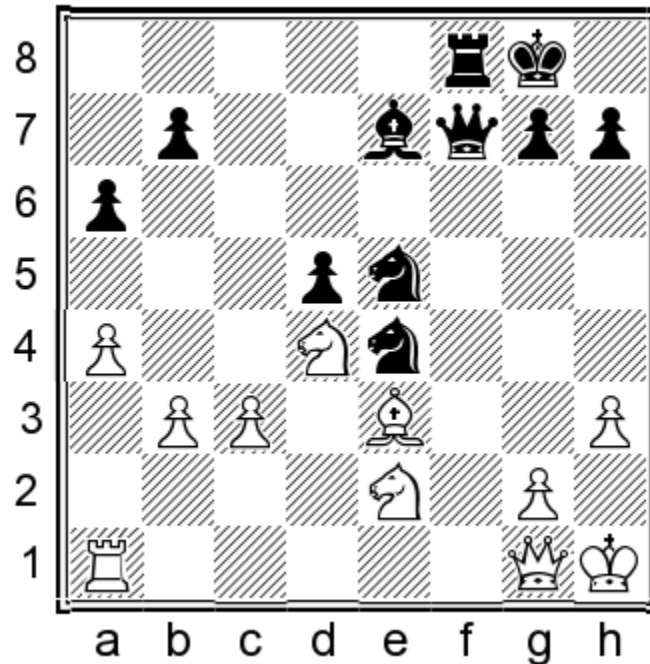
24...Qf5?!

One point. Black claims control over the critical open file. However, a better, tactical solution existed: 24...Ng4! 25.Rf1 Nef2+! 26.Rxf2 (it is crucial that 26.Bxf2 also loses to 26...Qf5!) 26...Nxf2+ 27.Bxf2 Qf5 (three points). A simple double attack concludes this pretty combination, and White can resign.

24...Nd3!?! 25.Rf1 Ndf2+ works the same way and earns full credit.

As you see, sometimes, while doing the simulations, you will discover that your move is better than the one played in the game. That is perfectly normal, and you should be proud of yourself when you make such a discovery. It shows that you went deep into the position and found something strong that even the person playing the game did not.

25.Ncd4 Qf7 26.h3



White has defended against the first wave of Black's attack. The f-file is in Black's control, while his knights are ready to jump into the heart of his position and cause damage. Still, he should find a plan to break through White's defenses.

EXERCISE 12: Please suggest the best continuation for Black.

SOLUTION

26...Bh4?!

One point. The idea behind this move is to provoke g2-g3, creating more weaknesses in the white position (f3-square, pawns on g3 and h3). However, that also helps White get a bit more space for his kingside pieces. Black had better options.

A) The bishop is Black's last inactive piece, so it makes sense to activate it, but not the way I did in the game. Instead, 26...Bd6! or 26...Bc5! (two points) were better, activating the bishop on one of the potentially important diagonals. For example, 26...Bd6 27.Rd1 Bb8 and White is virtually out of moves, while Black can start

pushing his kingside pawns freely. Importantly, 28.g3 runs into 28...Qh5, winning;

B) The direct attempt 26...Nd3 (one point) 27.Nf3 Qh5 is neutralized by 28.Rf1. Black keeps a nearly winning position but has lost some of the maneuvering flexibility he had a couple of moves before;

C) Finally, 26...Nf2+? (no credit) is way premature, allowing White to solve all his problems after 27.Bxf2 Qxf2 28.Qxf2 Rxf2 29.Kg1.

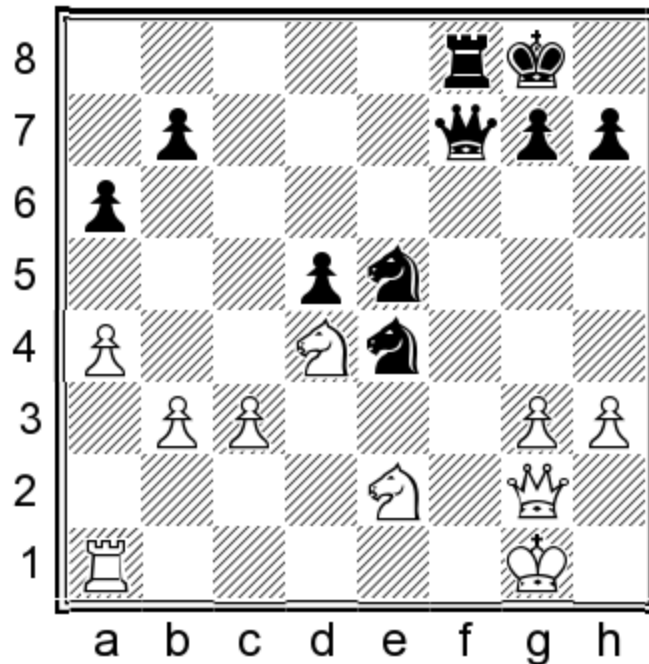
27.g3 Bg5 28.Bxg5 Nxc3 29.Qg2?!

This is probably the final mistake White made in the game. It was essential to activate the queen with 29.Qe3 to cover weaknesses like c3 and d3. White could still try to hold this problematic position after 29...Ne4 30.Rg1 etc.

29...Ne4 30.Kg1

30.Nf4 might have been a better practical try, tempting Black to win a pawn. After taking any one of the hanging pawns, White gets counterplay, as the following variations show: 30...Nxc3+?

31.Qxg3 Qxf4 32.Qxf4 Rxf4 33.Re1 and 30...Nxc3? 31.Rc1 Ne4 32.Nde6 Re8 33.Rc7. However, the simple 30...g5! forces White to retreat: 31.Nfe2 (31.Nfe6 Re8!), when 31...g4! 32.hxg4 Qg7 should lead to a decisive attack.



White is hoping to trade the heavy pieces on the f-file. What should Black do about it?

EXERCISE 13: Please suggest the best continuation for Black.

SOLUTION

30...Nf3+!

Two points. This straightforward move ensures a smooth transition into a winning endgame.

A) 30...Nc6! (one point) is another strong candidate. However, this move requires deep calculation, and you only get full credit for finding all the moves of the line that follows. Otherwise, you get partial credit (one point) if you missed something: 31.Rf1 (31.Rd1 Qc7!) 31...Qxf1+ 32.Qxf1 Rxf1+ 33.Kxf1 Nxc3!. This is the big point. But the forced line continues: 34.Nxc6 (or 34.Nxc3 Nxd4 35.b4 Kf7! 36.Nxd5 Ke6, winning) 34...Nxe2 35.Nd8 Nd4 36.Nxb7 Nxb3 37.Ke2 Nd4+! (one point). This is the only way to ensure that White doesn't do any damage and the only way to justify 30...Nc6. Black is winning after 38.Ke3 Ne6. Overall, 30...Nf3+ is a much more practical solution;

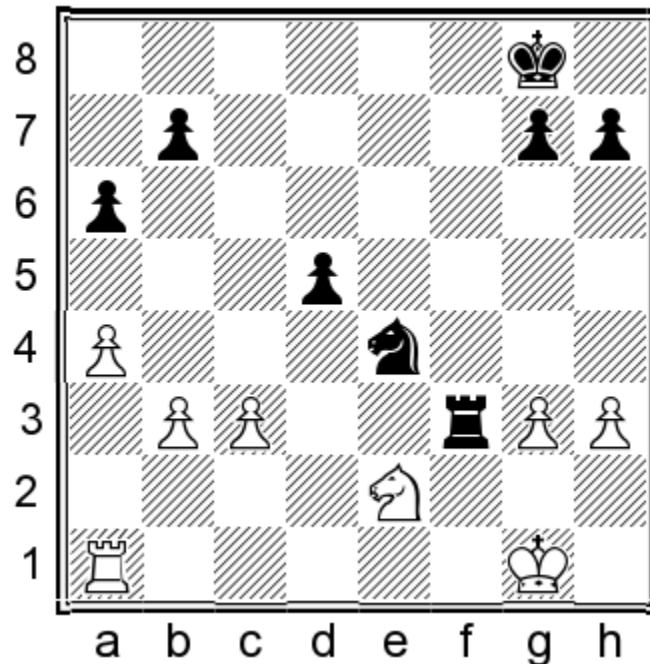
B) 30...Qg6 (one point) is a decent option, keeping the lion's share of Black's advantage. Still, White can keep fighting with 31.Nf4 (in the event of 31.Rf1 Rxf1+ 32.Kxf1 Black infiltrates the white position with his queen after 32...Qg5!) 31...Qd6 32.Rf1!, giving up a pawn to consolidate his forces: 32...Nxc3 33.Qc2;

C) 30...Qf2+? (no credit) would be a grave mistake because White could exchange all heavy pieces with 31.Qxf2 Rxf2 32.Rf1.

31.Nxf3 Qxf3 32.Qxf3

32.Rf1 also doesn't work because of 32...Qxf1+ 33.Qxf1 Rxf1+ 34.Kxf1 Nd2+ 35.Kf2 Nxb3 36.Nf4 Nc5 and the extra pawn should give us a decisive advantage in this simple knight endgame.

32...Rxf3



White's position is about to collapse with all his weaklings on the third rank.

33.Rd1

This speeds up the end, but the endgame is lost either way.

33...Re3

Black can win two pawns in several ways, including 33...Nxc3 34.Kg2 Rxc3+ 35.Kxg3 Nxd1.

34.Kf1

This allows a tactical finale, but 34.Nf4 Rxc3+ 35.Kh2 Rxc3 36.Rxd5 Rxb3 37.Rd8+ Kf7 38.Rd7+ Kf6 39.Nh5+ Kg6 40.Nxg7 Rb2+ 41.Kg1 Nc5 is also hopeless.

34...Rxe2!

White resigned.

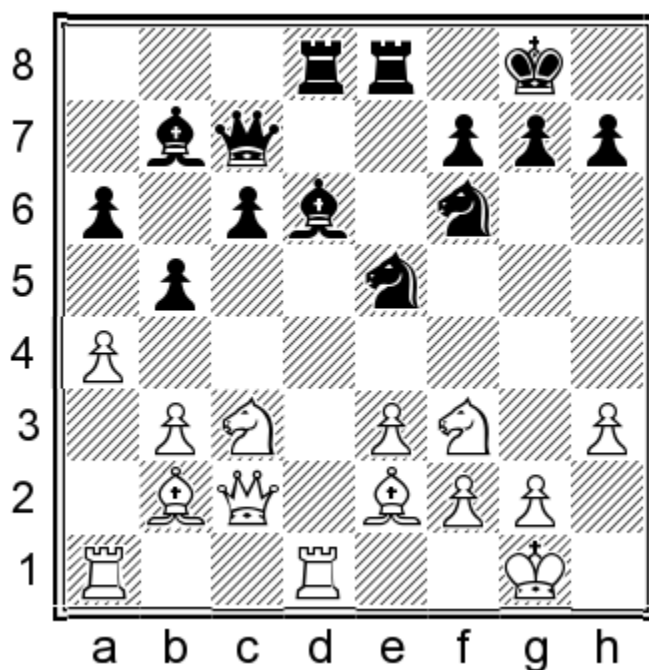
Your score = /15 points

Middlegame Simulation – Exercise 3 Anatoly Karpov 2715

Alexei Shirov (2710)

Biel 1992

1.d4 d5 2.c4 c6 3.Nc3 Nf6 4.e3 e6 5.Nf3 Nbd7 6.Qc2 Bd6 7.Be2 0-0 8.0-0 dxc4 9.Bxc4 b5 10.Be2 Re8 11.Rd1 Qc7 12.b3 e5 13.h3 Bb7 14.Bb2 a6 15.dxe5 Nxe5 16.a4 Rad8



White played a seemingly innocuous opening, preferring to control the game from a safe distance. His most active move, 16.a4, is

crucial because it makes it difficult for Black to push the thematic ...c6-c5 for the time being. Nevertheless, White should not sit idly because his opponent is fully mobilized for the battle. It is time to create a plan for the middlegame.

EXERCISE 14: Please suggest the best continuation for White.

SOLUTION

17.Ng5!

Three points. The only weaknesses in Black's solid 'armor' are the squares f5, c5, and d6. Karpov's move is the strongest because it helps White exploit the latter by maneuvering the knight to e4 before the opponent can push ...c5.

A) 17.Nd2 (two points) has the same idea, but this version is slightly worse than the text due to 17...Ned7! (taking c5 under control) and here, White has to satisfy himself with a slight edge after 18.Rac1 since 18.Nce4 Bh2+ 19.Kh1 Be5 keeps him out of c5 and d6. The problem is the d2-knight, which obscures d1-rook's view of d6. Naturally, that's not the issue with the knight on g5 instead, which is why Karpov's move is better;

Apart from these two strong moves, White has a host of other decent options that can hardly promise him an edge against the opponent's best reply:

B) 17.Nh4 (one point) aims to exploit the f5-weakness or provoke weakening of the long diagonal, but Black is doing okay after 17...g6 18.Rac1 b4 19.Nb1 c5;

C) In case of the straightforward 17.Rac1 (one point) 17...Nxf3+ 18.Bxf3, Black can push 18...c5! , nevertheless, counting on some tactical motifs to justify the sacrifice: 19.axb5 Bxf3 20.gxf3 Qd7! 21.Kg2 axb5;

D) 17.Nxe5 (one point) 17...Bxe5 18.Bf3 is solid, but hardly threatening: 18...Rc8 and Black has no problems;

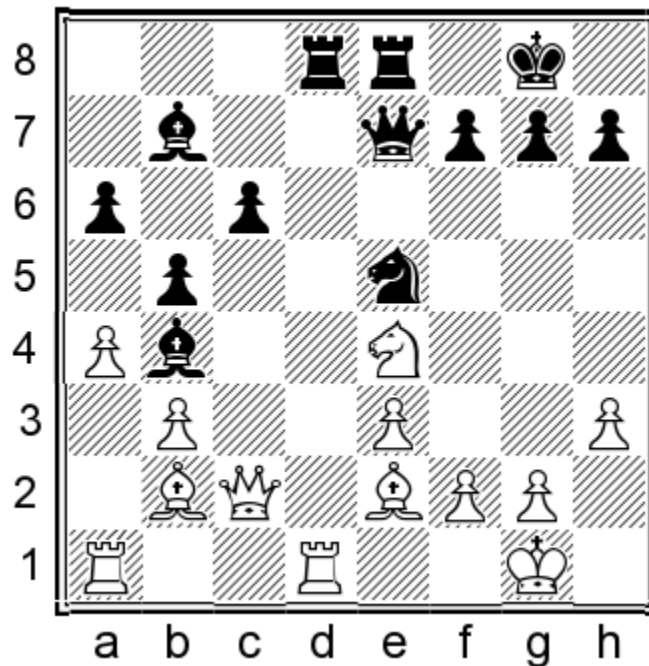
E) 17.Na2 (one point) is a decent idea, preparing to solidify control over c5 with b3-b4. Still, the knight is a bit misplaced on a2 after 17...Ned7! 18.b4 Rc8;

F) 17.Nd4?? (no credit) is very poor because the whole Nd4-f5 idea fails after 17...b4 18.Na2 c5 19.Nf5 Be4.

17...Qe7

Realizing that Nc(g)e4 can't be prevented, Shirov comes up with a reasonable idea to protect the vulnerable squares on the a3-f8 diagonal. Otherwise, White claims the c5 outpost in case of 17...Ng6 18.Nce4 Bh2+ 19.Kh1 Nxe4 20.Nxe4 Be5 21.Nc5 or the d6 outpost after 17...Ned7 18.Nce4 Bh2+ 19.Kh1 Be5 20.Bxe5 Rxe5 21.f4 Re7 22.Nd6.

18.Nce4 Nxe4 19.Nxe4 Bb4



This was Shirov's idea. Now, neither Nc5 nor Nd6 are available to White. So, it's time to look for a different way to improve the position.

EXERCISE 15: Please suggest the best continuation for White.

SOLUTION

20.Ng3!

Two points. The knight continues its dance. The f5-square is vulnerable as usual, but we attack it under slightly better circumstances than a couple of moves earlier.

White has many decent alternatives. However, he can obtain a serious advantage only if Ne4-g3 is a part of the plan. That is why I give only partial credit for moves like 20.Rac1! (one point) if you did not consider the knight move to be a follow-up. However, if your analysis included something like 20...bxa4 21.bxa4 c5 22.Ng3! (one point; 22.Nxc5?! Rc8) then you get full credit (two points in total) for this exercise. The same goes for 20.Bf1 (one point) 20...Bc8 21.Ng3! (one point) and 20.Rxd8 (one point) 20...Rxd8 21.Rd1 Rxd1+ 22.Qxd1 Ng6 23.Ng3! (one point).

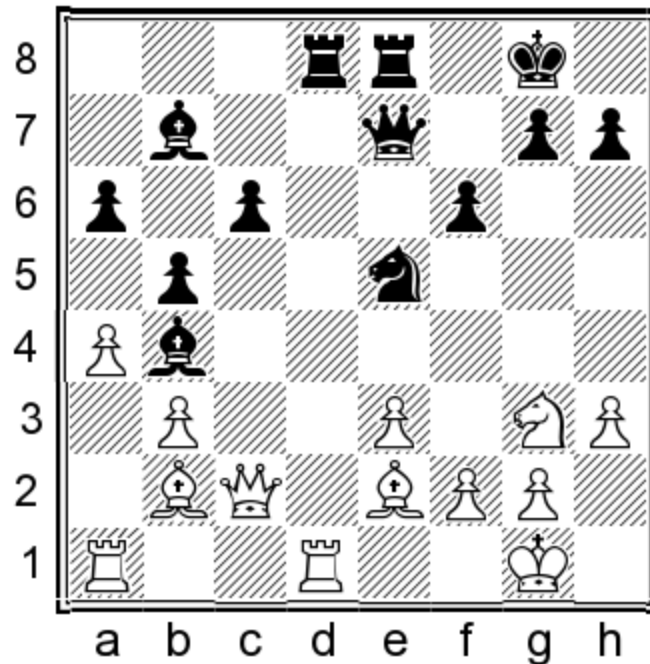
Alternatively, White could still fight for the c5-square with 20.Bc3 (one point) 20...Bc8 21.Bxb4 Qxb4 22.Nc5, but his advantage is more static in this case, and it's not so obvious how he should improve his position due to the annoying presence of the black queen on b4.

20.Bd4?! (no credit), played with a similar idea as 20.Bc3, underestimates the opponent's strong tactical resource 20...c5! 21.Bxc5 Qc7. The pin on the c-file and the pressure on e4 suddenly make the white position dangerous.

Shirov had a difficult choice between two evils: allowing White to have the strong Bb2 or Nf5. He opted for:

20...f6?!

Opening the long diagonal with the unchallenged bishop on b2 with 20...g6 doesn't look too appetizing, but it was a lesser evil. In this case, White can take advantage of the new weaknesses with a consecutive knight maneuver: 21.Ne4!, counting on a small tactic to justify it, 21...f5 22.Ng5! Qxg5 23.Bxe5.



The text move limits the bishop on b2 but creates significant weaknesses on the kingside. Karpov exploited this move skillfully; can you?

EXERCISE 16: Please suggest the best continuation for White.

SOLUTION

21.Bxe5!

Three points. Sometimes, trading a bishop for a knight is a difficult decision. Subconsciously, we know that bishops tend to be a little more valuable on the whole, particularly in open positions with pawns on both flanks. However, this trade makes perfect sense here: the dark-squared bishop was not particularly useful anymore, while the black knight on e5 was the pride of his position. By eliminating this knight, we open new possibilities that were previously unavailable.

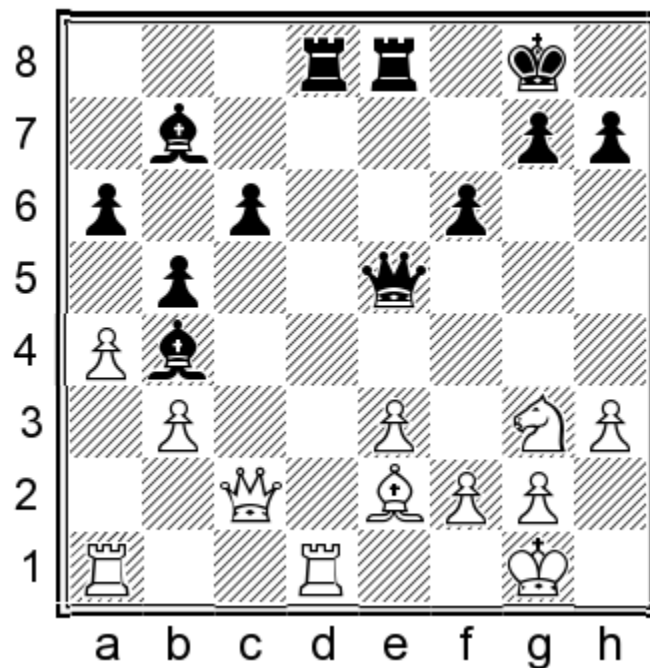
A) 21.h4! (two points) is a good alternative, preparing to push the h-pawn down the board and inflict further weaknesses in the opponent's kingside structure. For example, 21...Qf7 22.h5, continuing the pressure.

Black cannot alleviate the pressure by trading rooks, as the following line shows: 21...Rxd1+ 22.Rxd1 Rd8 23.Rxd8+ Qxd8 24.Bxe5 fxe5 25.Qe4 and White is winning;

B) 21.Nf5 (one point) is a sensible follow-up, but it's less promising than the alternatives. After 21...Qf7 22.h4 Bf8 23.h5 Bc8 or 22.Bxe5 fxe5, the knight somehow feels in the way of other pieces on f5.

21...Qxe5

Black doesn't want to compromise his pawn structure with 21...fxe5 (when 22.Bf3 establishes an unbreakable blockade on the light squares) and hopes his queen can replace the knight well on e5. However, as the game will show, it is one move too late to the party.



EXERCISE 17: Please suggest the best continuation for White.

SOLUTION

22.Bd3!

Two points. An instructive follow-up to White's previous move. As soon as Black put his pawn on f6, Karpov realized it was possible to exploit the light squares around his king.

The 'positional' continuation 22.Bf3?! (no credit) runs into a tactical problem: 22...Rd2! 23.Rxd2 Bxd2! 24.Rd1 Bxe3!, something the strong tactician Shirov probably saw miles away. Something similar happens in case of 22.Bh5 (one point) 22...Rf8 23.Bf3 Rd2! 24.Rxd2 Bxd2 25.Rd1 Bxe3 26.b4, but White keeps the positional advantage in this instance, thanks to the Qb3+ threat.

22.Rac1 (one point) prevents the ...Rd2 tactic, keeping a positional advantage after 22...g6 23.Bf3. However, as the game shows, White can do better than that.

22...h6

Black is forced to play this ugly move since 22...g6 is refuted by 23.Bxg6! hxg6 24.Qxg6+ Kh8 25.Qh6+! (the correct move order; 25.Nh5? allows Black to save himself with 25...Qg5) 25...Kg8 26.Nh5 with a winning attack. There is no way to defend against both 27.Qg7 checkmate and 27.Nf6+.

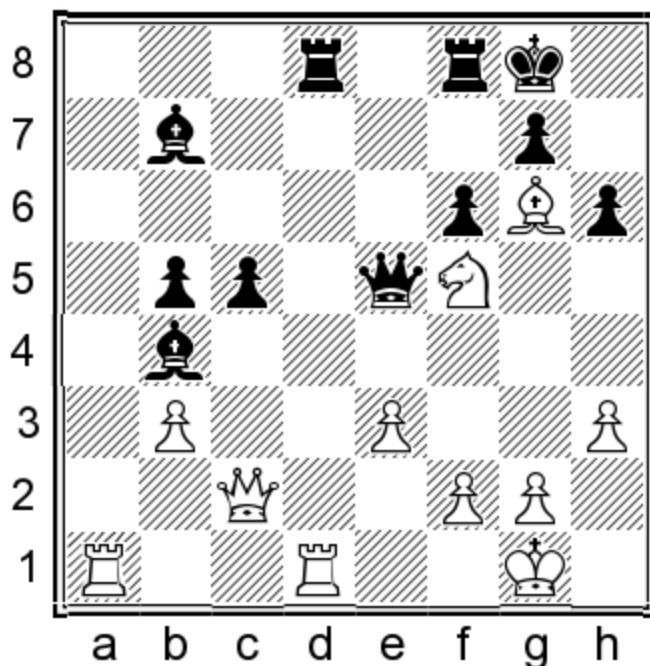
23.Bg6 Rf8 24.Nf5

The white pieces have set up camp on the light squares, making the position of the black king precarious. The black bishops are particularly helpless in this situation. Shirov decides to do something about this:

24...c5?

But this move will only backfire. Instead, he should have brought his light-squared bishop into the game via 24...Bc8.

25.axb5 axb5



EXERCISE 18: Please suggest the best continuation for White.

SOLUTION

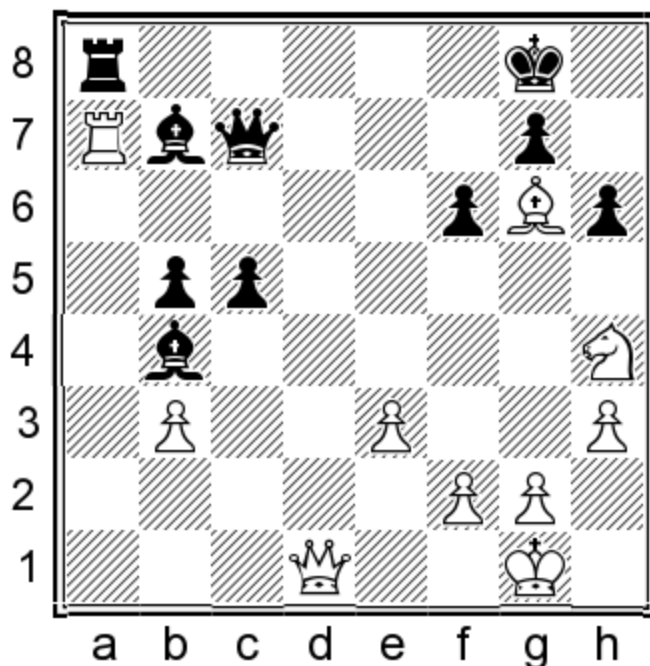
26.Ra7!

Two points. The last white piece joins the attack, showing why 24...c5 was not a good idea. Now, the intended 26...Be4 doesn't work because of a forced mate after 27.Rxg7+, so Black has to start defending.

White could also have started the attack with 26.Nh4! (one point), threatening 27.Bh7+ and 28.N/Qg6+. In that case, it would be important to see that Black could defend with 26...Qg5 when only 27.g3! (one point) keeps White in the driver's seat. 27.Bh7+ Kh8 28.Ng6+?! (no credit) is messier because of the mating threat on g2. After 28...Kxh7 29.Nxf8+ Kg8 30.f4 Rxd1+ 31.Rxd1 Qg3, Black obtains counterplay, and there was no reason to allow that.

26...Qc7 27.Nh4! Rxd1+ 28.Qxd1 Ra8

Black hopes that simplifications will help him fend off White's attack. However, the light squares around his king are in such bad shape that this measure may not be enough.



EXERCISE 19: Please suggest the best continuation for White.

SOLUTION

29.Qg4!

Two points. The white queen joins the attack, and Black cannot stop the upcoming onslaught on the light squares.

A) 29.Rxa8+ is a worse option, but not the end of the world because White still retains excellent winning chances after 29...Bxa8 30.Bc2 (one point) with multiple threats on the light squares;

B) 29.Rxb7 Qxb7 30.Bh5 (one point) is also possible, with similar ideas.

29...Qc6

29...Rxa7 allows a back-rank checkmate with 30.Qe6+ and 31.Qe8.

30.Rxb7!

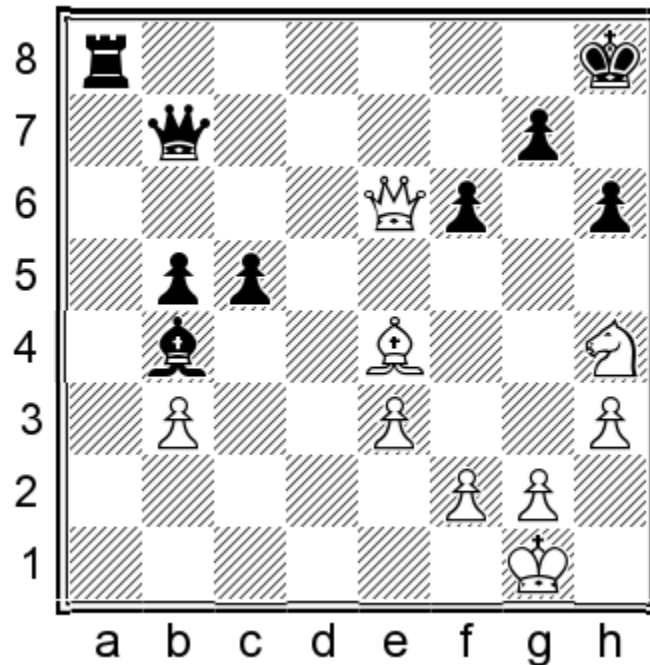
Not the only way to finish the game, but the most thematic one. The last defender of the light squares is gone, and the remaining black pieces are merely spectators of the mating finale.

30.Nf5 was a more prosaic way to finish the game.

30...Qxb7 31.Qe6+ Kh8

If 31...Kf8, then 32.Be4 with 33.Ng6 checkmate.

32.Be4



Due to his excellent middlegame strategy, White has achieved picture-perfect light-square domination, and the opponent's king will be the final casualty. Black made a few more spite checks before resigning:

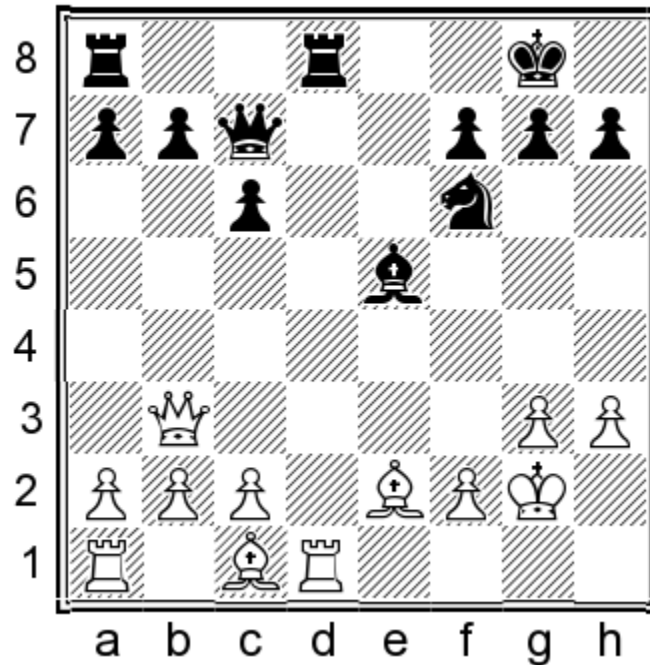
32...Ra1+ 33.Kh2 Qb8+ 34.f4 c4 35.Ng6+ Kh7 36.Ne7+ Kh8 37.Qf5 1-0

Your score = /14 points

The next Middlegame Simulation features a game between two considerably lower-rated players than the rest of the selection. I included it, nevertheless, because White's middlegame play was very instructive and strong.

Middlegame Simulation – Exercise 4
Vladyslav Fishchuk 2204
Antonios Gkavardinas (2162)

1.e4 c6 2.Nc3 d5 3.Nf3 Bg4 4.h3 Bxf3 5.Qxf3 Nf6 6.Be2 e6 7.0-0 Nbd7 8.d4 dx4 9.Nxe4 Nxe4 10.Qxe4 Nf6 11.Qe3 Bd6 12.Rd1 0-0 13.g3 Qc7 14.Kg2 e5 15.dxe5 Bxe5 16.Qb3 Rfd8



This typical middlegame structure, often seen in the Caro-Kann, Scandinavian, or Slav, features two open central files, relatively symmetrical pawn structures, and White's bishop pair advantage. White typically holds a slight edge, but the black position is very solid. To overcome this, White must demonstrate high positional class. The first important decision is how to respond to the opponent's last move, which proposes a rook trade.

EXERCISE 20: Please suggest the best continuation for White.

SOLUTION

17.Re1!

Two points. White wisely avoids trading heavy pieces and gives the opponent an illusion of control over the d-file. In reality, all squares on this file are well-protected by White's pieces. What's more important is that he keeps more pieces on the board as the side with

a slight positional initiative. Piece trades would only make Black's life easier.

A) 17.Be3 (one point) is the most straightforward continuation, developing a piece and connecting rooks. It's a good move, but the downside is that Black can simplify the position with 17...Nd5 18.Bd2 Qb6. White has an edge in the endgame arising after 19.c3 Qxb3 20.axb3 a6, thanks to his bishop pair, but Black remains solid;

B) 17.Bd2 (one point) avoids the rook trade like the text, but this is a slightly awkward square for the bishop. Black can trade the queen here as well. For example: 17...Bd4!? 18.Bf4 Qb6 19.Qxb6 Bxb6;

C) 17.c3, just as 17.a4 and 17.h4 (one point), improves the position slightly. The downside of all these moves is that Black trades a pair of rooks with 17...Rxd1 18.Bxd1 Re8 19.Bf3. White keeps an edge, but Black's position is a bit easier to handle with less congestion on the back rank.

17...Rd7

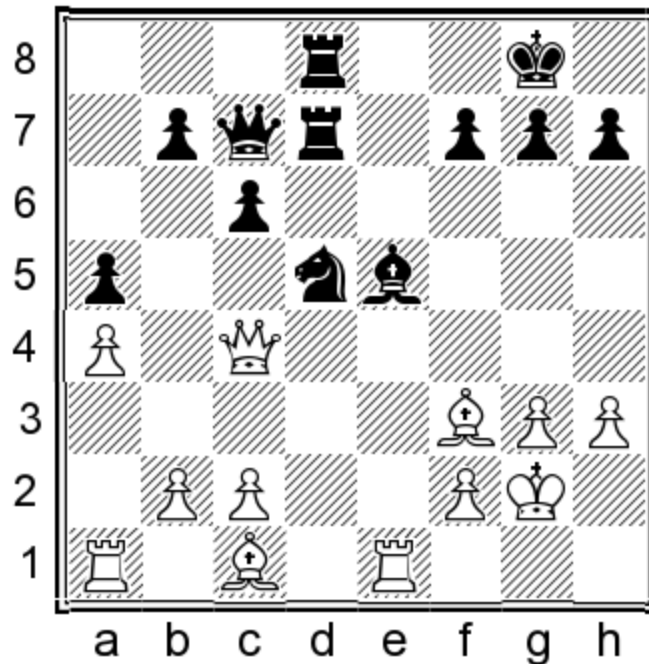
Doubling the rooks on the d-file is a decent idea, but it's somewhat pointless, considering the previous comment. 17...Re8 was better, mirroring the white rook.

If Black tried trading queens with 17...Qb6, White could decline by moving the queen over: 18.Qf3! Nd5 19.Bd3, keeping the tension.

18.Bf3 Rad8 19.a4

White expands on the queenside, hoping to provoke weaknesses in the black structure. A logical alternative was 19.Re2!?, preparing to double the rooks on the e-file. Here is a sample line: 19...h6 20.c3 Rd3 21.Be3 Bd4!? 22.Bf4 Qd7 23.Rae1 Bc5 24.Qc4 Bf8± .

19...a5 20.Qc4 Nd5



Both sides are carefully trying to put their pieces on the best squares for the upcoming battle. How can White improve his position further?

EXERCISE 21: Please suggest the best continuation for White.

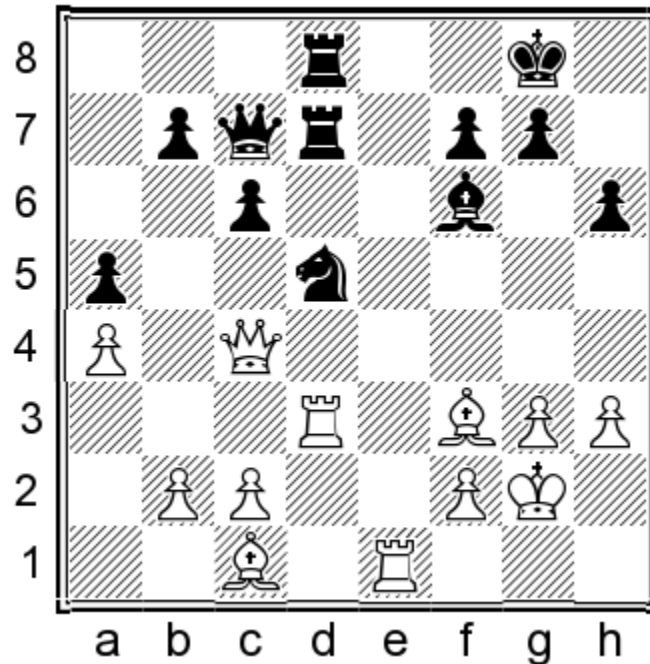
SOLUTION

21.Ra3!

Two points. This move shows that White doesn't need to use the first rank to develop his rook. It can join the game via the third rank while the bishop keeps exerting pressure on the c1-h6 diagonal from its 'home office' on c1.

As in the previous exercise, White has many reasonable ways to preserve his positional edge, but I will only give maximum credit to the text because it improves his position. The other relevant options are: 21.h4!? (one point) 21...h6 22.Ra3! (one point); 21.c3 (one point); 21.Bg4 (one point). 21.Qg4 (one point) is the most direct idea, targeting the kingside. But Black can fight back with 21...g6 22.Bg5 Bf6! 23.Bxd5 Bxg5 24.Bxf7+ Rxf7 25.Qxg5 Qb6!, and White lacks development to capitalize on his extra pawn.

21...h6 22.Rd3 Bf6



White has completed the mini-plan of activating the queen's rook, now it's time to look for another one.

EXERCISE 22: Please suggest the best continuation for White.

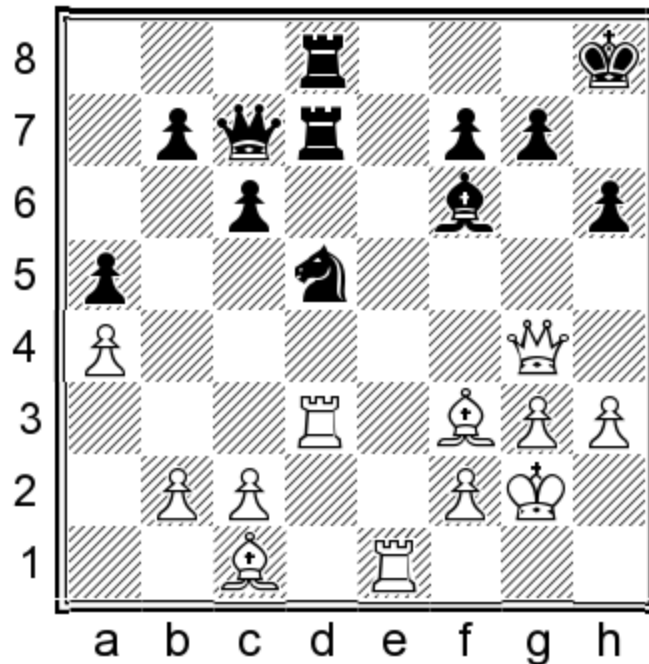
SOLUTION

23.Qg4!

Two points. The opponent's 21st move created a few targets on the kingside, and it's only natural to swing the queen over to exploit it. 23.h4! (one point) or any other reasonable move, like 23.b3, etc., earns partial credit because the game move responds best to the position's needs. For example, Black can force a trade of one rook here with 23...Nb6 24.Rxd7 Nxd7 25.Bf4 Ne5 26.Qc5 Re8.

**23...K

######**



The black king has suddenly become vulnerable.

EXERCISE 23: Please suggest the best continuation for White.

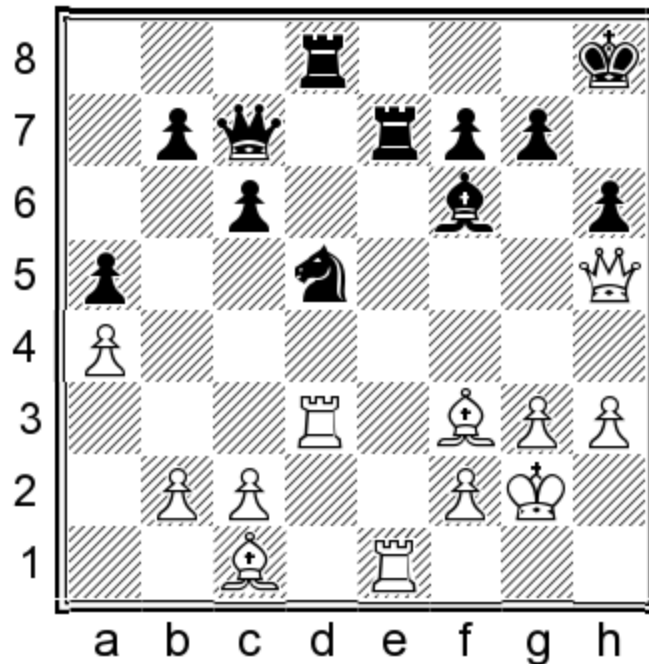
SOLUTION

24.Qh5

One point. A stronger attacking continuation exists. White would create dangerous threats on the b1-h7 diagonal had he included the light-squared bishop in the attack with 24.Be4! (two points). Black would hardly be able to resist White's attack after 24...Ne7 25.Bf4 Qc8 26.Rf3!, etc.

24.Red1 Be7 25.Qf5 (one point) is another reasonable plan, increasing pressure on the d-file and the kingside. Taking more space on the kingside with 24.h4 (one point) also makes sense. However, 24.Of5?! (no credit) is premature because of 24...g6 and the queen would have to retreat.

24...Re7



Black realizes he needs to do something before the opponent's attack becomes too strong. Trading a pair of rooks would be a good start. How should White respond?

EXERCISE 24: Please suggest the best continuation for White.

SOLUTION

25.Red1!

Two points. Of course! White should keep as many pieces on the board as possible to strengthen his attacking chances. Once again, the opponent's control over the open file (in this case, the e-file) is irrelevant. In fact, White has more serious threats on the d-file now.

A) 25.Rxe7 (one point) only makes Black's life easier. After 25...Qxe7 26.Rd2 (26.Bxd5? cxd5 27.Rxd5 doesn't work because of 27...Qe4+) 26...Kg8 27.Re2 White keeps a significant positional advantage but still has a lot of work to do to make it count;

B) 25.Re4 (one point) is a sensible continuation, aiming to bring more pieces to the kingside. Black has a surprising defense, though: 25...Kg8 26.Rg4 Kh8! and the rook might need to return to e4 since the direct sacrifice 27.Bxh6?? fails to 27...g6;

C) 25.Rdd1 (one point) is also fine, but the conclusion is similar to 25.Rxe7.

25...Re5 26.Qg4

White is close to strategically winning now. The black pieces coordinate poorly, and his weaknesses are mounting (besides h6, the pawns on a5, b7, and f7 are all potential targets). White is looking for the right moment to strike at the d5-knight and make a breakthrough on the d-file.

26...h5

This is a sign of desperation. The pawn will only be weaker on h5. Still, the alternatives weren't too inspiring:

A) If Black unpins with 26...Rde8, the d-file remains undefended: 27.h4! secures a retreat on h3 for the queen and threatens the decisive c2-c4 (the immediate 27.c4 is a blunder: 27...h5! 28.Qd4 c5, and the queen gets trapped);

B) In case of 26...Ree8, White can invade the seventh rank with 27.c4 Nb4 28.Bf4 Qb6 29.Rxd8 Rxd8 30.Rd7!;

C) 26...Bg5 was relatively best, although White keeps a nearly winning advantage after 27.Bxg5! Rxc5 28.Qc4 Nf4+ 29.Qxf4! Qxf4 30.Rxd8+ Kh7 31.h4!, etc.

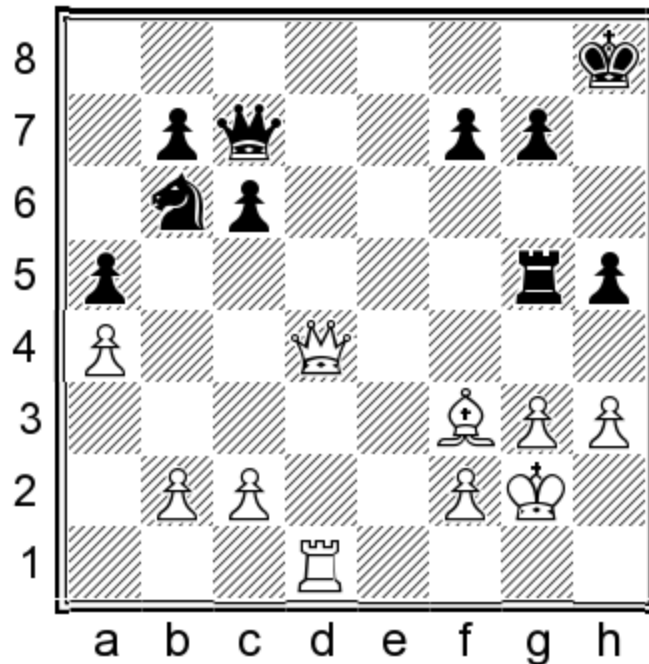
27.Qc4 Nb6?

This retreat speeds up the end. Still, it is difficult to suggest something better. For example, 27...Qb6 28.b3, and it's unclear what Black's next move is. His pieces are completely tied down.

28.Rxd8+ Bxd8 29.Qd4

White starts exploiting the opponent's poor piece coordination.

29...Bg5 30.Bxg5 Rxc5



Black traded pieces a little too late. His remaining pieces are in disarray, and White only needs to find a way to capitalize on this.
EXERCISE 25: Please suggest the best continuation for White.

SOLUTION

31.Re1!

Two points. This quiet move crowns White's excellent middlegame strategy of avoiding the trade of heavy pieces. Thanks to this patient approach, he obtained complete control over the two open files and now threatens a decisive invasion of the opponent's back rank.

White could win in several other ways, including transitioning into an endgame. Technically, there is nothing wrong with these moves, but the text is better from a practical perspective because it closes the game in a couple of moves without allowing the opponent an off chance to escape in the endgame.

A) 31.Qd8+ (one point) 31...Qxd8 32.Rxd8+ Kh7. I give full credit for this line if you calculated one of the following continuations: 33.b3! (one point) or 33.Rb8 Nxa4 34.Rxb7 Rb5 35.Rxf7 Nxb2 36.Bxc6 (one point). It is important to be precise in

winning positions. Simulations are an excellent tool for practicing this skill, so I recommend to you not to be lazy when you see a winning idea but make sure to calculate it properly. You will reap benefits from this honest training approach in your games;

B) 31.h4! (one point) 31...Re5 32.Qd8+ is similar to the previous line. Again, you will get full credit only for calculating the line until the end: 32...Qxd8 33.Rxd8+ Kh7 34.Rb8 Nxa4 35.Rxb7 Rb5 36.Rxf7 Nxb2 37.Be4+ (one point);

C) 31.Qh4 (one point) also works, provided you see 31...Qe5 32.Rd8+ Kh7 33.Rf8! f6 34.Qe4+! Qxe4 35.Bxe4+ (one point).

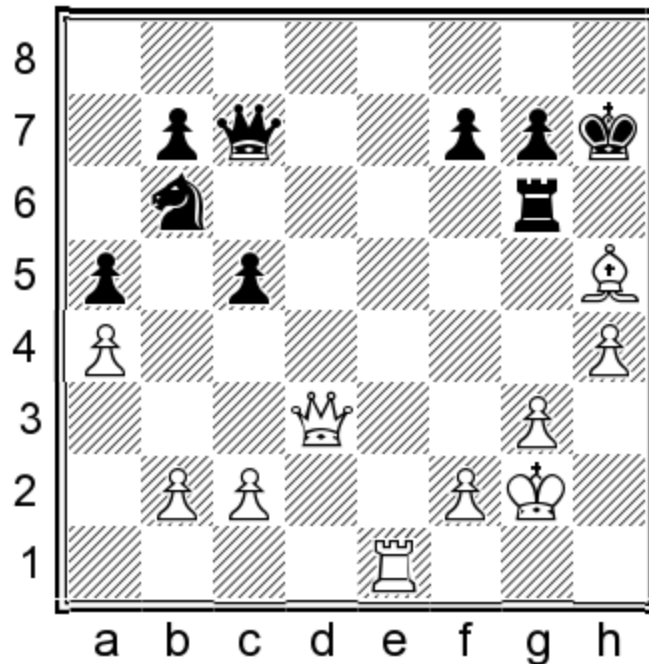
31...Kh7

31...Nd5 doesn't help. White wins by force with 32.Re8+ Kh7 33.Be4+ f5 34.Bxd5 cxd5 35.Qxd5.

32.h4!

There was nothing wrong with 32.Re8, but, paying attention to the opponent's last move, White realized that the rook-trapping idea would have a more immediate effect; the point is that now 32...Rg6 allows the decisive pin with 33.Be4.

32...c5 33.Qd3+ Rg6 34.Bxh5



White wins the exchange, and the rest is agony for Black.

**34...Qc6+ 35.Kg1 Nxa4 36.b3 Nb6 37.Bxg6+ fxg6 38.h5 c4
39.hxg6+ Qxg6 40.Qxg6+ Kxg6 41.Re6+**

Black resigned.

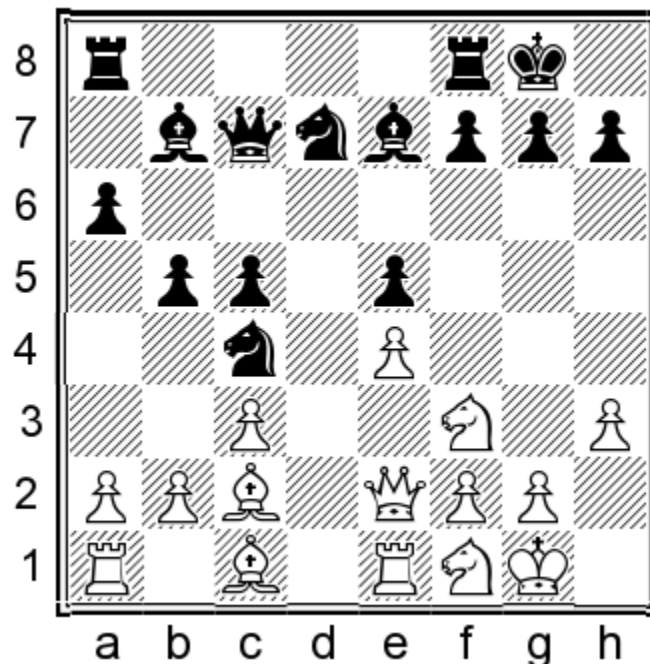
Your score = /12 points

Middlegame Simulation – Exercise 5 Vladimir Akopian 2667
Evgeny Postny (2618)
Ningbo World Team Championship 2011

**1.e4 e5 2.Nf3 Nc6 3.Bb5 a6 4.Ba4 Nf6 5.0-0 Be7 6.Re1 b5 7.Bb3
d6 8.c3 0-0 9.h3 Na5 10.Bc2 c5 11.d4 Nd7 12.dxc5 dxc5
13.Nbd2 Bb7 14.Qe2 Qc7 15.Nf1 Nc4**

The Ruy Lopez is rich with possibilities, and this is one of the thematic central formations that arises from it. Bobby Fischer scored many excellent victories on the white side of this middlegame, often combining kingside attack with positional pressure on the d5-square. The fixed e4/e5 pawn center usually leads to a maneuvering fight, and this game is an excellent example of White's ideas. Both sides

have completed their development, and we have our first critical position where White should devise a plan for the middlegame.



EXERCISE 26: Please suggest the best continuation for White.

SOLUTION

16.b3

Two points. The most straightforward move, but you get full credit only if you played this move to prepare 17.c4 (otherwise, you get only one point on this exercise).

A) Undermining the knight with 16.a4 (one point) is sensible. However, the downside of this move is that after 16...Rfe8 17.b3, Black can move the knight back with 17...Na5!?, trying to exploit the weakened b3-pawn with ...c5-c4;

B) 16.Ng3 (one point) is quite straightforward, but flexibility with this knight is better because Nf1-e3 might be the right maneuver in certain lines. Black can protect f5 without weakening his kingside by playing 16...Nd6 since 17.Nf5 Nxf5 18.exf5 Qc6! doesn't look that attractive for White;

C) 16.g4 is too aggressive (no credit). This typical pawn attack is misguided here, and Black should be better after 16...Nd6 17.Ng3 g6;

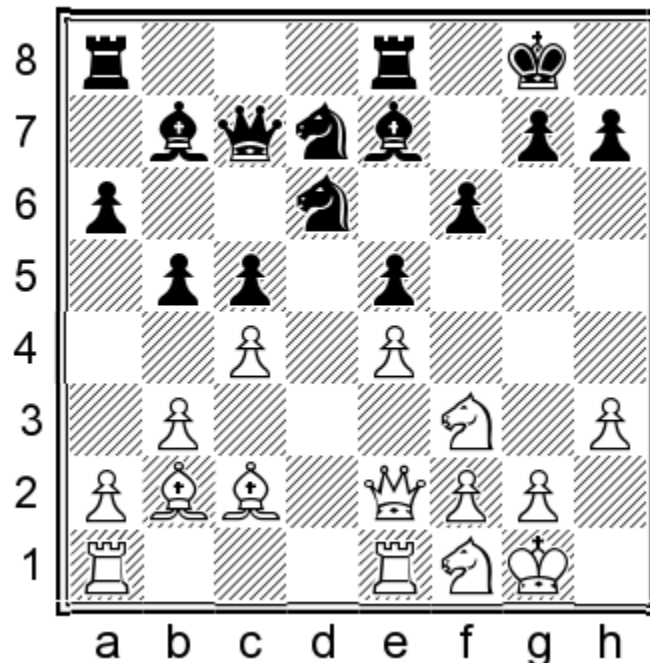
D) 16.Ne3 (no credit) works in Black's favor because he can trade a problematic knight for a potentially dangerous one with 16...Nxe3 17.Bxe3 and then take space on the queenside with 17...c4.

16...Nd6 17.c4!

With this move, White solidifies his control over the d5-square, prevents Black's pawn expansion on the queenside, and opens a diagonal for the dark-squared bishop.

17...Rfe8 18.Bb2 f6

The black position looks rock-solid. The structure is pretty symmetrical, with only minor differences between the piece placement of white and black pieces.



Still, White can use his first-move advantage to obtain the upper hand in this tense middlegame. Can you see how?

EXERCISE 27: Please suggest the best continuation for White.

SOLUTION

19.Ne3!

Three points. White should waste no time getting his knight to d5 if he wants to keep the initiative, even if that means he needs to sacrifice the central pawn.

19.N3d2 (one point) prepares the Nf1-e3-d5 maneuver more systematically, but it also gives the black knight an important tempo to pursue control of the neighboring d4-outpost: 19...Nf8 20.Ne3 Ne6 21.Nd5 Qd8 with a roughly balanced maneuvering fight ahead. There is also nothing wrong with moves like 19.Nh4 (one point) 19...Nb8 20.Ne3! (one point) and 19.Rad1 (one point) 19...Nf8 20.Ne3! (one point), but the key move in both cases is 20.Ne3 (otherwise, you get partial credit for this exercise).

19...Nf8

Taking the central pawn, 19...Nxe4, is risky in view of 20.Nh4! Nd6 (or 20...Ng5 21.Nhf5 Bf8 22.Qg4) 21.Qh5 Nf8 22.Ng4, when the ‘Spanish bishop’ on c2 looks menacing. White has an ideal attacking position ‘à la Fischer’ for a mere pawn.

20.Nd5 Qc6?!

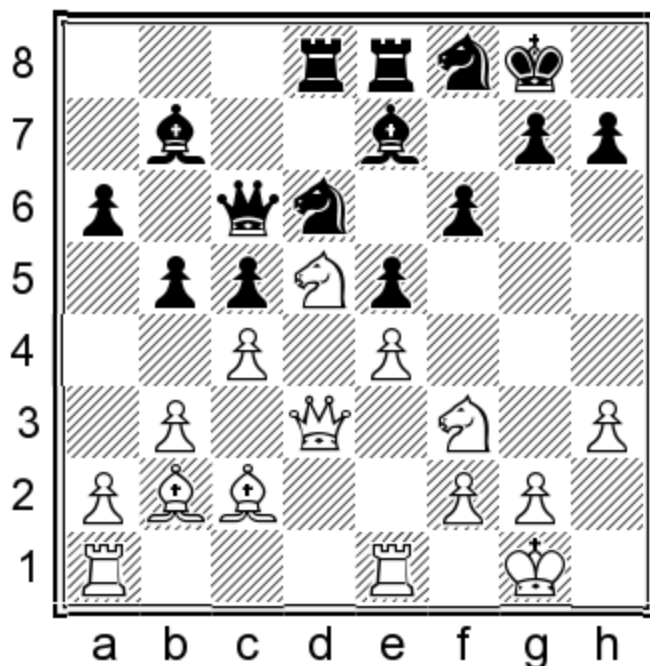
An awkward square for the black queen. 20...Qd8 was more natural, keeping the b7-bishop open and the queen connected with the kingside.

21.Qd3!?

A very clever move. White had a few good alternatives, but this way he takes full advantage of the opponent’s inaccuracy.

21...Rad8

The intended 21...Ne6? loses tactically to 22.Bxe5! fxe5 23.Nxe5, exposing the black queen: 23...Qc8 24.Nxe7+ Rxe7 25.Qxd6.



White has increased his positional initiative over the last few moves, but Black is getting ready to neutralize it with ...Nf8-e6-d4. What is the best way to utilize our slight advantage in time to keep Black on the back foot?

EXERCISE 28: Please suggest the best continuation for White.

SOLUTION

22.a4!

Three points. One of the most difficult moves of the game. It shows deep positional understanding and the ability to play on the whole board. By attacking the b-pawn, White wants to force the opponent to push it to b4, which releases tension off his c4-pawn. Then, White could prepare for the kingside attack more freely since he would no longer have to worry about his queenside safety.

A) 22.Nh4 Ne6 23.Qg3 (two points) logically continues White's previous strategy. However, Black could play 23...bxc4 in this case. After 24.bxc4 Kxh8, the c4-pawn needs attention, and Black has the potential for counterplay on the open b-file. White still has the initiative, but it's not as clear-cut as in the game;

B) 22.h4 Ne6 23.h5 (two points) is another sensible plan that gives White better chances, though it's a little slow compared to a direct piece attack.

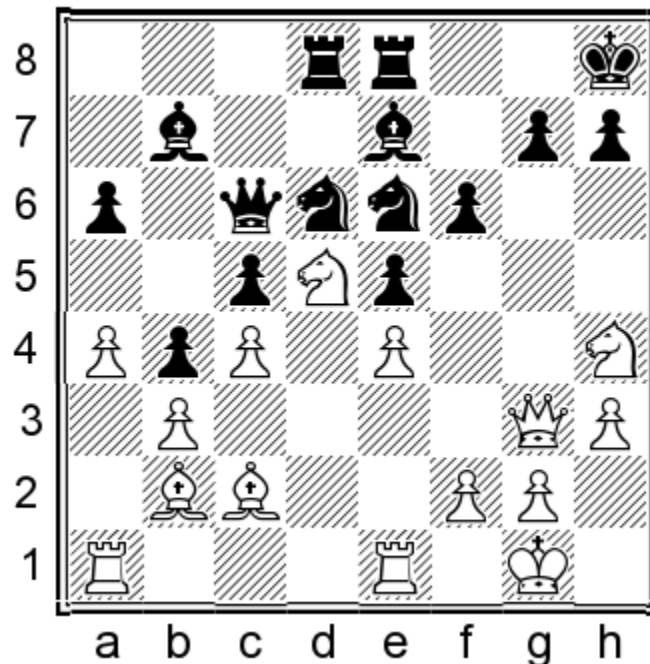
22...b4

Black offers no resistance to the opponent's idea. 22...Ne6 was better, when 23.axb5 axb5 24.Ra5! forces Black to do something with his b-pawn: 24...b4 (24...bxc4?! 25.bxc4 gives White the initiative on the queenside), and White can then keep pressing with 25.h4 or 25.Nh4!?, as noted in the previous comment. Another possible downside of this structure for Black is that the b4-pawn would be hanging in case of ...Nd4, Bxd4 cxd4, which limits his options in the center.

23.Nh4!

White can completely focus on his kingside attack now.

23...Ne6 24.Qg3 Kh8



White has made a lot of progress in this maneuvering affair, but these gains could prove temporary if he doesn't develop a new plan to strengthen his position.

EXERCISE 29: Please suggest the best continuation for White.

SOLUTION

25.Bd1!

Two points. A wonderful idea. The Spanish bishop switches diagonals and joins the kingside attack from an unexpected angle.

A) 25.Qg4 (one point), preparing Qh5, Ng6+, was another reasonable attacking option. The game could continue 25...Bf8 26.Qh5 K_g8 27.f4! Nd4 28.Bxd4 cxd4 29.Nf3, with a positional advantage. Still, it's better to add another piece to the attack, as Akopian did;

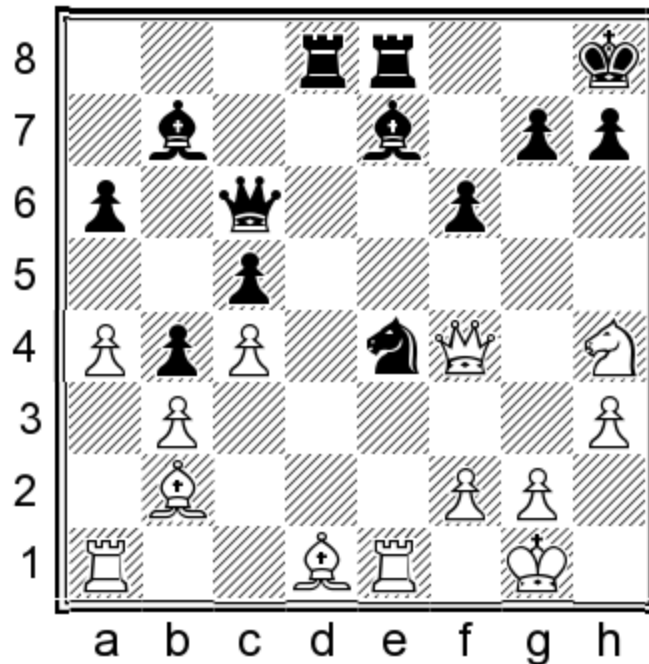
B) 25.f4?! (no credit) is premature due to 25...Nxf4 26.Nxf4 exf4 27.Qxf4 Nf7, while 25.Nf5?! (no credit) 25...Bf8 misses the target. White should be attacking the weak g6-square, not g7.

25...Nf4

This desperate shot wasn't calculated properly. Then again, Black didn't really have better options. 25...Nd4 doesn't work here, because after 26.Bxd4 cxd4 27.Bh5, 27...g6 runs into 28.Nxg6+ hxg6 29.Bxg6 and the black king is defenseless.

Black surely didn't like the look of 25...g5 26.Nf3 Nf7 27.h4, which looks strategically hopeless against a player of Akopian's caliber.

26.Nxf4 exf4 27.Qxf4 Nxe4



Can you refute Black's attempt to break free?

EXERCISE 30: Please suggest the best continuation for White.

SOLUTION

28.Bh5!!

Two points. Only this precise move secures White a winning advantage.

A) Attacking the e8-rook first is essential because the immediate 28.Bf3?! (one point) allows Black to defend the knight with the help of a discovered attack: 28...Bd6;

B) 28.Nf5?! (one point) is also inaccurate, as it allows the opponent to escape with a counterattack: 28...Nd2! 29.Qg3 Bf8.

28...Bd6

Black decides to give up material to keep the game going. Crucially, the fork 28...g5 doesn't work due to 29.Qf5 gxh4 30.Rxe4! (one point). You get full credit (3/3 points) for this exercise only for finding this winning shot. Otherwise, your score is 2/3 points.

30...Qxe4 31.Bxf6+ Kg8 32.Qg5+ and Black loses a queen or gets checkmated.

In case of 28...Rf8, 29.Bf3 works because the knight cannot be protected when the rook is on f8.

29.Bxe8 Rxe8

White's flawless middlegame play allows him to claim a winning material advantage. For the purposes of this exercise, the rest of the game is not very interesting, so I will give the remaining moves without comments:

**30.Qe3 Qc7 31.Nf3 Re7 32.Qd3 Kg8 33.Rad1 f5 34.Kf1 Bc6
35.Nd2 Re6 36.Nxe4 fxe4 37.Qd2 h6 38.Re3 Kh7 39.g3 Be7
40.h4 Qc8 41.Qc2 Rg6 42.Rd5 Qh3+ 43.Ke2 Qg4+ 44.Ke1 Bxd5
45.cxd5 Kg8 46.Qxe4 Qxe4 47.Rxe4 Kf7 48.Be5 Bf6 49.Bc7 Be7
50.Ke2 Bd6 51.h5 Rf6 52.Bxd6 Rxd6 53.Re5 c4 54.bxc4 b3
55.Kd3 Rb6 56.Re1 b2 57.Rb1 1-0**

Your score = /13 points

Total points for Middlegame Simulation exercises = /65 points

Total scores and grading scale

1) Total score for FMP section = /55 points

The grading scale for the FMP section:

(Please note that I have adjusted the grading scale in this chapter since no extra credit was available, unlike the other three chapters. Instead of using 70% and 90% cutoffs for the middle two score ranges, I reduced them to 65% and 85% respectively, to make it easier for you to get a better grade for Middlegame exercises.)

Your total score Corresponding Elo rating

0-28 pts	Below 2100
29-35 pts	2100-2250
36-46 pts	2250-2400
47-55 pts	2400+

2) Total points for Middlegame Simulation section = /65 points

The grading scale for the Middlegame Simulation section:

Your total score Corresponding Elo rating

0-32 pts	Below 2100
33-41 pts	2100-2250
42-43 pts	2250-2400
55-65 pts	2400+

3) Total score for Chapter 4 = /120 points

The grading scale for Chapter 4:

Your total score Corresponding Elo rating

0-59 pts	Below 2100
60-77 pts	2100-2250
78-101 pts	2250-2400
102-120 pts	2400+

Chapter 5

Endgame Training

The final training area, often overlooked but crucial, is the endgame. As we discussed in Chapter 1, endgame errors can be more game-changing than those made in the opening or middlegame. It's disheartening to see some ambitious players, even with ratings around 2300, not giving endgame study the attention it deserves. Some have even admitted to never reading an endgame book! This neglect in your chess education can lead to significant gaps in your overall game.

Let me stress a practical point about endgames: We often find ourselves playing them under time pressure and fatigue from intense middlegame battles. In such situations, relying on improvisation is not a wise idea. To succeed as a tournament player, you need a solid foundation of endgame technique and knowledge. In essence, mastering endgame skills translates to better results. I believe this practicality should be motivation enough for any ambitious tournament player to prioritize endgame training.

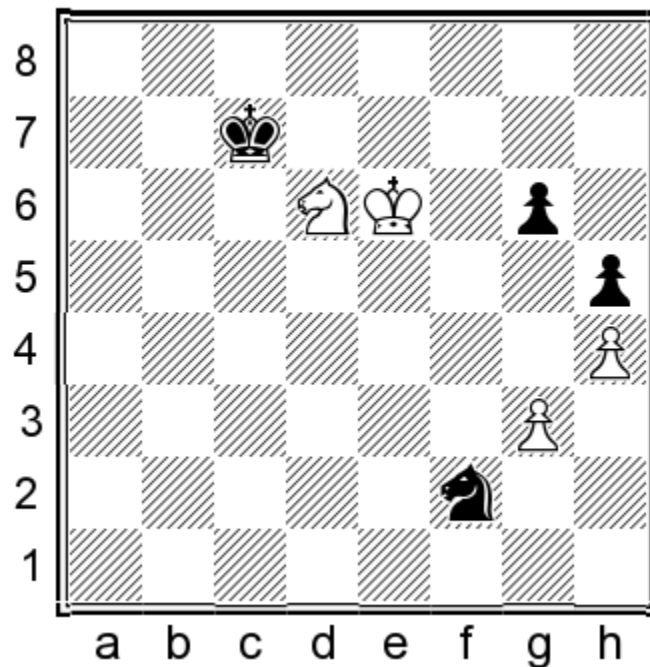
In this chapter, we will delve into two familiar study methods for endgame exercises: deep analysis and simulation. The action will unfold in positions with significantly fewer pieces than in the previous chapters. However, that does not mean that the 15 Endgame Analysis and 5 Endgame Simulation exercises you will tackle will be simpler. On the contrary, visualizing long lines, spotting a tactic, or devising the best plan can sometimes be more challenging in the endgame than the middlegame, due to its unique features we discussed in Chapter 1.

It will be helpful to look at a couple of examples before you start your final training module.

Endgame Analysis

Let me stress again that the Deep Analysis format allows you to freely move the pieces as you explore the possibilities in the given exercise. This freedom, however, should be balanced with a systematic approach. As we have seen when solving Tactical Analysis exercises, the most important aspects of such analysis are **generating essential candidate moves (width)** and **analyzing the resulting lines deeply enough (depth)** to ensure accurate evaluation.

Endgame Analysis – Example 1



We have a deceptively simple knight endgame. Its main feature is that White's king is closer to the opponent's pawns than Black's. That gives White good winning chances. However, things are never straightforward with knights.

Your task is to analyze two continuations, **54.Nb5+** and **54.Ne8+** , to determine which one is better. As you do that, remember that the main goal is not to analyze only what you believe is the best move/line and ignore the other important options in the position. Instead, aim for a comprehensive analysis that considers a wide range of candidate moves and the potential long-term possibilities they open up. This is what we mean by ‘depth and width’ in chess analysis. Like with the Tactical Analysis exercises, you will benefit the most from this thorough analytical approach and increase your chances of earning regular and extra training points.

A) 54.Nb5+!

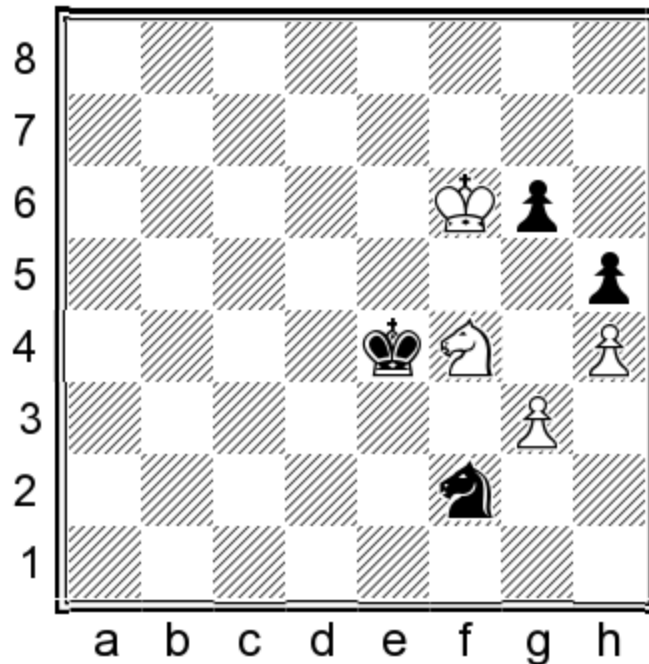
This is the right check.

54...Kc6 55.Nd4+ Kc5 56.Ne2!

Two points. This is the crucial square. The white knight simultaneously protects the vulnerable g3-pawn and runs as far as possible from the opponent’s king. Black has two options now:

A1) In case of 56...Ne4, White needs to employ the shouldering strategy: 57.Ke5! (57.Kf7 (no credit)allows the opponent to simplify matters with 57...g5) 57...Nd6 58.Kf6. White wins (one point);

A2) 56...Kc4 (Black continues to advance his king, hoping to get to the white pawns in time) 57.Kf6 Kd3 58.Nf4+ Ke4.



We have reached the culmination, as both kings have maximized their activity. However, White's 'first-move advantage' proves to be decisive after 59.Kxg6! (59.Nxg6? (no credit) would be a big mistake because of 59...Kf3) 59...Kf3 60.Nxh5 (two points). The knight geometry works beautifully for White. He has picked up both black pawns while protecting his own. Black cannot win the g-pawn with 60...Ne4 61.Kf5 Nxg3+ 62.Nxg3 Kxg3 because the remaining h-passer decides the issue: 63.h5 (one extra credit point).

B) 54.Ne8+

Somewhat surprisingly, this move doesn't work. Black has a narrow path to a draw:

54...Kc6!

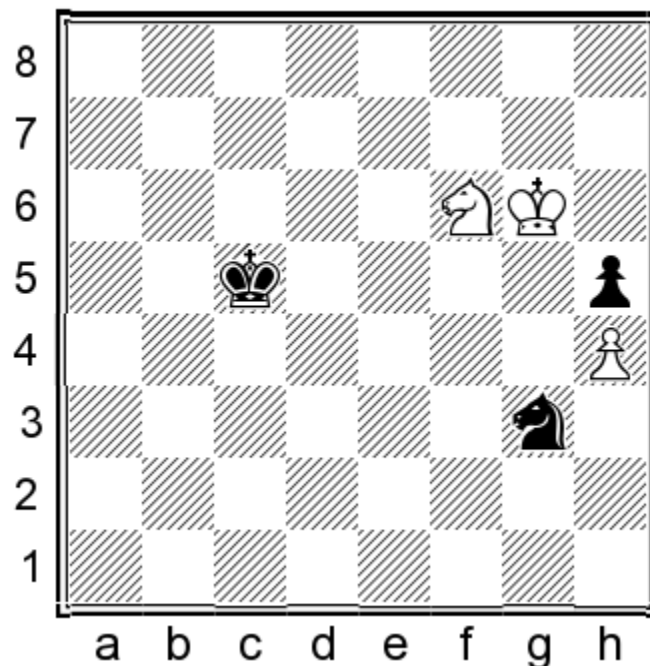
54...Kd8? is wrong due to 55.Nf6 Nd3 56.Ne4! (one point) and Black has no way to prevent Ke6-f6xg6xh5. His king is too passive.

55.Nf6

And now:

B1) 55...Nh1? is premature because of 56.Ne4 Kb5 57.Kd5! (one extra credit point), and the knight is trapped on h1! White will bring his king to f3 via d4 and capture it. On the other hand, the greedy 57.Kf6? (no credit) allows the black king to generate counterplay with 57...Kc4 58.Kxg6 Kd4 59.Kf5 Ke3=;

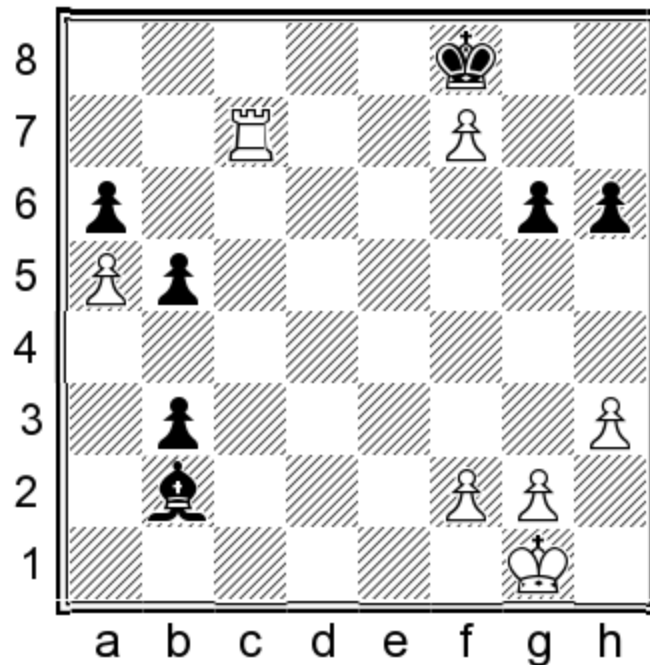
B2) 55...Kc5! (one point) continues with the correct, active strategy. 56.Kf7 looks like it's winning, but Black has a fancy defense: 56...Nh1! (one point) 57.Kxg6 (57.Ne4+ Kd4 is why we had to bring our king up the board) 57...Nxg3.



Black is close to a draw now, but precision is still needed because a rook's pawn is the knight's greatest foe. You can earn extra credit for finding the correct path after 58.Nxh5: 58...Ne2! (one extra credit point). The only move. Establishing control over the f4-square is crucial to threaten the ...Nf4+ fork when the white pawn eventually advances to h5 (58...Ne4? (no extra credit) loses to 59.Ng7 Ng3 60.Nf5): 59.Nf6 Kd6, and a draw is inevitable after 60.h5 Nf4+ 61.Kg5 Nxh5 or 60.Kg5 Ke6 61.h5 Kf7.

Your score = /8 points + extra credit

Endgame Analysis – Example 2



This sharp endgame with passed pawns on both sides requires precise, deep analysis. We will evaluate and compare two candidate moves for Black: **37...b4** and **37...Bg7**.

Please take your time to analyze these moves if you decide to use this example as a warm-up exercise.

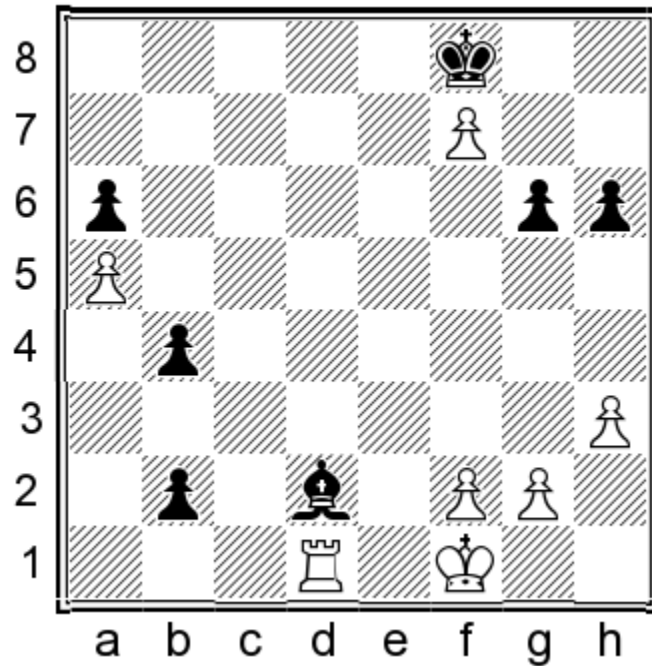
A) **37...b4!**

The idea behind this move is to cut off the white rook with ...Bc3. This is the most efficient way to threaten to promote the black passer in an endgame where every tempo matters.

A1) White could bring his rook back at once: 38.Rd7 Bc3 39.Rd1 b2 40.Rb1 (one point), preventing the ...Bc3-d2-c1 maneuver from the A2) line. After 40...Kxf7 41.Kf1 Ke6 42.Ke2 Kd5 43.Kd3, we get a position similar to the one referenced in the B) 37...Bg7 line, but with an extra tempo (...b5-b4) for Black. Black gets enough time to pick up the a-pawn with his king, and you can earn extra credit for further analyzing this line: 43...Kc5 44.f4 Kb5 45.Kc2 Kxa5

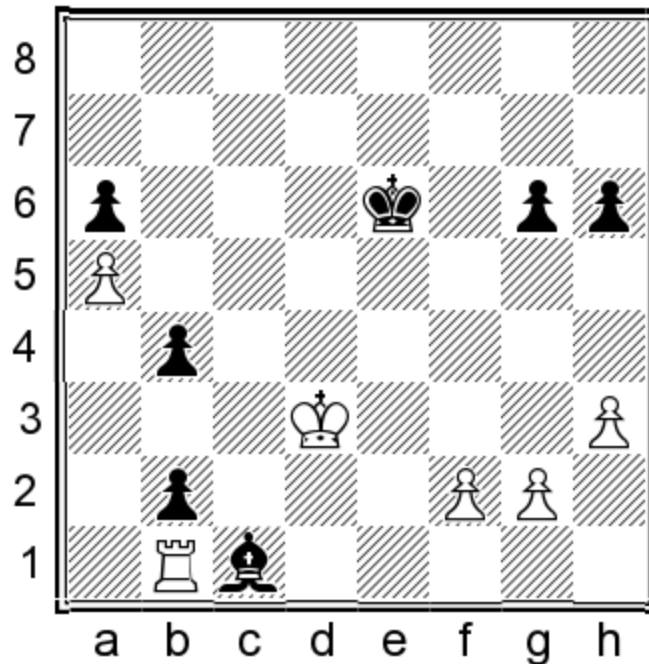
46.Rd1 Kb5 47.Kb1 a5 (one extra credit point). White blocks the b-pawns, but Black will have enough counterplay with his a-pawn;

A2) 38.Kf1 Bc3 (one point) 39.Rd7 b2 40.Rd1 Bd2! (one point). By contrast, 40...Kxf7 (no credit) allows White to win quite trivially after 41.Ke2 b3 42.Rb1 etc.



position after 40...Bd2

This is the crucial idea for Black as he prepares to box in the white rook on b1. 41.Rb1 Bc1 42.Ke2 Kxf7 43.Kd3 Ke6.



It's impossible to do anything in this endgame without the rook, so White will have to sacrifice it on b2. This should lead to a drawn king and pawns endgame because both sides have passed pawns on opposite wings that the opponent's king can catch and eliminate. You can earn extra credit for analyzing one of the following drawing lines:

A21) 44.Kc4 Ke5! 45.Kxb4 Kd4 46.Kb3 Kd3 47.Rxb2 Bxb2 48.Kxb2 Ke2 49.f4 Ke3 50.Kc3 Kxf4 51.Kd4 Kg3 52.Kc5 g5 53.Kb6 Kxg2 54.Kxa6 Kxh3 55.Kb5 (one extra credit point) resulting in a simultaneous pawn promotion and a drawn queen endgame; or

A22) 44.Kc2 Kd5 45.Rxb2 Bxb2 46.Kxb2 Kc4 47.f4 h5 48.g4 hxg4 49.hxg4 Kd4 (one extra credit point). Please note that your lines need not match the ones I provided here move-by-move to earn extra credit. There are alternative ways to achieve a draw, so your solution is as good as mine if you demonstrate a draw with accurate analysis.

The alternative fails in this respect because of a wonderful rook maneuver:

B) 37...Bg7? 38.Rc1!

One point.

38.Rd7 (no credit), on the other hand, doesn't succeed because it allows 38...Bc3! 39.Rd1 Bxa5 and White will have to work hard to make a draw after 40.Rb1 Bc3 41.Rxb3 b4 etc.

38...b2

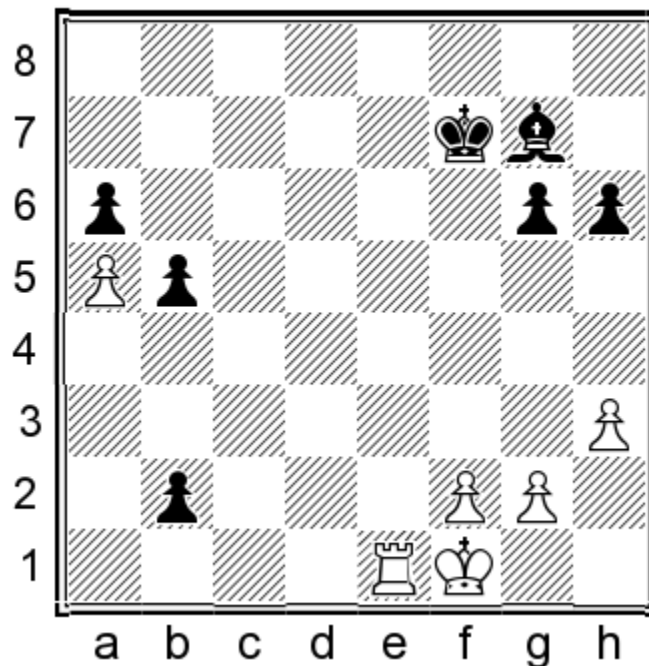
38...Kxf7 doesn't change much. After 39.Kf1 Ke6 40.Ke2 Kd5 41.Kd3, the white king gets inside the square of the b3-pawn, relieving the rook from that defensive duty.

39.Re1!

One point. Cutting off the black king is essential.

39.Rd1! is similar, and you also earn full credit for this move. After 39...Kxf7 40.Kf1 Ke6 41.Ke2, the black king is cut off the d-file instead of the e-file. That means he still needs to waste a tempo with 41...Bc3 and then 42.Rb1 Kd5 43.Kd3 transposes to the main line.

39...Kxf7 40.Kf1

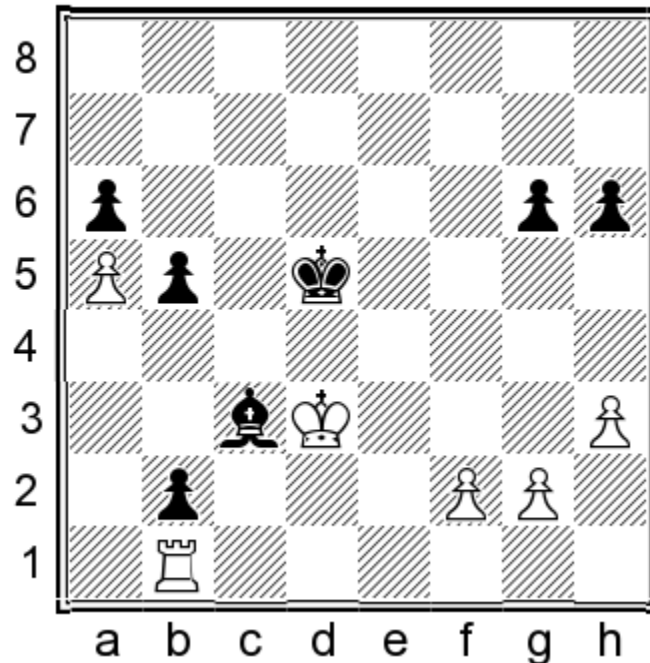


Black cannot cross over to the queenside because his king is cut off. That means he needs to spend a move on:

40...Bc3

This gives White a crucial tempo:

41.Rb1 Ke6 42.Ke2 Kd5 43.Kd3



If we compare this position to a similar one in the 37...b4 line, we see that Black is down a tempo here (his pawn is on b5 instead of b4). This makes a huge difference because Black is one move short of taking the a5-pawn with his king.

You can earn extra credit for analyzing this position deeper:

43...b4

43...Bxa5 44.Rxb2 should be an easy win for White because the black pawns have still not crossed the half of the board.

44.f4! Kc5 45.Rf1!!

Two extra credit points. This is the only winning move. It sets up a beautiful geometric idea:

45...Kb5 46.f5 gxf5

46...b1Q+ is only a temporary distraction: 47.Rxb1 gxf5 48.Rf1 Kxa5 49.Rxf5+ and White wins.

47.Rxf5+ Ka4

The crucial a5-pawn is safe, and now the white king takes over the defense of the back rank:

48.Kc2 b3+ 49.Kb1

Your score = /5 points + extra credit

Endgame Simulation

Endgame Simulations follow the format we saw in Middlegame Simulations.

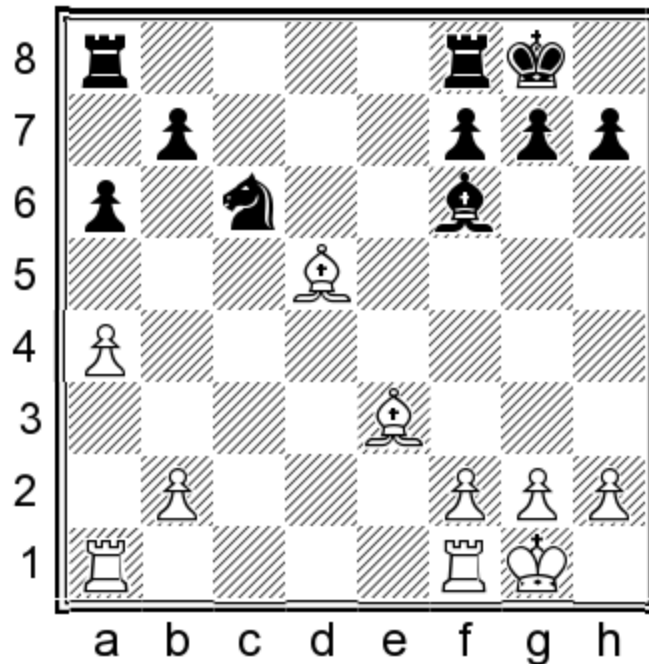
I hope you will find the following example instructive.

Endgame Simulation – Example Magnus Carlsen 2863

Fabiano Caruana (2835)

Carlsen Invitational INT rapid prel 2020

Our first endgame simulation features a clash between two of the highest-rated players in the world at the time of this writing. In addition, the endgame of the first diagram is quite a thematic one: how realistic are White's winning chances with the bishop pair in an endgame with an open center? Such games usually provide good material for analysis.



White has a slight, lasting edge in the endgame thanks to his bishop pair. However, converting it to something more requires a lot of skill. How should White start, considering that the b2-pawn is under attack?

EXERCISE 1: Please suggest the best continuation for White.

17.Rfd1!

Two points. Carlsen's extraordinary feeling for the endgame shines through. He knows the b2-pawn is indirectly defended as Black's b7-pawn also hangs, so he wastes no time centralizing his kingside pieces: the rook and the king.

A) Protecting the pawn with 17.Rab1 (one point) is sensible. However, it's also relatively slow compared to the text. Black can use the extra tempo to mobilize his rooks: 17...Rfd8 18.Rfd1 Rd7 19.Be4 Rad8 20.Rxd7 Rxd7²;

B) 17.Rad1 (one point) is a slightly inferior way of deploying the rooks. They are best on the open c- and d-files, and now the f1-rook feels a bit crowded. Black can utilize this fact to play 17...Rac8! 18.b3 b5²;

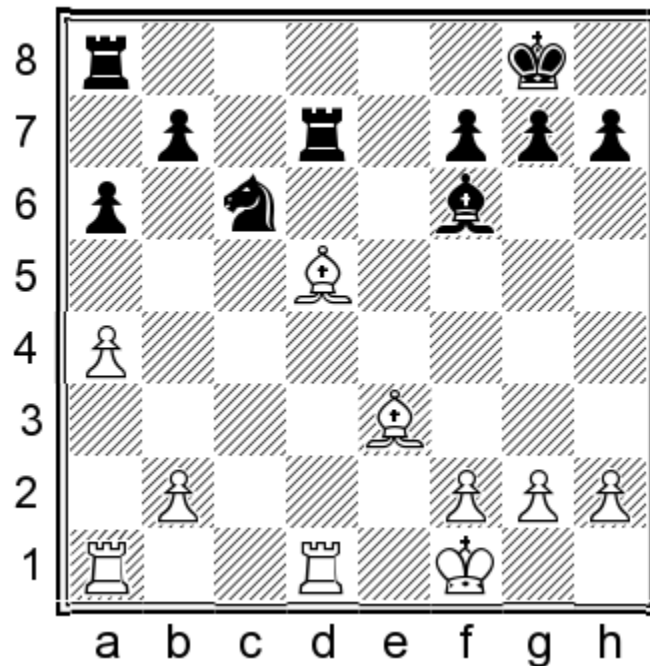
C) 17.Rac1?! (no credit) was White's choice in the only other game that reached this position, Tan Zhongyi-Lagno, Almaty blitz 2022 (1-0, 57). However, it wasn't good because Black could have forced simplifications with 17...Rfd8! 18.Rfd1 Bd4! 19.Bxc6 Bxe3 20.Rxd8+ Rxd8 21.fxe3 Rc8! or 18.Bxc6 bxc6 19.b4 Rdb8 20.Bc5 a5! with a drawish endgame in both cases.

17...Rfd8

If 17...Bxb2? 18.Rab1 Bc3 19.Rxb7, White has a decisive advantage.

18.Kf1 Rd7?

Caruana's plan to double the rooks on the d-file is natural, but 18...Rac8 was better. Can you find a way to exploit this inaccuracy?



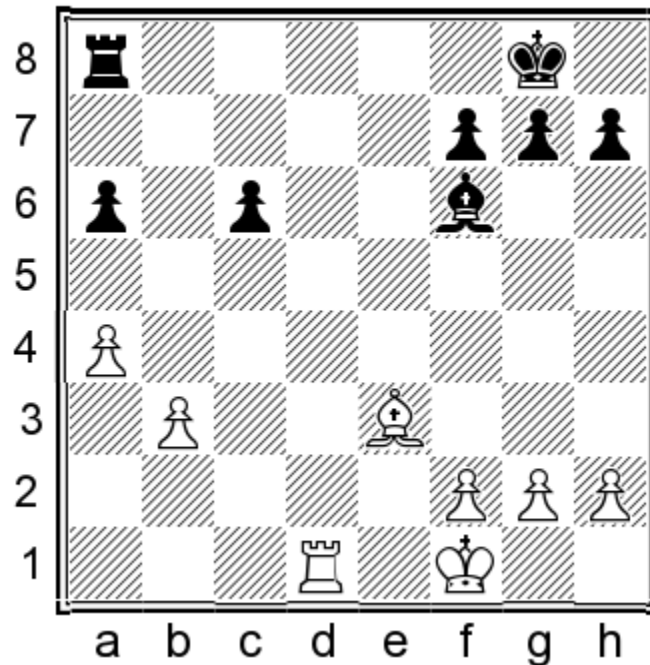
EXERCISE 2: Please suggest the best continuation for White.

19.Bf3?!

One point. Carlsen didn't find it. Such mutual inaccuracies are typical for quicker time controls, even in the games of the world top players. That is because they have limited time for deep reflection.

On the other hand, this means you have an opportunity to find a better move in the simulation than Magnus Carlsen did in the game!

A) This was a perfect time to force a positional transformation with 19.Bxc6! (two points) 19...Rxd1+ 20.Rxd1 bxc6 21.b3!.



analysis diagram

White utilized the undefended black rook on d7 to unpin his b-pawn. The transition from the bishop pair advantage to an endgame where Black has two isolated pawns on the queenside favors him. Since counterplay with 21...Rb8 fails to 22.Rd6 Rxb3 23.Rxc6, Black is in for a long and difficult defense after 21...Rd8 22.Rc1! Rd6 23.Rc4 etc.;

B) As far as the alternatives go, 19.Be4 (one point) is similar to the text. White keeps the bishop pair advantage;

C) Centralizing the king with 19.Ke2 (no credit) is superficial. When converting the advantage, the main goal is to limit the opponent's counterplay. This move ignores the opponent's tactical idea: 19...Nd4+! 20.Bxd4 Rxd5 21.Bxf6 Re8+!, which leads to a drawn rook endgame after 22.Kf1 Rxd1+ 23.Rxd1 gxf6 24.Rd7 Re4.

19...Rad8

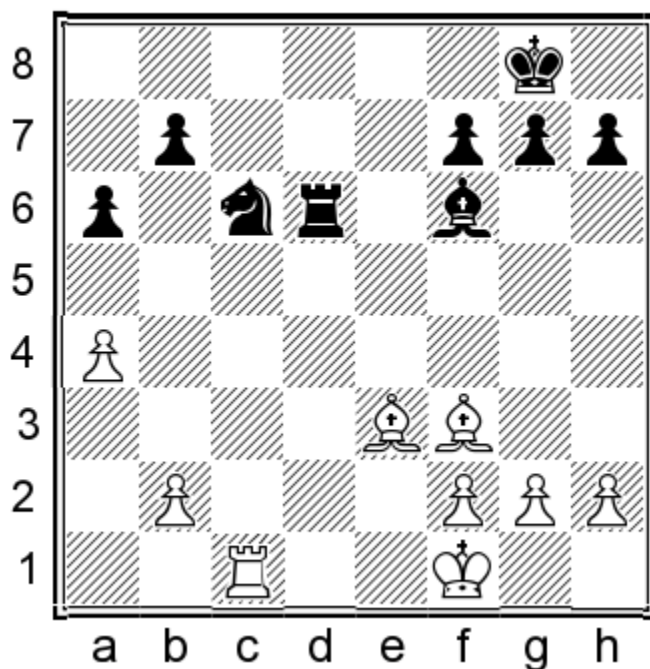
Caruana plays another ‘natural’ but slightly inaccurate move. 19...Rxd1+! 20.Rxd1 Rd8 was more accurate because now 21.Rc1 can be met by 21...Bxb2 22.Rb1 Bd4! 23.Rxb7 Bxe3 24.fxe3 Ne5 with reasonable drawing chances.

20.Rxd7 Rxd7 21.Rc1

Carlsen uses the unfavorable position of the rook on d7 to finally bring his rook into the game. As noted on move 19, a positional transformation with 21.Bxc6!? was also possible here, with a stable advantage after 21...bxc6 22.Rc1 Rd6 23.b3.

21...Rd6

Caruana had no choice but to defend the knight like this. Unfortunately, 21...Bxb2 doesn't work here because of the intermezzo 22.Bxc6! bxc6 23.Rxc6. That is why Black should have kept his rook on d8 on the 19th move. The Bxc6 intermezzo wouldn't work there.



The position has stabilized, and White needs a plan now to exploit his advantages.

EXERCISE 3: Please suggest the best continuation for White.

22.b4

Two points. Carlsen increases the pressure on the queenside, trying to clear the long diagonal for his powerful light-squared bishop.

A) 22.b3! (two points), following the ‘do not rush’ endgame guideline, was a roughly equivalent alternative: 22...h6 23.Bxc6 (or 23.Rc4!?, preparing to push the b-pawn more methodically) 23...bxc6 (23...Rxc6 24.Rxc6 bxc6 25.Ke2 is winning for White) 24.Rc4 leads to a favorable type of rook endgame we already discussed;

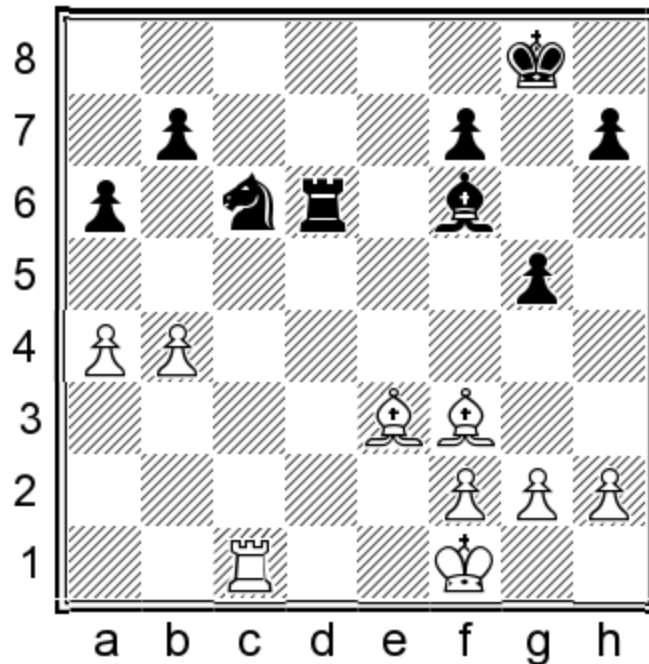
B) In case of 22.Bc5! (one point) 22...Rd2, White would be best off repeating moves with 23.Be3! Rd6 (one point). 22.Rc2 or 22.Rb1 (one point) are a little on the slow side, even if they keep the lion’s share of White’s advantage;

C) 22.Bxc6? (no credit) is mistimed here because White will need to lose a crucial tempo to defend the b-pawn. After 22...Rxc6 23.Rxc6 bxc6 24.b3 Kf8 25.Ke2 Ke8 26.Kd3 Be7!, Black has good drawing chances in the bishop endgame;

D) 22.Ke2? (no credit) allows the opponent to force a liquidation with 22...Bxb2 23.Rb1 Nd4+!

22...g5?!

22...h6 or 22...g6 were safer options.



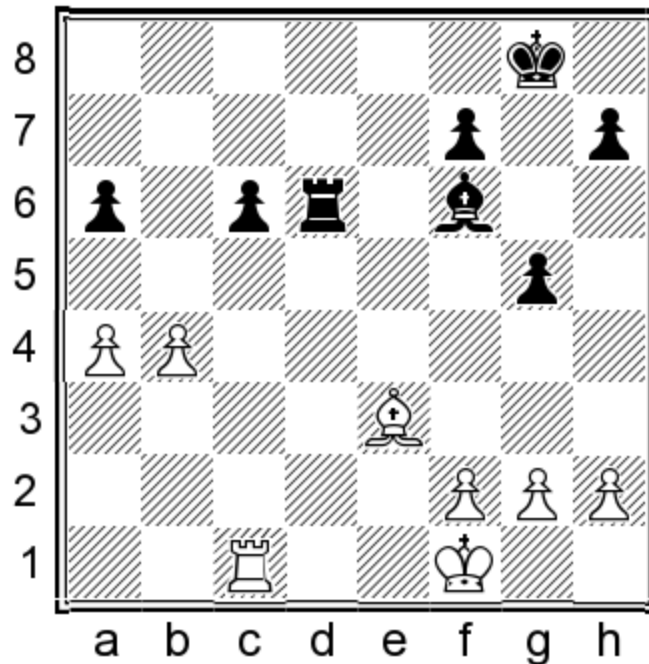
Taking space with pawns is not wrong, in principle. However, this pawn will turn out to be a liability. How can White exploit it?

EXERCISE 4: Please suggest the best continuation for White.

23.Rc5

Two points. This is one way to do it. White wins a crucial tempo to activate his rook. This move would make little sense if the black pawn were on g6 or g7, clearly showing the downside of Caruana's previous move.

A) 23.Bc5! (two points) was another good option, forcing a favorable trade on c6 after 23...Rd2 (23...Re6 doesn't make a difference after 24.Bd5 and Bxc6 next) 24.Bxc6 bxc6 25.Be3! Rd6.



analysis diagram

Here, White wins a pawn thanks to 26.Rc5;

B) 23.Rb1 (one point), preparing b4-b5, wouldn't be wrong. However, you'd need to find 23...h6 24.b5 axb5 25.Rxb5 Nd4 26.Rd5! (one point) to prove that White has a winning endgame. Otherwise, Black keeps chances for a successful defense. 26...Rxd5 27.Bxd5 b6 28.f4 etc.;

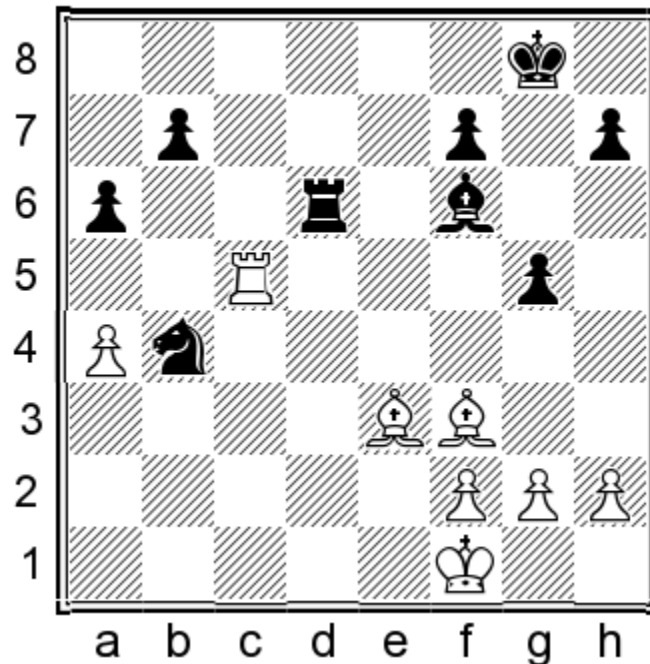
C) A slower move, like 23.a5 or 23.g3 (one point) would give Black a tempo to consolidate with 23...K<g7, though White is still better;

D) Finally, 23.b5?! (no credit) is premature due to 23...axb5 24.axb5 Nd4 and Black gets counterplay.

23...Nxb4

Caruana finally releases the tension. But this favors the side with the bishop pair. However, even in case of the more restrained 23...h6, White clears the long diagonal with 24.b5 axb5 25.Rxb5 Nd4 26.Rd5! Rxd5 27.Bxd5 b6 28.f4. Like the game, Black will find it

difficult to defend this endgame because the white bishop pair dominates, allowing him to exploit the pawn weaknesses on both flanks.



EXERCISE 5: Please suggest the best continuation for White.

24.Rc8+!

Two points. It's important to remember that even the most 'obvious' moves may have alternatives. In this case, White postpones taking on b7 to insert a check that forces a useful rook trade.

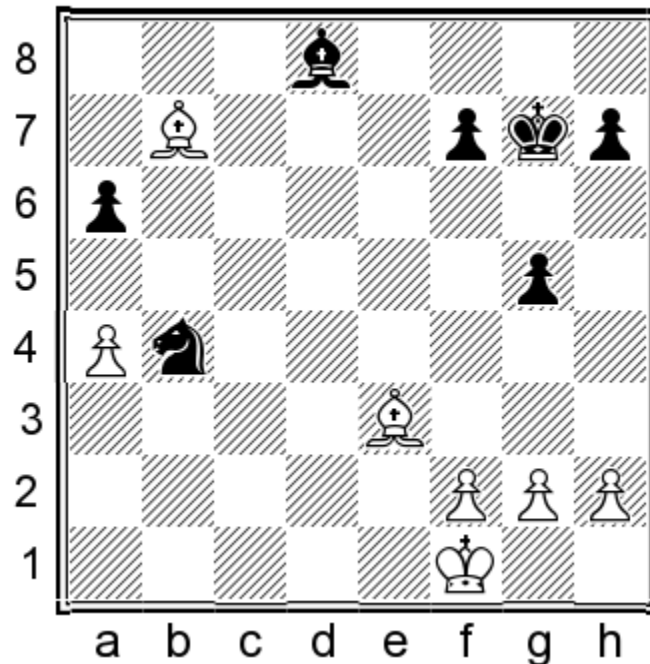
A) 24.Bxb7 (one point) would allow the opponent to keep the rook on the board and fish for some counterplay with 24...Rd1+ 25.Ke2 Ra1 26.Bxg5 Ra2+ etc.;

B) Capturing the other pawn, 24.Bxg5? (no credit), shows inadequate conversion technique. The problem with this move is that Black can force simplifications with 24...b5! 25.axb5 Bxg5 26.Rxg5+ Kf8 with good drawing chances in an endgame with two vs three pawns on the same flank.

24...Rd8

Black's main problem is that 24...K_{g7} runs into 25.Bc5, so the rook trade was forced.

25.Rxd8+ Bxd8 26.Bxb7 K_{g7}



The dust has settled, and we can see that White's bishop pair advantage has become even more pronounced. Black cannot create counterplay without the rooks, and his minor pieces are too static. Still, White must show the right plan to convert this sizeable positional advantage.

EXERCISE 6: Please suggest the best continuation for White.

27.Ke2

Two points. Centralizing the king at once makes the most sense. White would like to eventually transfer his king to the queenside to capture the opponent's a-pawn.

- A) 27.Bd4+!? K_{g6} 28.Ke2 (two points) also works;
- B) The king centralization plan is straightforward enough, so creating the second weakness with 27.g4 (one point) 27...K_{f6} 28.f4 is not needed at this point;

C) 27.f4?! (no credit), played with a similar idea, might even jeopardize White's win because it allows the opponent to free his knight with 27...gxf4 28.Bxf4 Nd3!.

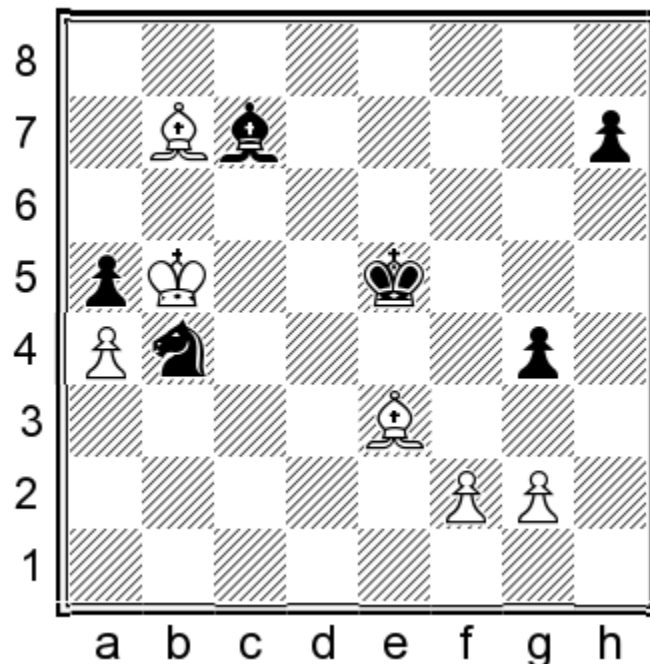
27...a5

In case of 27...Kf6, White could use the 'second weakness' on g5 to win a tempo for the king's centralization with 28.Kf3!. The Kf3-g4-h5 threat looks nasty, so Black should go 28...h5, and then the white king beats the opponent's counterpart with 29.Ke4, asserting its domination in the center. Black couldn't defend his weaknesses on both flanks in the long run.

28.Kd2 f5

Caruana knows that the battle for the queenside is lost, so he is trying to create some counterplay with his kingside pawns.

29.Kc3 Kf6 30.Kc4 Bc7 31.h3 g4 32.Kb5 Ke5 33.hxg4 fxg4



White has made critical progress on the queenside. Can he win already?

EXERCISE 7: Please suggest the best continuation for White.

34.Bb6!

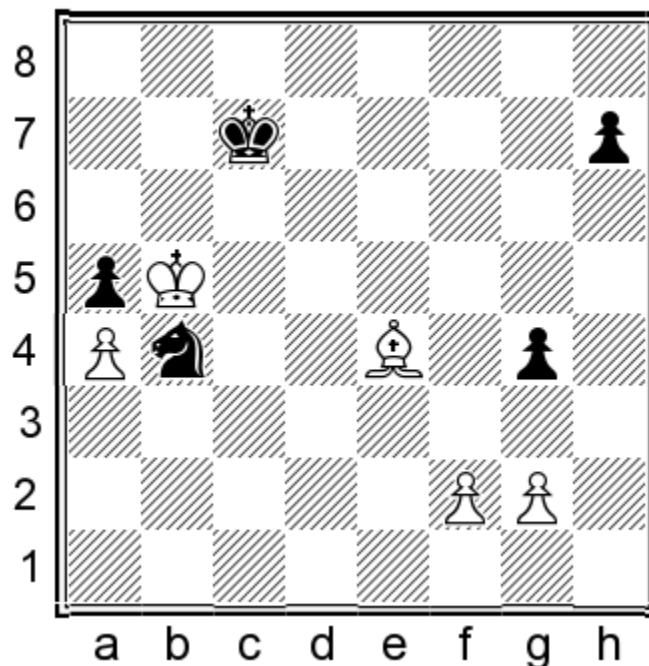
One point. The most direct move works, but you will get full credit (two points in total) only for calculating the critical winning ideas after the trade of bishops.

34.g3! (one point) is the other way to win, threatening to win the bishop with 35.Bf4+. You will also be rewarded for calculating the variation deeper: 34...Nd3 (34...Nd5 stops 35.Bb6, but not 35.Bd2) 35.Kc4! Nb2+ 36.Kb3 (one point). The only winning sequence, but quite sufficient: 36...Nd1 37.Bf4+.

34...Kd6

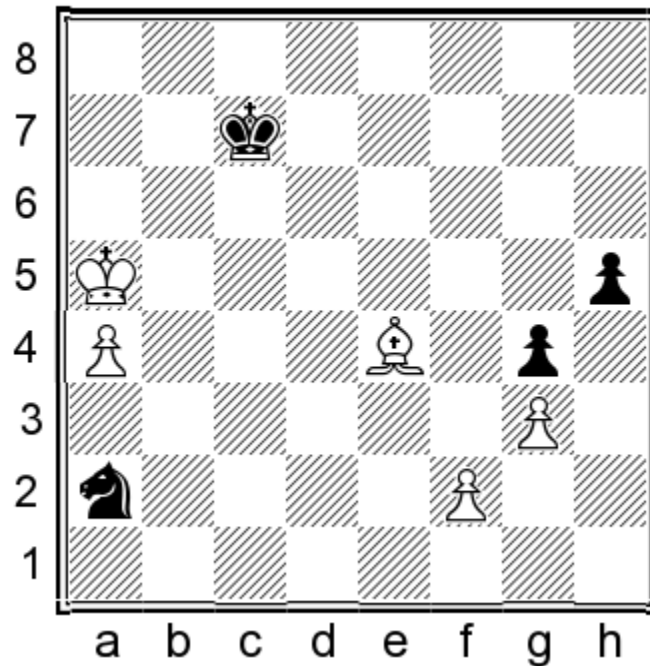
Alternatively, 34...Bxb6 35.Kxb6 Kd4 (Black could win a pawn with 35...Nd3 36.Kxa5 Nxf2, but his problem is that there is no way to catch the white a-passer after 37.Kb6 Nd3 38.a5 Nb4 39.Kb5) 36.Kxa5 Kc5, and now you need to have seen 37.Be4! (one point) to make certain that White is winning (37.g3? Nd3=): 37...h6 38.g3 h5 39.Bg6.

35.Bxc7+ Kxc7 36.Be4!



The bishop asserts domination over the black knight, preventing it from organizing any real counterplay.

36...h5 37.Kxa5 Na2 38.g3!



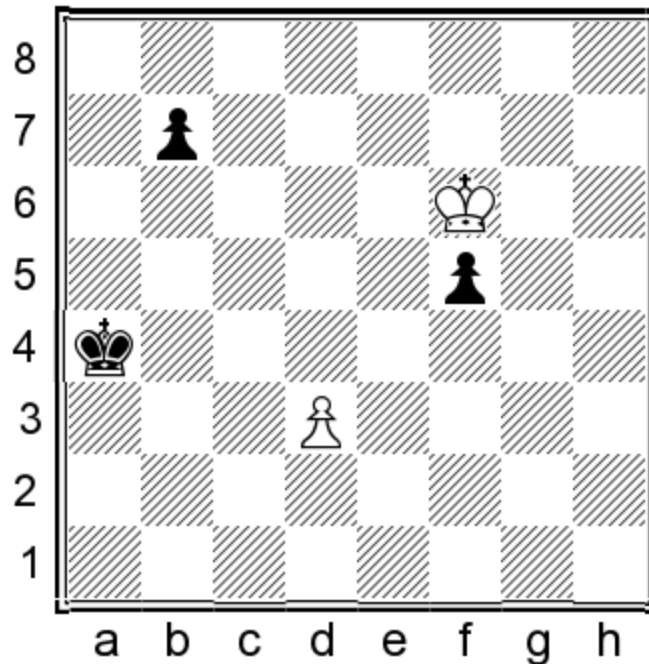
Black has lost the battle on both flanks. His short-legged knight is no match for the powerful bishop.

38...Nc3 39.Bc2 Ne2 40.Bg6 1-0

Your score = /14 points

Exercises

Endgame Analysis exercises



Can White draw this pawn endgame? Please analyze and evaluate the following two continuations: 1.Ke5 and 1.Kg5 .

SOLUTION

Analysis – Exercise 1-

A) 1.Ke5?

The king will be misplaced on e5 in the ensuing pawn race:

1...b5 2.d4 b4 3.d5 b3 4.d6 b2 5.d7 b1♚ 6.d8♚

The problem is that Black can give a check:

6...Qe4+!

(one point), Forces a queen trade, 7.Kd6 Qd4+, or a skewer after 7.Kf6 Qh4+.

B) 1.Kg5!

Paradoxically, moving away from the pawn is the way to go.

1...b5

If Black tries to get in the square of the d-pawn with 1...Kb5, he blocks his own pawn, allowing White to play 2.Kxf5 Kc5 3.Ke5 (one extra credit point) or 3.Ke4!? b5 4.d4+.

2.d4 b4 3.d5 Kb5

At first glance, this move seems to bury White's hopes of saving the game. However, things are not as they seem.

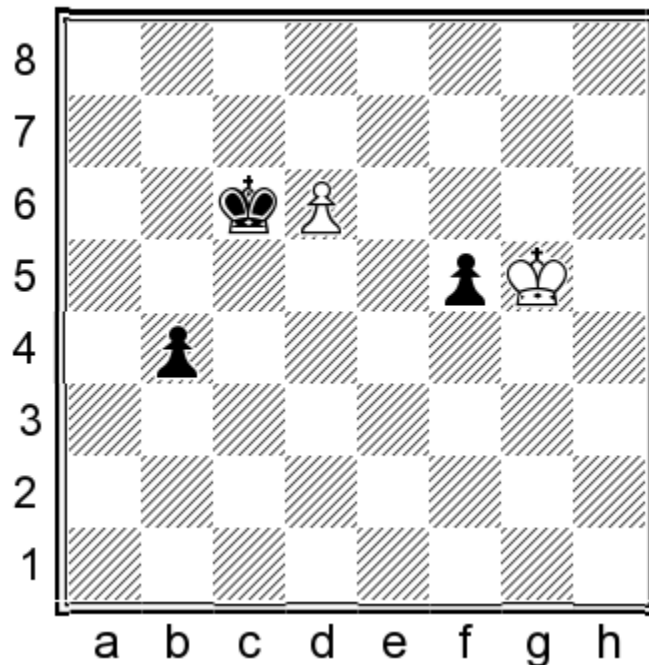
3...b3 isn't effective now because 4.d6 b2 5.d7 b1Q 6.d8Q gives White a much better version of the queen endgame since Black cannot force a queen trade as in the 1.Ke5 line.

4.d6

One point.

4.Kxf5? (no credit) puts the king on a vulnerable square: 4...b3 5.d6 b2 6.d7 b1Q+.

4...Kc6

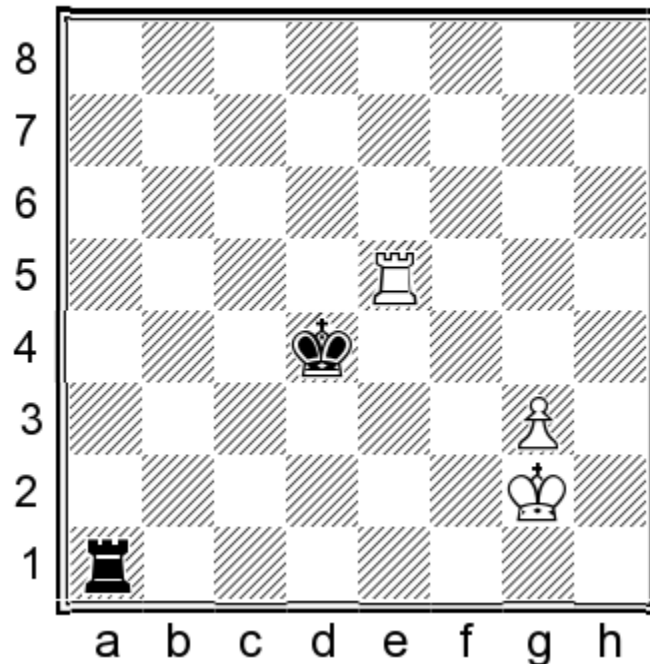


It seems like White cannot catch the b-pawn, but those familiar with Richard Réti's famous pawn endgame study will realize that...

5.Kxf5!

(two points) does the ‘impossible’. White kills two birds with one stone: the king simultaneously threatens to support the d-pawn from e6 while also planning to get inside the square of the b-pawn via e4. Black cannot prevent both, so it’s a draw after 5...b3 6.Ke6 b2 7.d7 or 5...Kxd6 6.Ke4 Kc5 7.Kd3.

Your score = /4 points + extra credit



Is it better to cut off the black king vertically with 60.Re8 or horizontally with 60.Rb5 ?

SOLUTION

Analysis – Exercise 2-

We are used to vertically cutting off the opponent’s king in rook endgames because this strategy usually works. However, this particular case is an exception.

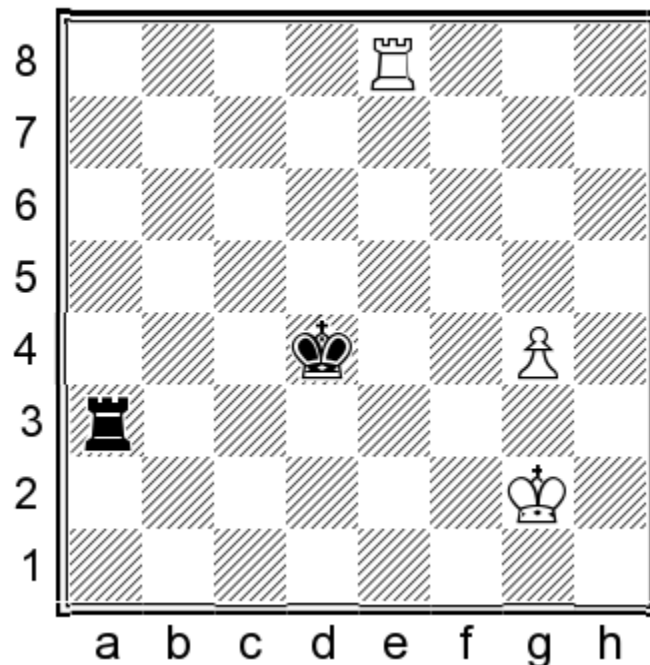
In case of the more ‘natural’

A) 60.Re8?

A1) Black can go 60...Ra7! (one point), preparing to give checks from the front, a usual strategy in this type of endgame: 61.g4

(White would like to support the pawn with his king – 61.Kh3, but the problem is that 61...Rh7+ allows Black to keep enough distance with checks to prevent White’s king from advancing: 62.Kg4 Rg7+ 63.Kh4 Rh7+ 64.Kg5 Rg7+ (one point), and the king will eventually be forced back to g2, when ...Rg7 prevents further progress) 61...Ra3! (one point; 61...Rg7? (no credit) is wrong because White gains an additional row for his king + pawn advance: 62.Kg3 Kd5 63.Kh4 Rh7+ 64.Kg5 Rg7+ 65.Kh5 Rh7+ 66.Kg6+- etc.).

Black cuts off the opponent’s king in turn. White cannot get far with his pawn without the king’s help, so this endgame is drawn.



position after 61...Ra3

The game Tan-Sipila, Chennai 2022, continued 62.Kf2 (62.g5 Ra5 63.Rg8 Ke4 64.Kg3 Kf5) 62...Rb3 63.Re1 Ra3 64.g5 Ra5 65.Rg1 Ke5 66.Kg3 and a draw was agreed since the black king easily blocks the pawn;

The alternatives are insufficient:

A2) 60...Ra3 (no credit) 61.Kh3 Ra1 62.g4 Rh1+ 63.Kg3 Rg1+ 64.Kh4 Rh1+ 65.Kg5 Rg1 66.Kh5;

A3) 60...Kd5 (no credit) 61.Kh3 Kd6 62.Kh4 Kd7 63.Re4 Ra8 64.g4 Rh8+ 65.Kg5 Rg8+ 66.Kh6 Rh8+ 67.Kg7.

In both cases, White succeeds in advancing his king and the pawn beyond the fourth rank while keeping the opponent's king cut off.

B) 60.Rb5!

This is the right move. The horizontal cutoff works well here, not letting the opponent's king get ahead of the g-pawn. However, the key point behind keeping the rook on the fifth rank is that it can shield White's king from checks, which is impossible if we put the rook on e8 instead.

60...Ra8

One point. Black has to try the checks from the front.

Trying to hold the pawn from the back is ineffective, for example:

60...Ke4 61.Kh3 Rh1+ 62.Kg4 Rg1 63.Kh4 Rh1+ 64.Kg5 Kf3 65.g4 (one extra credit point).

61.Kh3 Rh8+ 62.Kg4 Ke4

The crucial difference compared to a similar position in the 60...Re8 line is that White can use his rook on the fifth rank:

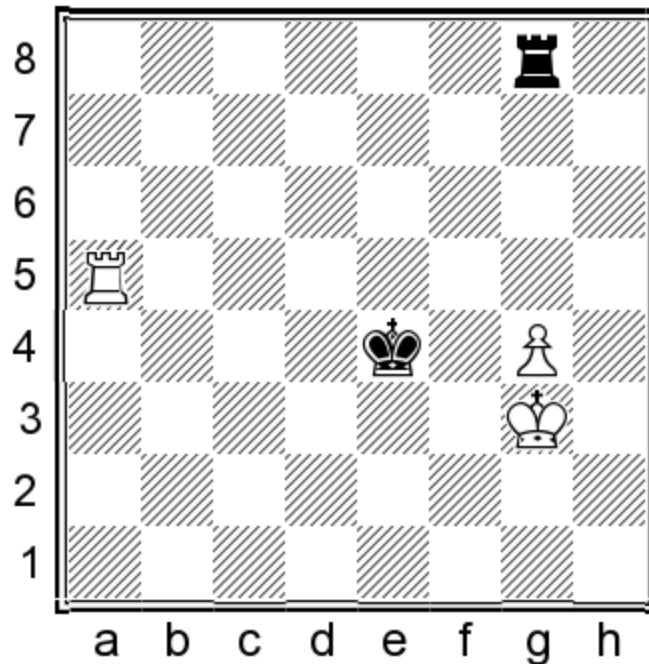
63.Rh5 Rg8+ 64.Kh4

One point. The king is safe here.

Please note that you get full credit for reaching this position with a different move order; it doesn't have to be the exact one given here.

The main point is that you manage to hide the king behind the rook and secure the advance of the g-pawn. You can also earn extra credit for analyzing this kind of position further. For example:

64...Kf3 65.Rf5+ Ke4 66.g4 Rh8+ 67.Kg3 Rg8 68.Ra5!



The white rook does a fantastic job on the fifth rank, keeping the black king cut off and preparing the decisive push g4-g5.

68...Rf8 69.g5

One extra credit point. Once the pawn crosses half of the board and the black king is cut off, it's game over.

69...Rf5

One last trick, but White won't fall for it:

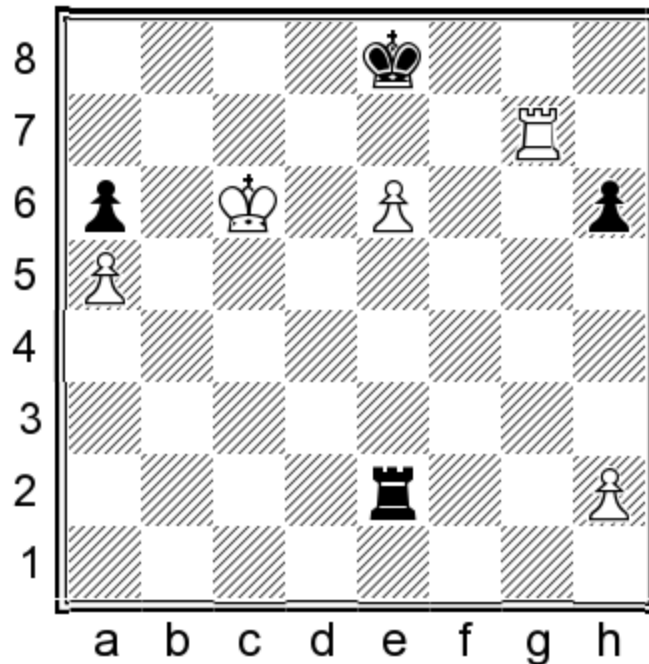
70.Ra4+

70.Rxf5?? Kxf5 71.Kh4 Kg6=.

70...Ke5 71.Kg4

White will continue cutting off the black king along the sixth rank; the rest should be trivial.

Your score = /5 points + extra credit



Which pawn should Black capture: 51...Rxe6+ or 51...Rxh2 ?

SOLUTION

Analysis – Exercise 3-

It might not seem so initially, but Black should take the h-pawn instead of the more advanced e-pawn here.

A) 51...Rxe6+?

What is more natural than taking the opponent's far-advanced passer with a check? Yet, this is a grave mistake.

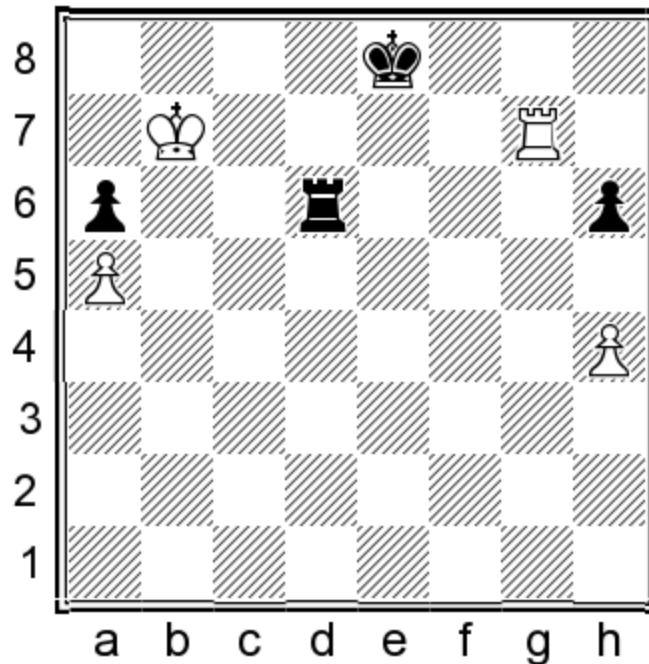
52.Kb7 Rd6

Now, the black rook becomes very passive. The right way to exploit that is by playing:

53.h4!

(two points)

53.Rc7 (no credit) fails to 53...Rd7! 54.Rxd7 Kxd7 55.Kxa6 Kc6 56.h4 h5 and Black gets a theoretically drawn pawn endgame because the white a-pawn is too advanced (Bähr's rule).



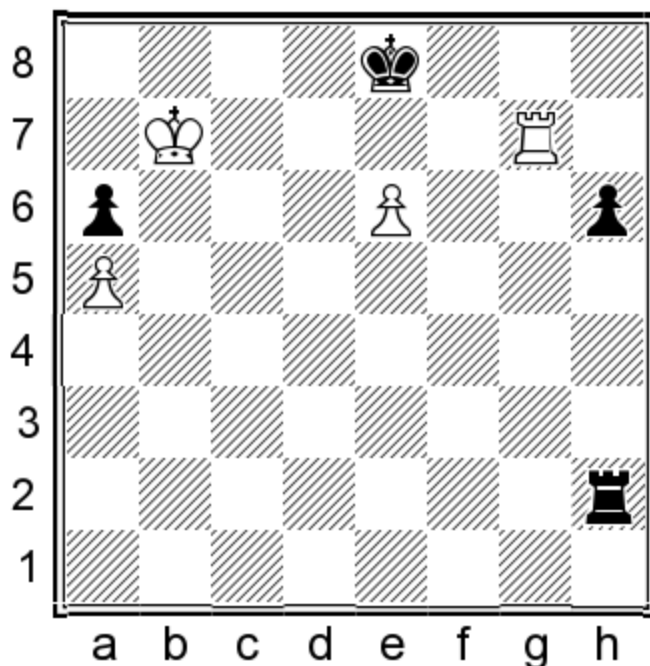
White prepares to fix both black pawns on the sixth rank with h4-h5 and take advantage of the ultimate passivity of black pieces. You can earn extra credit for a deeper analysis of this interesting rook endgame.

A1) 53...Kd8 54.h5 Ke8 55.Rc7 Rd5 (55...Kd8 56.Rc6)
56.Kxa6 Rxh5 57.Kb6! (one extra credit point);

A2) 53...h5 is the most stubborn defense, but it doesn't help. White forces the opponent's rook to a passive position with 54.Rg5 Rh6 first. Then, he should be able to win the a6-pawn with the help of some clever maneuvering: 55.Rd5 Ke7 56.Kc7! Rh8 57.Re5+ Kf7 58.Kb7! and White only needs to bring his rook to b6 to secure the victory (one extra credit point).

B) 51...Rxh2 52.Kb7

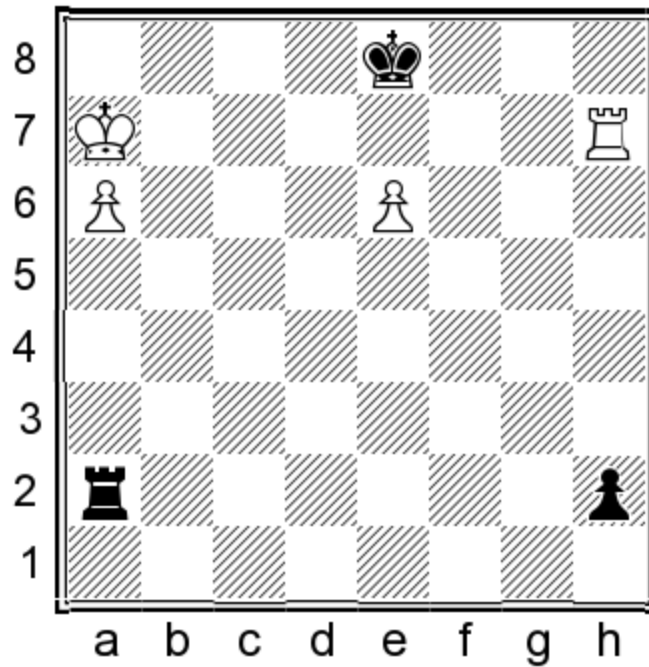
With his king hopelessly cut off on the eighth rank, the defender can only hope to make a draw with the active help of other pieces. That's why creating a passed pawn on the h-file is a must.



B1) The e-pawn is not dangerous because the black king already blocks it. Therefore, 52...Re2? (no credit) would be unnecessary and wrong. After 53.Kxa6 Rxe6+ 54.Kb7 Re1 55.a6 Rb1+ 56.Kc8, White will cover his king with the rook and promote the a-pawn with several tempi to spare;

B2) 52...h5! (two points; Black needs to create counterplay with his passed pawn as quickly as possible) 53.Kxa6 h4 54.Rh7 h3! (one point; Black is just in time with his counterplay. The pawn has to be as close to the promotion square as possible to tie the white rook to the h-file. Instead, a slower move like 54...Kf8 (no credit) gets punished with 55.Kb7 h3 56.a6 Rb2+ 57.Kc8 Rc2+ 58.Kd8 Rd2+ 59.Rd7! Rxd7+ 60.exd7 and Black would regret not pushing his pawn to h3 earlier: 60...h2 61.Kc7 h1Q 62.d8Q+).

You can earn extra credit for carrying out this variation to its logical end: 55.Ka7 Ra2! 56.a6 h2.

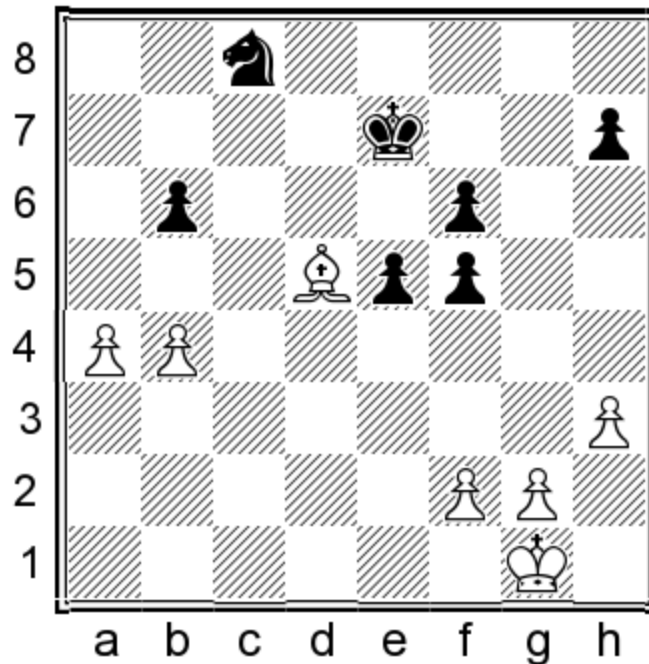


The black rook holds the king's (here, a-) pawn; the king blocks the other (here, e-) pawn, and the black h-pawn keeps the white rook busy. This is a perfect defensive strategy in similar endgames.

57.Kb7 Rb2+ 58.Ka8 Ra2 59.a7 Rb2 (one extra credit point).

Another important line that shows why having the pawn on h2 is essential is 58.Kc6 Ra2 59.a7 Rxa7! (one extra credit point).

Your score = /5 points + extra credit



Is it better to activate the white king with 36.Kf1 or 36.Kh2 ?

SOLUTION

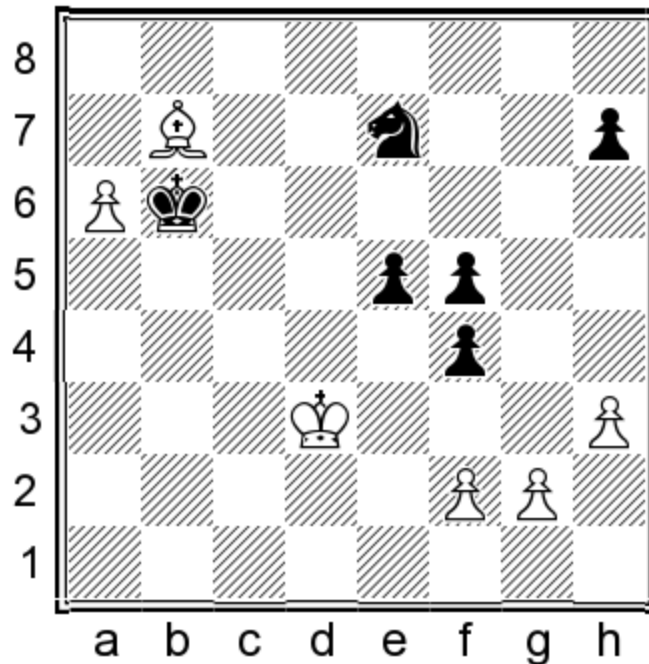
Analysis – Exercise 4-

In the first chapter of my book *How to Study Chess on Your Own*, I gave several examples where the ‘natural’ centralization of the king in the endgame was a superficial and wrong decision. In the game Ivanov-Kyc, Krakow 2022 (1/2-1/2, 44), White made a similar mistake:

A) 36.Kf1?

White could make no progress after

36...Kd6 37.Bb7 Ne7 38.a5 bxa5 39.bxa5 Kc7 40.a6 Kb6 41.Ke2 f4! 42.Kd3 f5



(one point). The cluster of the black pawns creates a barrier for the white king on the kingside.

43.Kc4 e4 44.Kc3

And a draw was agreed, considering that the alternative 44.Kd4 allows Black to simplify into a drawn king and pawn endgame with 44...Nc6+!? 45.Bxc6 Kxc6 46.g4 fxg3 47.fxg3 h5!. Please note that you get full credit for this variation if your analysis and conclusions are similar to the lines provided here; they don't have to be an exact match.

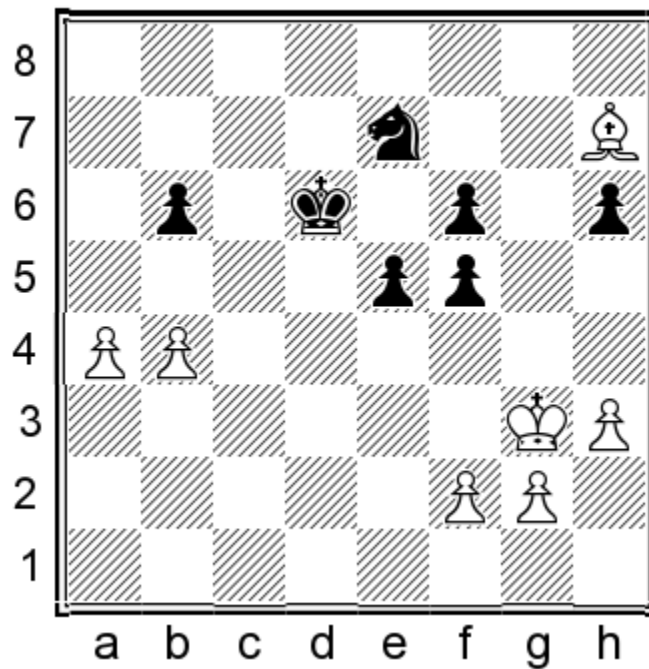
B) 36.Kh2!

This is the right way to activate the king. Black's main weakness is his h-pawn; the best way to exploit it is to send the king that way.

B1) Black could try to create a kingside barrier with 36...f4, but this move doesn't help: 37.g3! (two points). This is the antidote. Now, the king gets a route via g2 and f3, and Black will not be in time to protect his kingside pawns. You get extra credit for analyzing the following (or similar) lines: 37...f5 (37...fxg3+ 38.Kxg3 f5 39.Kh4; 37...Kd6 38.Be4 h6 39.gxf4 exf4 40.a5 bxa5

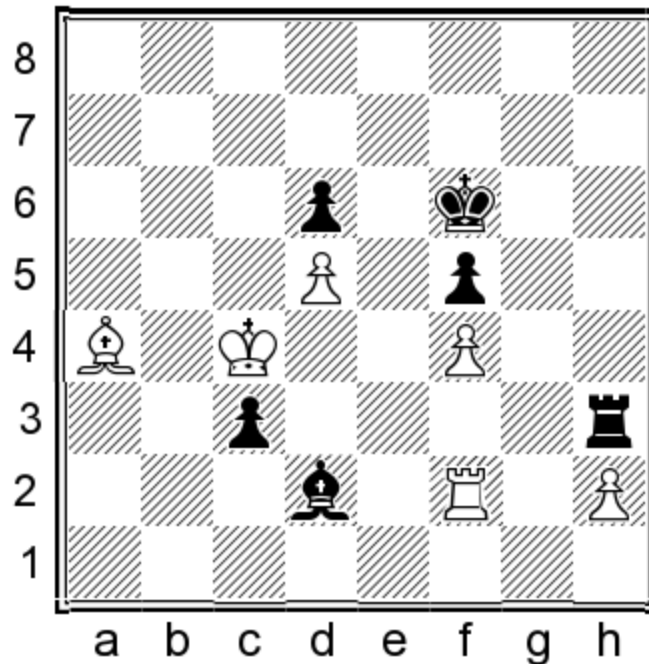
41.bxa5 Kc5 42.Kg2 Nd6 43.Bd3) 38.gxf4 exf4 39.Kg2 Kd6
 40.Bc4 Ne7 41.Kf3 Ng6 42.Bg8 h6 43.Bh7 Ne5+ 44.Kxf4 Nd3+
 45.Kxf5 Nxb4 46.Kg6. White is winning (one extra credit point);

B2) If 36...Kd6, then 37.Bg8! (two points) wins a crucial tempo
 (on the other hand, 37.Bc4?! (one point) complicates White's task,
 allowing the opponent to activate his knight just in time: 37...Ne7
 38.a5 bxa5 39.bxa5 Kc5 40.a6 Kb6 41.Kg3 Ng6!): 37...h6 38.Kg3
 Ne7, and now it's important to play 39.Bh7! (one point; 39.Bf7? (no
 credit) is worse because it doesn't attack the f5-pawn, giving Black
 the extra option 39...Nc6).



This subtle bishop move secures the king's path toward the weak h-pawn. You can get extra credit for analyzing this variation deeper, for example: 39...Kd5 40.a5 b5 41.Kh4 Kc4 42.a6 Nc6 43.Bxf5 Kxb4 44.Kh5, winning (one extra credit point).

Your score = /6 points + extra credit



Please analyze and evaluate the following two continuations: 61...c2 and 61...Rh4 .

SOLUTION

Analysis – Exercise 5-

A) 61...c2!

Black wins unexpectedly – by forcing a king and pawn endgame down a pawn!

62.Bxc2 Rc3+ 63.Kd4

In the event of 63.Kb4, Black wins a piece with 63...Rxc2+ 64.Kb3 Rc3+ 65.Kb2 Rd3 66.Kc2 Be3! 67.Rf3 Ra3 68.Kb2 Bc1+ (one extra credit point).

63...Rxc2 64.Kd3

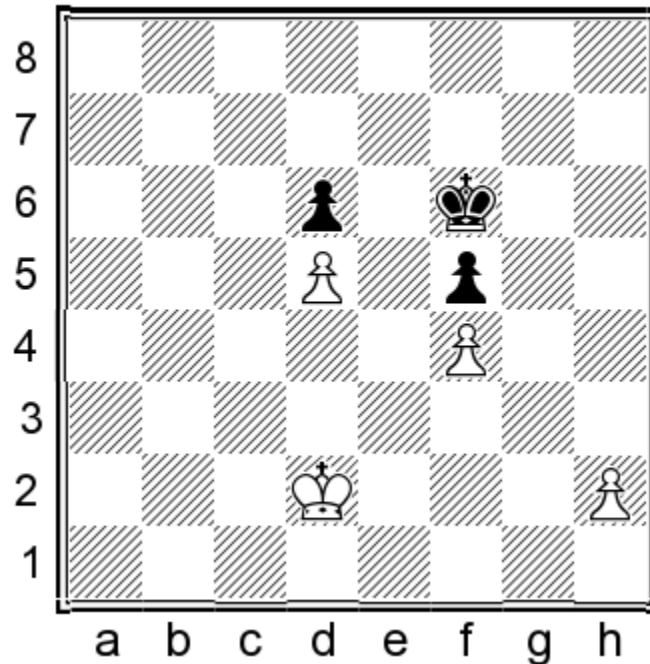
White wins back the piece now. Many people (including my wife, who played this game: Badev-Videnova-Kuljasevic, Plovdiv 2023; 1/2-1/2, 106) would stop their calculation here. I mean, how could Black possibly win this?

64...Rb2!

Two points.

64...Rc3+ (no credit) 65.Kxd2 Rc5=.

65.Rxd2 Rxd2+ 66.Kxd2



One does not often see a king and pawn endgame where the side with a pawn less wins (and the opponent has a passed pawn to boot!). However, this is one of such exceptional situations. Black capitalizes on their king's slightly more active position:

66...Kg6! 67.Ke3

If White goes after the d6-pawn, Black wins the race by a tempo: 67.Kc3 Kh5 68.Kc4 Kg4 69.Kb5 Kxf4 70.Kc6 Ke5 71.h4 f4 (one point).

67...Kh5 68.Kf3 Kh4

The white king has to yield now.

69.Kg2 Kg4 70.h3+ Kxf4 71.Kf2

White still has the outside passer, but that doesn't matter because the black king is just in time to pick up the d-pawn and get back in the square of the passer:

71...Ke5 72.Kf3 Kxd5 73.Kf4 Ke6 74.h4 Kf6 75.h5 d5 76.h6 d4

One point. A beautiful demonstration of the importance of activity over material in the endgame!

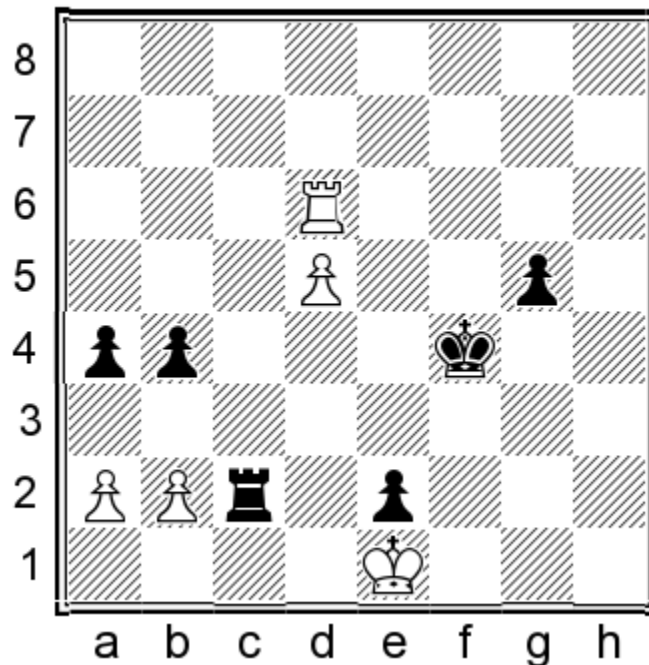
In the game, Black missed the winning combination and played:

B) 61...Rh4?!

White was out of real danger after 62.Bc2! (one point) 62...Rh7 63.Kd3 Rc7 64.Rf3 Rc5 65.Kd4.

62...Be3 63.Rf3 Bxf4 also doesn't help. White eliminates the c-pawn, with good drawing chances after 64.Kxc3 since the f5-pawn hangs in case of 64...Bxh2 (thanks to 62.Bc2). 64...Be5+ 65.Kb3 f4 66.h3 Bd4 67.Kc4 Be3 etc.

Your score = /5 points + extra credit



White seems to be in a critical situation. Only one of the following three moves saves her:

- A) 41.Re6
- B) 41.Rh6
- C) 41.Rd8

Please analyze them carefully to determine the right continuation.

SOLUTION

Analysis – Exercise 6-

It's easier to find a losing than a drawing move in this tough endgame.

A) 41.Re6

This doesn't work in view of:

41...Kf3 42.Rf6+ Ke3 43.Re6+ Kd3

(one point) and if White continues:

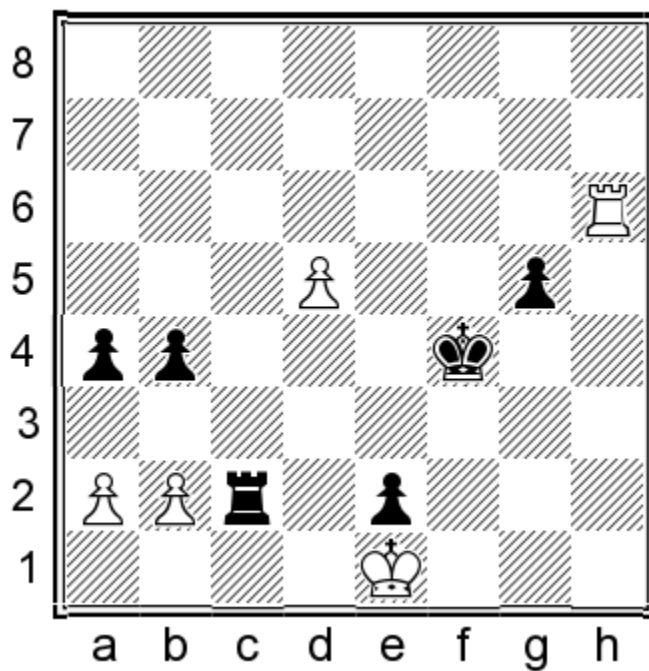
44.d6

(44.Kf2 is too slow: 44...Rxb2 45.d6 Rd2 46.d7 Kc3) Black stops his counterplay with:

44...Rc1+ 45.Kf2 Rf1+ 46.Kg2 Rf7!

(one point) or 46...Rf4!? 47.d7 Rd4, which also gets full credit for this line.

B) 41.Rh6!



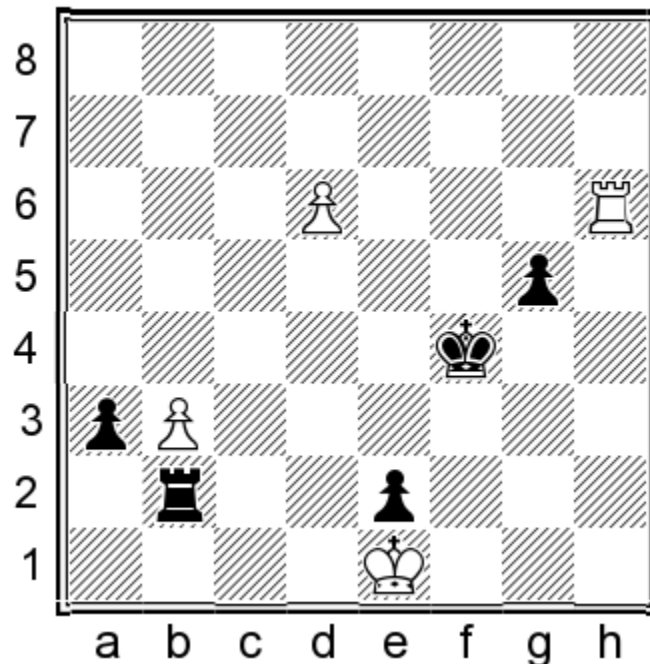
Only this move saves White. Side checks are the key to preventing Black's ...Kf4-e3-d3 maneuver. In response, Black can try to jeopardize White's concept with a couple of moves.

B1) 41...g4 prevents the check on h3, and you are expected to analyze this important idea. White holds the balance thanks to the advanced d-pawn, as in many other lines: 42.d6 g3 (42...Ke3 43.Re6+ and now 43...Kd3?? even loses to 44.d7 Rc1+ 45.Kf2 Rf1+ 46.Kg2 Rf8 47.Re8) 43.d7 g2 44.Rg6 Kf3 45.Rf6+ (one point);

B2) 41...Rc5 occurred in the game Videnova-Kuljasevic-Ziegenfuss, Augsburg 2024 (1/2-1/2, 57). White drew easily after 42.d6 Rd5 43.Kxe2 g4 44.Rf6+ Ke5 45.Rg6 Kf5 46.Rh6 Kg5 47.Re6 etc.;

B3) 41...Ke3 allows White to demonstrate the main idea: 42.Rh3+ Ke4 43.d6= (one point);

B4) 41...Rxb2 is the most testing one: 42.d6 b3!? 43.axb3 a3. Black creates a second passed pawn, hoping to exploit the opponent's exposed king on the first rank.



Fortunately, White has two ways to neutralize this plan:

B41) 44.d7 a2 45.Ra6 and if 45...Ke3, White holds a draw thanks to his flexible rook: 46.Re6+ (one point) 46...Kf3 47.Rf6+ Kg3 48.Ra6;

B42) The second one is 44.Rf6+!? Ke3 45.Re6+ Kf3 (45...Kd3?? loses to 46.d7) 46.Rf6+, which also gets full credit.

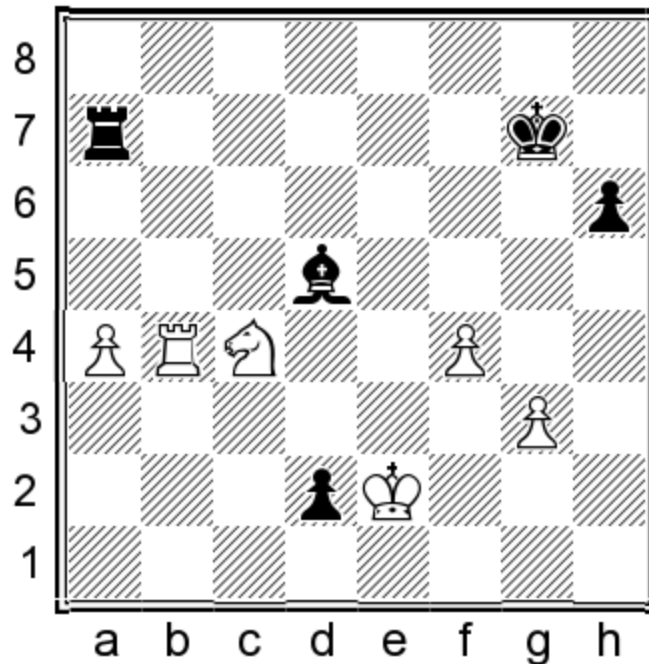
C) 41.Rd8

A somewhat better practical try than 41.Re6 because the white rook controls the eighth rank, and this becomes important in a few lines:

C1) 41...Kf3? is the wrong way to go here because of 42.Rf8+ Ke3 43.Re8+ Kd3 44.Kf2!= (one extra credit point; 44.d6 (no credit) loses to 44...Rc1+ 45.Kf2 Rf1+ 46.Kg2 Rf7). The point is that this time (compared to a similar position in the 41.Re6 line) Black cannot just collect pawns with 44...Rxb2 since 45.d6 Rd2 46.d7 secures the promotion of the d-pawn thanks to the rook on the eighth rank;

C2) Black wins with a pragmatic reply, 41...Rxb2 42.d6 Ke5! (one point), simply keeping an eye on the d-pawn with his king and concluding the game thanks to a couple of extra pawns (42...Ke3? (no credit) 43.Re8+ Kf3 44.Rf8+=): 43.d7 Ke6.

Your score = /6 points + extra credit



Please analyze and evaluate the following continuations: 43...Bxc4+ and 43...Bc6 .

SOLUTION

Analysis – Exercise 7-

A) 43...Bxc4+? 44.Rxc4 Rd7

keeps the pawn alive, but the rook endgame is hopeless for Black after:

45.Kd1 Rd3 46.g4

(one point)

The d2-pawn is safely blocked, and the white rook does a fantastic job of protecting his pawns. However, the key issue for Black is that she doesn't have a good answer to White's outside a-passer. You can earn extra credit for demonstrating the winning plan for White after:

46...Rd5

A1) The elegant rook maneuver 47.Rc3! Rd4 48.Ra3 forced Black's resignation in the game Stefanova-A. Muzychuk, Khanty-

Mansiysk 2018, due to 48...Rxf4 49.a5 Rf7 50.a6 Ra7 51.Kxd2 (one extra credit point);

A2) Alternatively, White also wins with 47.f5, which requires more elaborate rook maneuvering after 47...Kf6 (the simplification attempt 47...h5 doesn't save Black: 48.gxh5 Rxf5 49.Kxd2 Rxh5 50.Rf4! (one extra credit point)): 48.Rc6+ Kg7 49.Rb6! Ra5 50.Rb4 Rd5 51.Rb7+ Kg8 (51...Kf6 52.Rh7 Kg5 53.Rg7+, winning) 52.Rb5! (one extra credit point), securing further advance of the a-pawn. 52...Rd4 53.a5 Rxf4 54.a6 Ra4 55.Rb8+ Kg7 56.Ra8!.

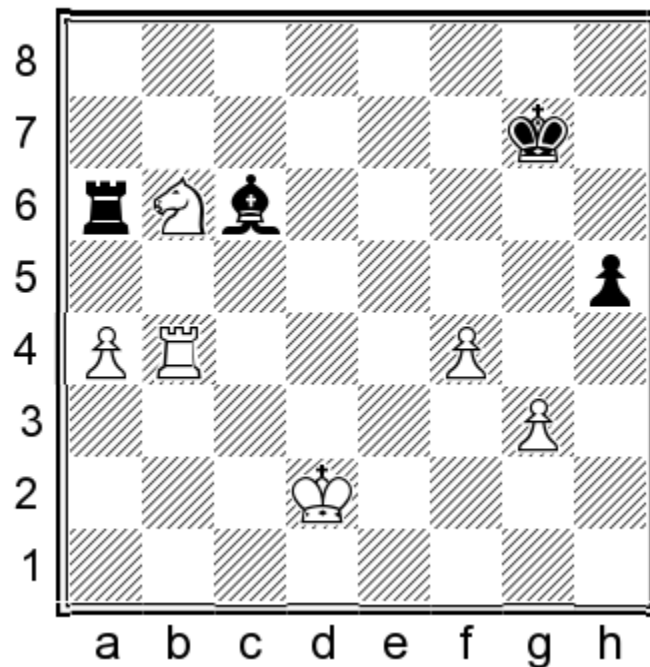
B) 43...Bc6!

Black should not be materialistic. The only chance to hold this endgame is by giving up the pride of his position, the d2-pawn.

44.Nb6

B1) 44...Ra6! (two points). This accurate move paralyzes the white pieces on the queenside. 45.Kxd2

B11) 45...h5! (one point).



This is another essential part of Black's defensive strategy. He has fixed the white pieces on both flanks, making his two extra pawns

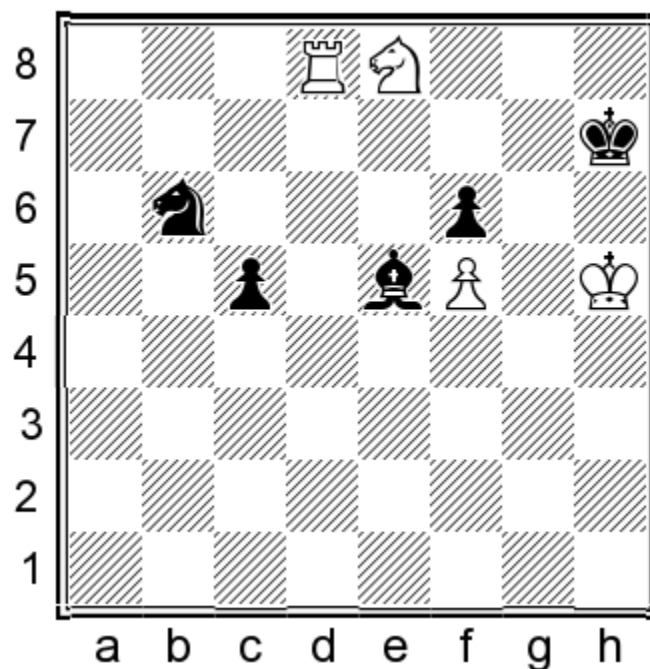
ineffective. White can only play with his king now, but these attempts lead nowhere, as we can see from the lines below (for which you can also get extra credit): 46.Kc3 Kf6 47.Kb3 Kf5 48.Nc4 Kg4 49.Ne5+ Kxg3 50.Nxc6 Rxc6 51.a5 h4= (one extra credit point) or 46.Ke3 Kf6 47.Kd4 Kf5 48.Kc5 Be8!= (one extra credit point);

B12) 45...Kg6 is a reasonable alternative (deserving of the full credit), although it allows White to regroup with 46.Nc4! (one extra credit point; 46.g4 (no credit) 46...h5=) 46...Bxa4 47.Ne5+ Kf6 48.Rb8 and still try to give his opponent some headache in the 2 vs 1 endgame.

B2) 44...d1Q+ 45.Kxd1 Ra6!= is similar to A1), also earning you full credit;

B3) However, in case of 44...Kg6 45.Kxd2 Kf5 (one point), White can activate his rook with 46.Rc4! (one extra credit point), making Black's defensive task much more difficult. For example: 46...Be8 47.Ke3 Ra6 48.Rc5+! Kg4 49.a5 Kxg3 50.Ke4 etc.

Your score = /4 points + extra credit



Please analyze and evaluate the following continuations: 67.Nxf6+ and 67.Rd1 .

SOLUTION

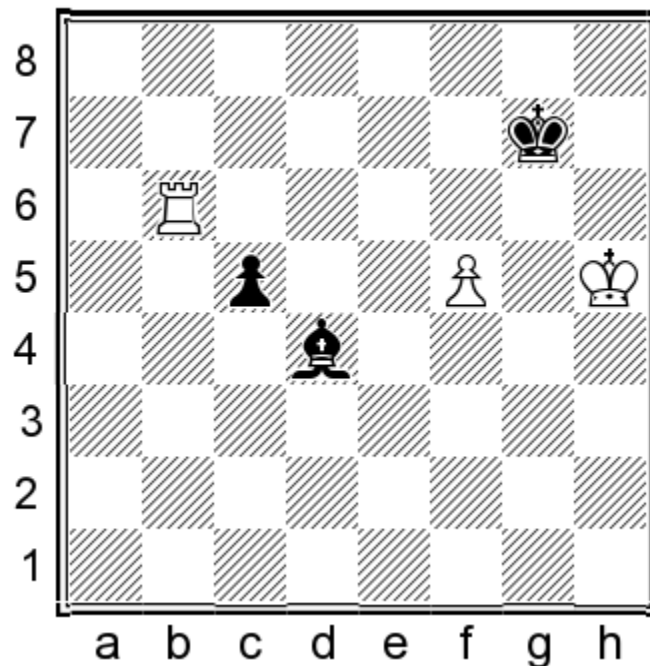
Analysis – Exercise 8-

A) 67.Nxf6+?

A hasty mistake. The rook vs bishop endgame is drawn:

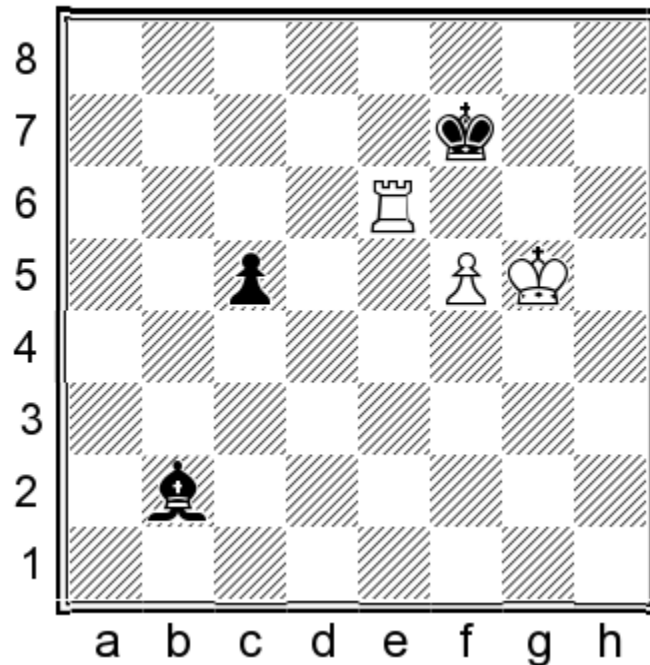
67...Bxf6 68.Rd6 Kg7 69.Rxb6

A1) 69...Bd4! (one point).



White cannot win against this set-up against the best defense – as soon as the king tries to enter via g5, Black will hit him with a check on the c1-h6 diagonal. Meanwhile, the black king will move to f7 to cover other possible infiltration squares like g6 and e6. The crucial point, though, is that it is impossible to chase away the black bishop from the key a1-h8 diagonal because the c-pawn defends it. Let's look at a sample line (you can get extra credit for analyzing these or similar lines):

70.Kg5 Be3+ 71.Kg4 Bd4 72.Re6 Kf7 73.Kg5 Bb2! (one extra credit point; 73...Bc3? 74.Rd6!).



The c5-pawn is also instrumental in shielding the black bishop. Now, White cannot prevent ...Bc1+ with Rc6. 74.Rc6 Bc1+ (74...Bd4?? loses to 75.f6) 75.Kg4 Be3 etc;

A2) In the game Kuljasevic-Neverov, Legnica 2013 (1-0, 78), I got lucky as my opponent erred immediately with 69...Kf7?? (no credit) when 70.Rb7+! compromises Black's piece coordination. The game continued 70...Be7 71.Kg4 Kf6 72.Rb6+ Kf7 73.Kf4 Bf6 74.Rb7+ Ke8 75.Ke4 c4 76.Kd5 c3 77.Ke6 Kd8 78.Rb4 and Black resigned.

B) 67.Rd1!

White improves his rook, which was stuck on d8. The plan is to reroute it to b7 via b1 and push the black king back to the eighth rank to ensure the decisive Kh5-g6 invasion.

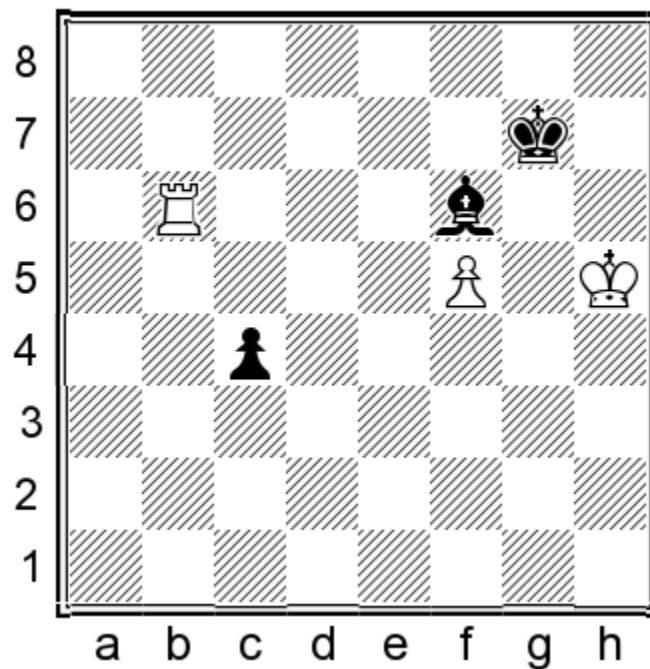
B1) In case of 67...Bd4, simplest is 68.Rb1 Nd5 (68...c4 69.Nxf6+!) 69.Rb7+ (one point), followed by Kg6 at the right

moment. For example: 69...Kg8 70.Nd6 Be5 71.Nc4 (one extra credit point) 71...Bc7 72.Kg6 Nf4+ 73.Kxf6.

70.Kg6!? Nf4+ 71.Kh6 also works, but only after 71...Be5 72.Rd7! (one extra credit point);

B2) 67...c4 68.Nxf6+! (two points). Recycling the original idea in a better version (68.Rb1 (no credit) doesn't work here because of 68...Nd5 69.Rb7+ Kg8 and the c-pawn is suddenly dangerous): 68...Bxf6 69.Rd6 Kg7 70.Rxb6.

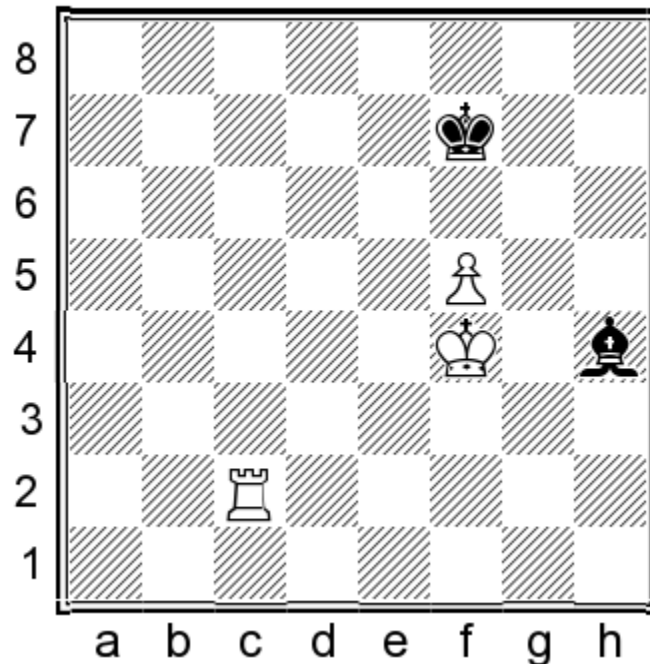
It is a completely different ball game with the pawn on c4 instead of c5.



Here, the bishop doesn't have a safe outpost on d4, and it will be chased around and dominated easily by the rook. The following lines are open-ended and mainly serve illustrative purposes, but you can earn one extra credit point for demonstrating a similar win in your analysis:

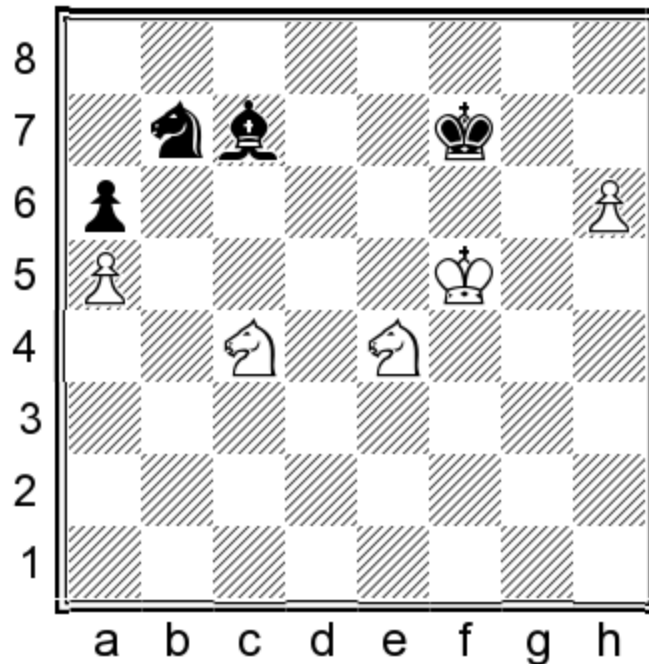
70...Bd4. Black is not in time to save the c-pawn. Still, the winning method is not straightforward (70...c3 enables 71.Rb7+ Kf8 72.Kg6): 71.Rb4 Kf7 72.Rxc4 Be3 73.Kg4 Kf6 74.Rc2!. Here is

where the domination part starts. Instead of picking up empty tempi, White removes useful squares from the black bishop. The short-term goal is to chase it away from the shorter, c1-g5 diagonal. 74...Kf7 75.Kf3 Bg5 76.Ke4 Bh4 77.Kf4!.



The black bishop has been sidelined thanks to the clever maneuvering of the white king and rook: 77...Kf6 78.Rc6+ Kf7 79.Rd6! Bf2 (79...Kg7 80.Rd2 Kf6 81.Kg4 Be1 82.Rd6+ Kf7 83.Kg5 shows the main purpose behind putting the rook on the d-file) 80.Rd2 Bh4 81.Rh2 Bd8 82.Rh7+ Kf6 83.Ra7 Bc7+!? 84.Kg4 Bd8 85.Ra6+ Kf7 86.Kh5 and the black bishop has finally been dominated!

Your score = /4 points + extra credit



Is it better to take the pawn 53...Nxa5 or try to block the h-passer with 53...K_{g8} ?

SOLUTION

Endgame Analysis – Exercise 9-

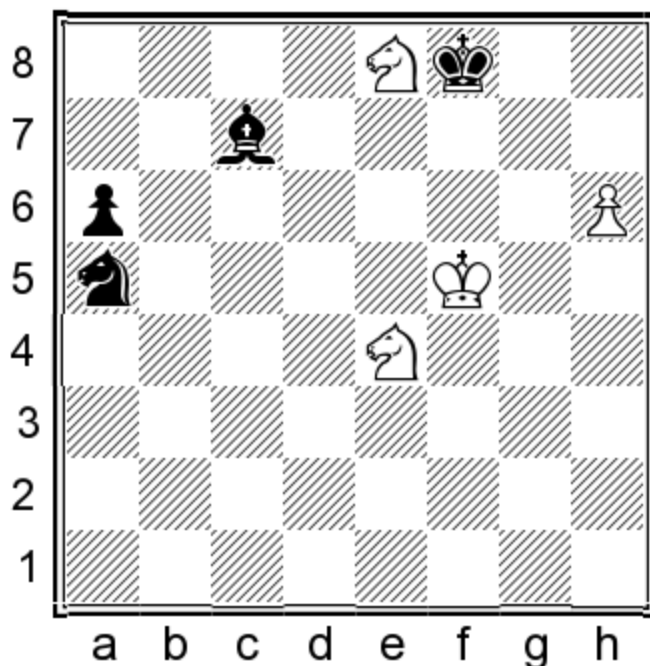
Black should not be greedy here:

A) 53...Nxa5?

This meets a swift refutation (actually, a couple of them):

A1) 54.Ncd6+ is the most efficient one. 54...Kf8 (54...Bxd6 55.Nxd6+ Kf8 56.Kf6! K_{g8} 57.K_{g6} (one point)) and now for the key point: 55.Ne8!! (two points; 55.K_{g6}? (no credit) 55...Nc6 56.h7 Ne5+ 57.Kh6 Ng4+=).

A beautiful ‘invisible move’. Black cannot stop the h-pawn after this.



55...Kg8 (55...Kxe8 56.h7) 56.N8f6+ (the immediate 56.Nxc7!? wins as well) 56...Kf8 (56...Kh8 57.Ng5 Nc6 58.Nf7#) 57.Ne8 Kg8 58.Nxc7 and Black soon resigned in Ja.Plenca-Hecht, Zagreb 2018;

A2) White also obtains a winning endgame after 54.Ng5+!? Kf8:

A21) 55.Ne6+ Kg8 56.Nxa5 Kh7 57.Nxc7 Kxh6 58.Ne6 (one point). This is a theoretically winning endgame. However, proving this in practice is never easy, so I give this solution partial credit;

A22) 55.Ne3!? (one point) also works, but the proof is quite elaborate, so I am removing an 'artistic' point from it, too: 55...Nc6! 56.Ne6+ Kg8 57.Nxc7 a5 58.Ne6 Ne7+ 59.Kf6! Kh7 60.Kg5 a4 61.Nf8+ Kh8 62.Nc4! Kg8 63.Nd7! a3 64.Nf6+ Kf7 65.Nxa3.

B) 53...Kg8!

Bringing the king in front of the dangerous passer is the main priority.

B1) White can try to exploit the opponent's last move with 54.Kg6, but then we have:

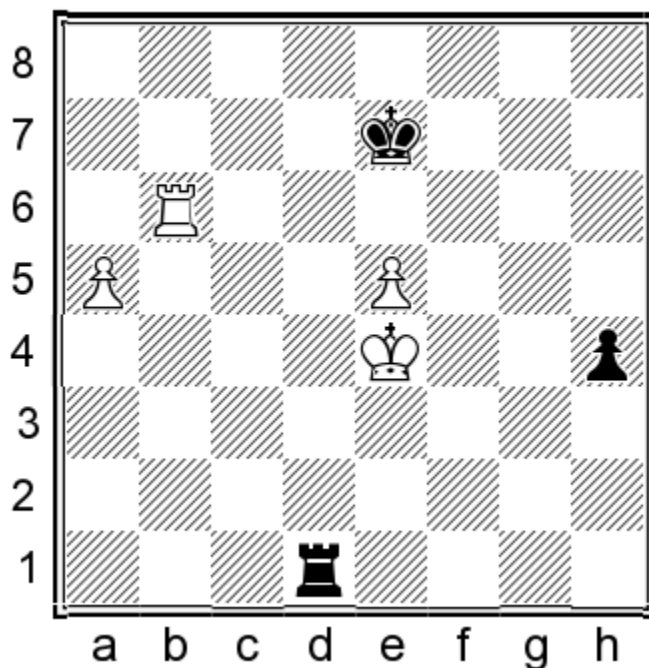
B11) 54...Bf4! (one point), stopping 55.Ng5, essentially. Black's activity prevents White from coordinating his knights in the mating attack, as in some other lines. For example: 55.Nf6+ Kh8 56.Nd5 Bg3 57.Ne7 Nd8! 58.Nf5 Be1 59.Ncd6 Bc3;

B12) 54...Kh8!? 55.Ng5 Nd8 (one point) is a more passive defense but also works;

B13) However, 54...Nd8? is the wrong move order. White has a beautiful refutation: 55.h7+ Kh8 56.Ned6! Bb8 57.Kh6 Bc7 58.Ne5! Bxd6 59.Ng6# (one extra credit point).

B2) The other tricky option is 54.Ng5, preparing Kg6 and Nf7, with h7+. Still, Black can prevent this with 54...Bd8! (one extra credit point): 55.Kg6 Bxg5 56.Kxg5 Nc5.

Your score = /4 points + extra credit



Please analyze and evaluate the following continuations: 55.a6 and 55.Rh6 .

SOLUTION

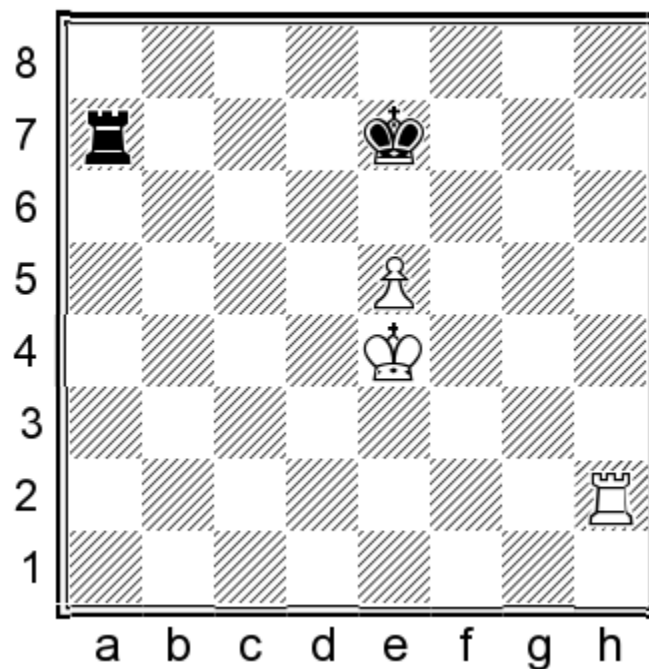
Analysis – Exercise 10-

This instructive rook endgame has some similarities with Exercise 3.

A) 55.a6?

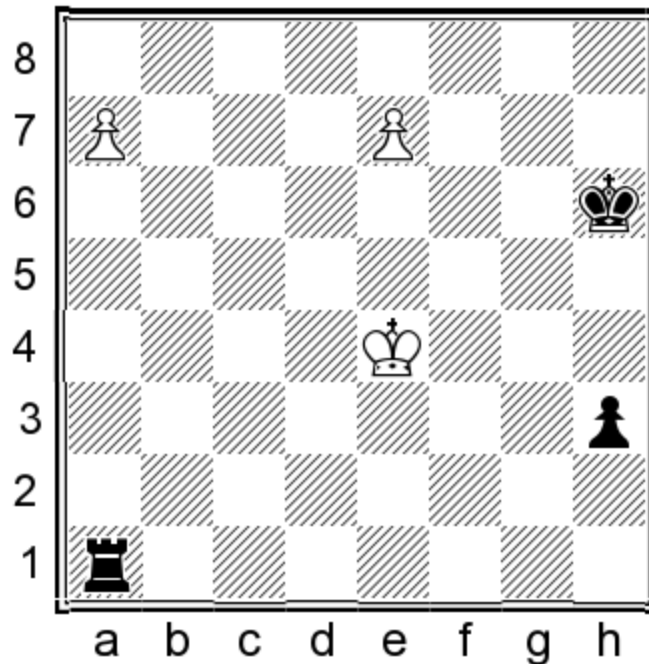
This natural but hasty move allows Black a miraculous escape.

A1) 55...h3 56.a7 seems decisive at first, but if we dig deeper, we realize there is a catch: 56...h2 57.Rh6 Ra1 58.Rxh2. White doesn't win because of the well-known stalemate trick 58...Rxa7! (two points).



This stalemate-based idea is worth remembering, as it surfaces in rook endgames in various forms from time to time. The opposition of kings on e6 and e4 is the key: 59.Rh7+ Ke6 60.Rh6+ (60.Rxa7 is stalemate) 60...Kf7 61.Kf5 Ra1 62.Rh7+ Kf8 63.Kf6 Rf1+ 64.Ke6 Ra1= etc., Kuljasevic-Martinovic, Plitvicka Jezera 2013 (1/2-1/2, 85);

A2) The alternative is 55...Ra1 56.Rh6 h3 57.a7 Kf7!/? when Black draws unexpectedly (57...h2 transposes directly to the 55...h3 line): 58.e6+ Kg7 59.e7 Kxh6.



A fascinating position. All three results are still possible, depending on what happens next. You get full credit for getting this position in your analysis. You can get extra credit for analyzing any of the following options:

A21) 60.Kd3. Black cannot prevent the promotion of one of the pawns now, but he still survives thanks to a ‘crazy rook’ tactic: 60...h2 61.e8Q Rd1+!! (two extra credit points; 61...h1Q? (no extra credit) loses to 62.Qh8+ Kg5 63.Qxh1 Rxh1 64.a8Q) 62.Kc2 Rc1+!= etc.;

A22) In the event of 60.Kf5, Black needs to start with a check: 60...Rf1+ 61.Ke6 and then 61...h2 62.a8Q h1Q! 63.Qxh1+ Rxh1 64.e8Q Re1+ 65.Kd7 Rxe8 66.Kxe8, draw (one extra credit point). If White loses his sense of danger, he can even lose the game, as shown in the line 61.Kg4?? (no extra credit) 61...Rg1+ 62.Kxh3 Rg8.

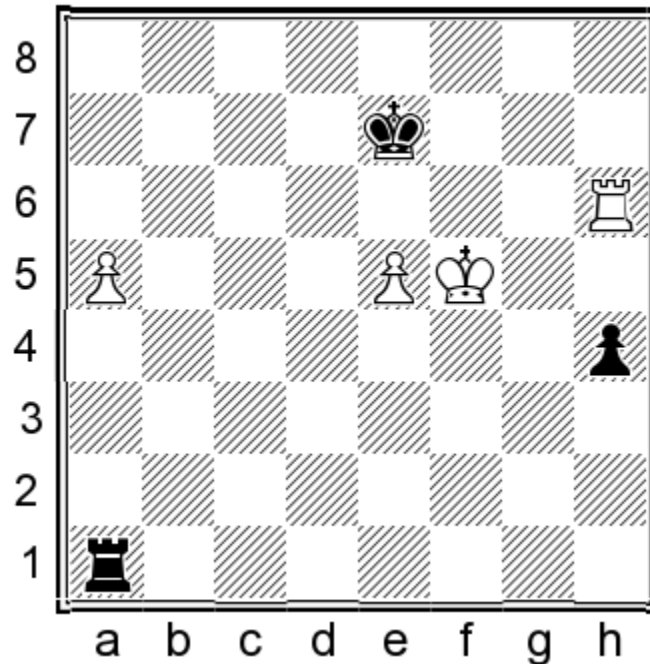
B) 55.Rh6!

The right continuation, keeping an eye on the opponent’s passed pawn.

55...Ra1 56.Kf5!

Two points.

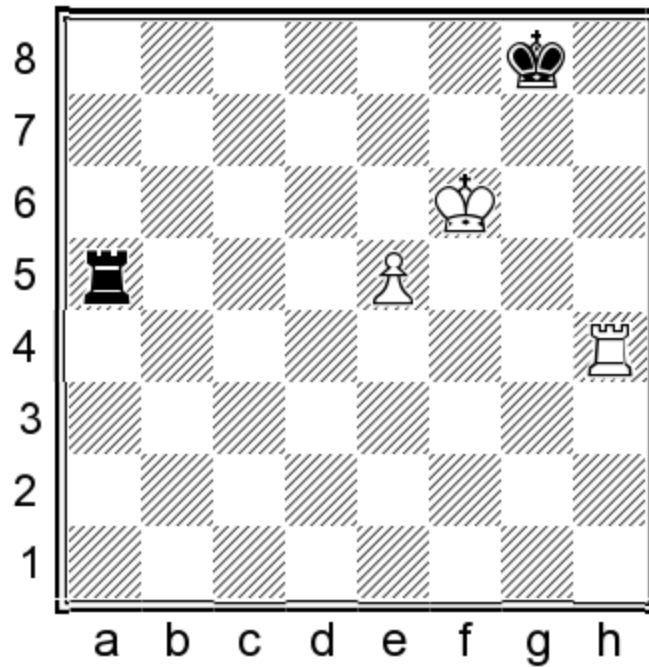
On the other hand, 56.a6 (no credit) transposes to the drawn 55.a6 line after 56...h3, etc.



This flexible king move is the key to the win. White threatens to push the black king back to the eighth rank with 57.Rh7+ and then catch the h-pawn with Kg4. Black doesn't have a good answer to this, as evidenced by the following lines:

B1) 56...Rf1+ 57.Kg4 Ra1 58.a6 h3 59.Kg3! (one point). This is the big point that stops any tricks. You can get extra credit for analyzing further: 59...Ra3+ 60.Kh2 Kf7 61.e6+ Ke7 (or 61...Kg7 62.e7) 62.a7 (one extra credit point) and Black doesn't have a good defense against Rh8 next. The stalemate trick doesn't work anymore;

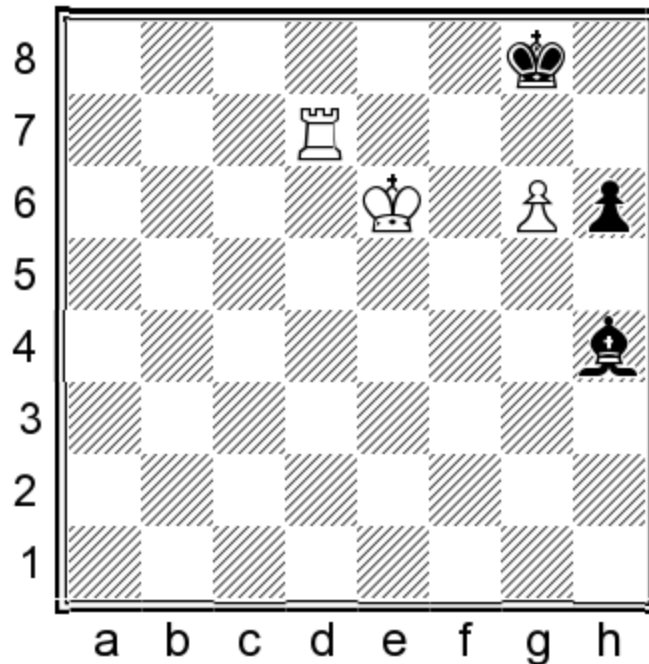
B2) 56...Rxa5 57.Rh7+ Kf8 58.Kf6 Kg8 59.Rxh4 (one point).



White has a winning endgame because Black cannot set up any active defense (Philidor/behind the pawn) in time. That means he can force the elementary Lucena position, for example: 59...Ra1 60.e6 Rf1+ 61.Ke7 etc.

You also get full credit for analyzing 57...Ke8 58.Kf6 Ra1 59.Rh8+ Kd7 60.e6+ Kd6 61.Rd8+ Kc7 62.e7.

Your score = /6 points + extra credit



Please analyze and evaluate the following continuations: 55.Rh7 and 55.g7 .

SOLUTION

Analysis – Exercise 11-

This simple endgame contains some fascinating ideas.

A) 55.Rh7 Bg5 56.g7!?

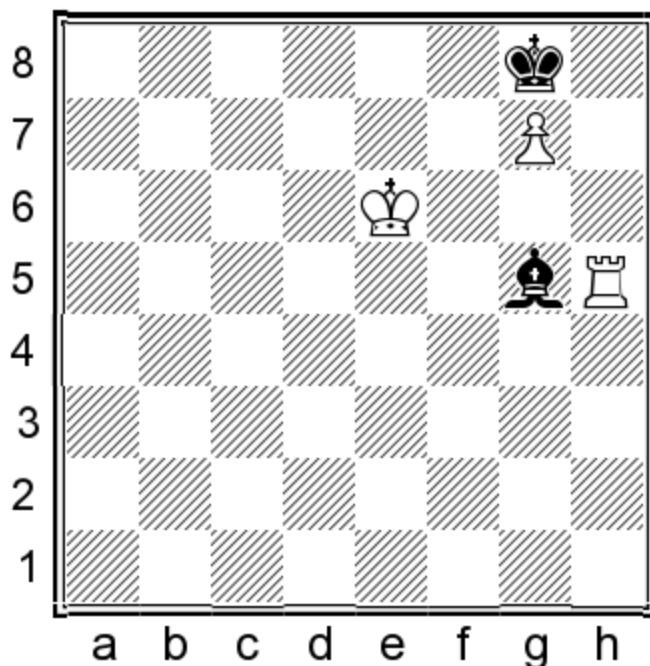
One point. The only remaining try. It's quite tricky since the rook on h7 is taboo. Black needs to be extra careful now.

A1) Sacrificing the pawn with 56...Bh4 doesn't work due to 57.Rxh6 Be1 58.Kf6! Bc3+ 59.Kg6 (one extra credit point) 59...Bxg7 60.Rh7 Bd4 61.Rd7 and Black loses because his king is in the 'wrong' corner, where the stalemate defense on the eighth rank is unavailable;

A2) 56...Kxh7?? (no credit) loses to 57.Kf7;

A3) 56...Bd2 (no credit) fails to 57.Kf6;

A4) However, 56...h5! 57.Rxh5



57...Bf6!! (two points) is a fantastic defense, once again using a stalemate motif, just like in exercise 10, to get out of trouble (57...Bd2?? (no credit) 58.Kf6 Bc3+ 59.Kg6 Bxg7 60.Rb5, winning): 58.Rh3 Bxg7 59.Ke7 Bb2. White could not get the opposition against the black king and a draw was soon agreed in the game Khalifman-Leko, Budapest 2000.

B) 55.g7 Bg5!

(one point). The only way to save the game. The bishop needs to keep covering the f6-square, and it is conveniently protected on g5. 55...h5? (no credit) allows White to put his opponent in zugzwang after 56.Rb7 Bg5 57.Kf5.

You get extra credit for analyzing any of the following lines:

56.Kf5

56.Rb7 Bh4=.

56...Kh7 57.Rf7

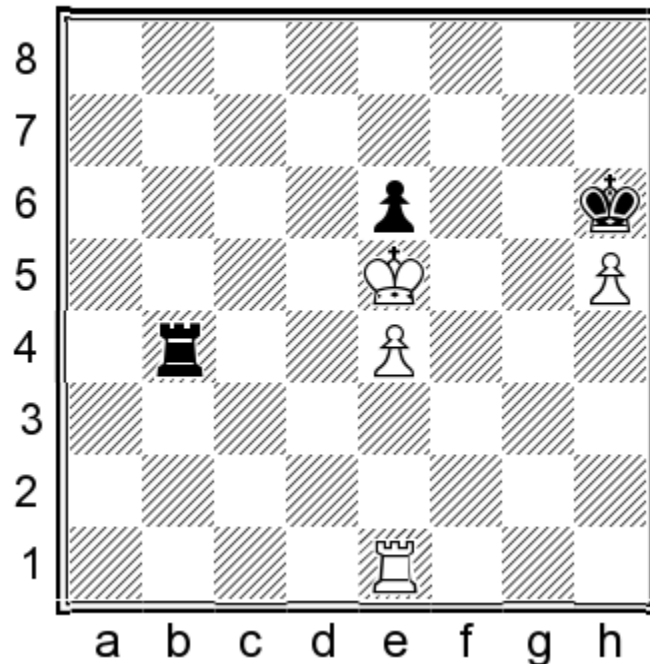
57.Ke6 Kg8!=.

57...Bc1

(one extra credit point)

White cannot make any progress.

Your score = /4 points + extra credit



Is it better to take the opponent's pawn with 86...Kxh5 or defend the pawn first with 86...Rb6 ?

SOLUTION

Analysis – Exercise 12-

A) 86...Kxh5

This is less intuitive than its alternative because the opponent gets a passed pawn in the center. However, there is a catch:

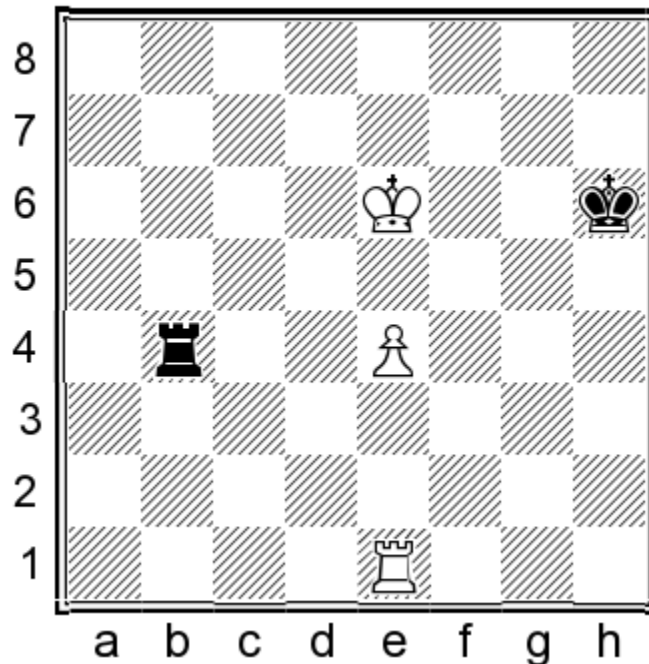
A1) In case of 87.Kf6, Black needs to find 87...e5! (one point) to prevent White from advancing his pawn to e5 as in the 86...Rb6 line. Now, after 88.Rh1+ Kg4 89.Kxe5 Black can stop the opponent's pawn with the coordinated effort of his two pieces: 89...Rb5+ 90.Kd6 Kf4 91.e5 Rb6+;

A2) After 87.Kxe6 Black has a single way to draw this endgame:

A21) 87...K_{g6}? (no credit) is the wrong way to approach g7 because White can cut off the king with 88.R_{g1}+ K_{h7} 89.e5;

A22) In case of 87...R_{b6}+ (no credit), 88.K_{f5} is the most convincing reply, picking up a valuable tempo with a checkmate threat: 88...R_{b5}+ 89.e5 K_{h6} 90.R_{g1} and White wins;

A23) 87...K_{h6}!! (two points) is the right path.



This counterintuitive move perfectly demonstrates the specific mobility of the king in the endgame. Most people subconsciously consider the ...K_{h5}-g6-g7 maneuver before ...K_{h5}-h6-g7 because it ‘seems faster’. One could easily miss the move 87...K_{h6} due to this bias, even though it takes the same number of moves to reach g7 via h6 and g6. The key point behind this move is that the king cannot be cut off with 88.R_{g1} due to 88...R_xe4+. If White advances his pawn, 88.e5, Black gets to the right defensive position just in time: 88...K_{g7} 89.R_{f1} R_{a4} (one extra credit point). The rook is on the long side, the king is on the short side, and the white pawn is still on the fifth rank, which means Black has a huge margin of a theoretically drawn endgame.

The passive defense doesn’t pay off in this rook endgame:

Please analyze and evaluate the following continuations: 41...Ng4 and 41...f4 .

SOLUTION

Endgame Analysis – Exercise 13-

Black can force a draw in this unpleasant endgame:

A) 41...Ng4!

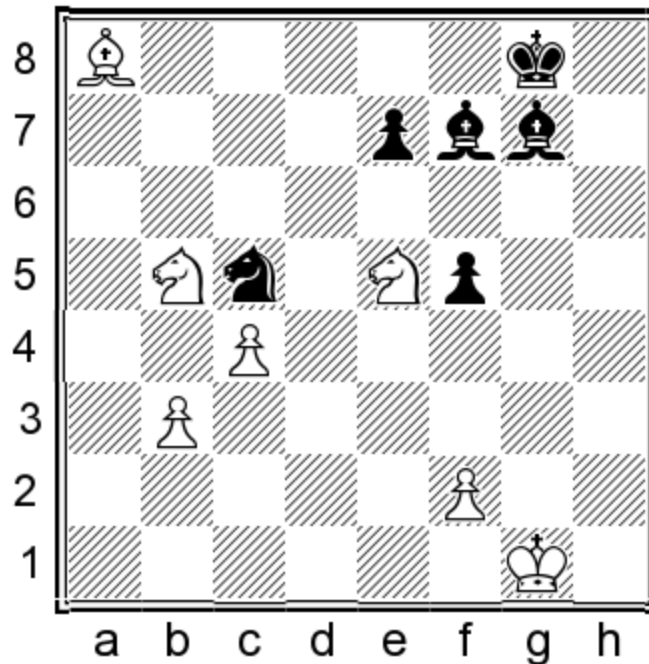
A1) In case of 42.Nxc5, Black forces favorable simplifications with 42...f4! (42...Nxe3 43.Nxd7 Nxc4!? 44.bxc4 Bxc4 (one point) also looks like a decent drawing attempt because White remains with a single pawn. Still, Black can hardly demonstrate forced equality here, unlike in the 42...f4 line) 43.Nxd7 fxe3 44.fxe3 Nxe3 (two points). The two connected passers on the kingside are not nearly as dangerous without the support of the dark-squared bishop. Black is very close to a draw here, and you get extra credit for proving it: 45.c5 Bxb3 46.c6 Nd5 (46...Be6!? works, too) 47.c7 Nxc7 48.Nxc7 (one extra credit point). White has no pawns left, so his extra piece is meaningless;

A2) 42.Bxc5

A21) 42...Nxc5?! (one point) 43.Nxc5. Black has chances to draw thanks to his bishop pair, but the game is not yet decided;

A22) 42...e5? (no credit) is useless here. White is fully in control after 43.Ba7 e4 44.Nc1!;

A23) 42...Nge5!. Black can get to the promised drawing land only with utmost precision: 43.Nxe5 Nxc5! (two points).



This is the big point. Black has eliminated White's key piece, the dark-squared bishop, and won the crucial tempo to harass the queenside pawns.

You can earn extra credit for continuing the analysis: 44.Nxf7 (White doesn't benefit from 44.Nc6 Nxb3 45.Nxe7+ Kf8 46.Nxf5 Bxc4 (one extra credit point)) 44...Kxf7 45.b4 Na6 (45...Nd3 46.c5 Be5 47.c6 Ke8! also deserves full extra credit) 46.c5 Be5! (one extra credit point). The most convincing continuation. Instead of eliminating the queenside pawns, White secures a draw by blockading them on the dark squares: 47.c6 Nc7 48.Nxc7 Bxc7=

Sek-Poh Yu Tian, Chiang Mai 2022 (1/2-1/2, 50). 46...Nxb4 47.c6 Nd5 48.c7 Nxc7 49.Nxc7 e5 should also work because it's unclear how White can progress when Black pushes his pawn to e4.

The alternative

B) 41...f4

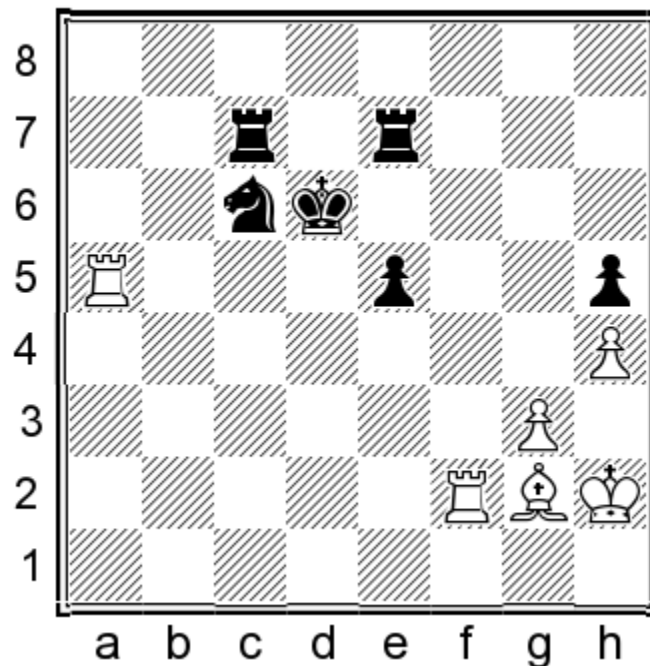
saves the c-pawn, but White can simply collect the f-pawn instead.

B1) 42.Bxf4 and Black would still have a lot of work to do to achieve a draw after 42...Bg6 43.Ne1! (two points). 43.Nc1!?! (one point) is slightly awkward by comparison, but at least it keeps the b3-pawn safe;

B2) 42.Nxf4 is slightly inferior because it allows the opponent to force the trade of dark-squared bishops with 42...Ng4 (42...Bh6!?! is similar) 43.Bc1 Bh6! (one point) 44.Nc3 e5 45.Nfe2 Bxc1 46.Nxc1 Ngf6 with better drawing chances than in the case of 42.Bxf4;

B3) 42.Bxc5?! helps Black achieve his simplification goal: 42...Bg6 43.Nxf4 Nxc5 44.Nxg6 Nxb3 45.Nxe7+ Kf7 (one point) with a likely draw despite the two extra pawns. Breaking Black's dark-square blockade seems nearly impossible.

Your score = /9 points + extra credit



The position is quite simplified, but it hides many tactical details. White has three promising options:

- A) 47.Rf6+
- B) 47.Rd5+
- C) 47.Ra6

Please analyze them in as much detail as possible and provide your final evaluation.

SOLUTION

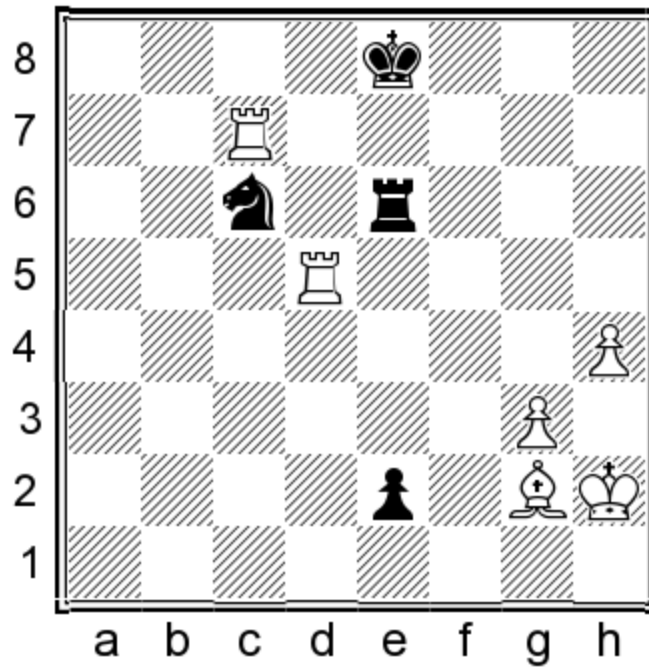
Analysis – Exercise 14-

A) 47.Rf6+ Re6

This is not the best option, but it still leads to a winning position with precise play.

A1) White should avoid the temptation to force the pawn endgame with 48.Rxe6+?! Kxe6 49.Ra6 Kd7 50.Bxc6+? (50.Bf3 (one point) still keeps winning chances after winning the h-pawn, though Black can fight on with ...Nd4, ...e4, etc.) 50...Rxc6 51.Rxc6 Kxc6 52.g4. You get no credit for this line if you think White can win with this move. However, you can get extra credit for finding its refutation: 52...Kd5! (one extra credit point). Black gets inside the square of the h-pawn, and the king and pawn endgame is drawn even after 53.g5 Ke6 54.Kg3 Kf5 55.Kf3 e4+ 56.Ke3 Ke5;

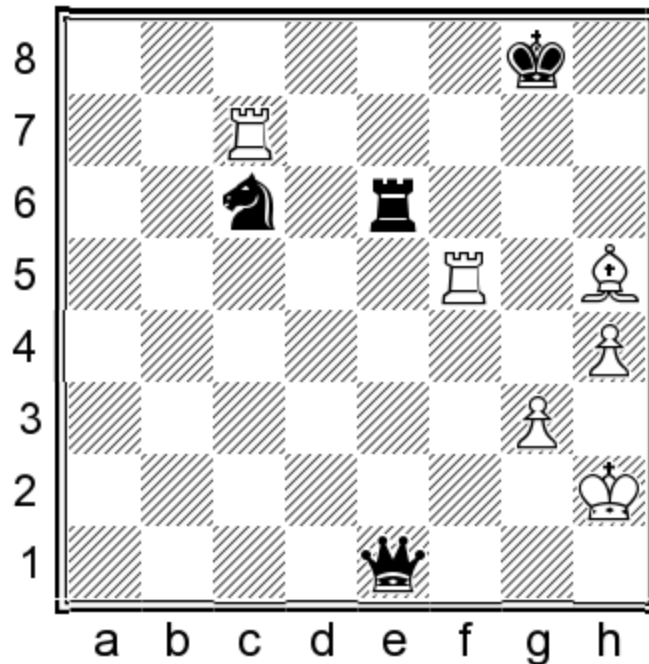
A2) 48.Rd5+ Ke7 49.Rf5! (two points). Black can't play ...Nd4 now, and the h-pawn will likely fall. The only downside of this approach is that the opponent obtains practical counterplay with 49...e4 (the passive defense 49...Rh6 50.Rg5 is hopeless for Black). You can earn extra credit for analyzing this line deeper: 50.Rxh5 e3 51.Rh7+ Ke8!?. The best practical try for Black since 51...Kf6 loses trivially to 52.Rh6+ Ke7 53.Rxe6+ Kxe6 54.Rd3 Ne5 55.Rxe3 (one extra credit point). The forcing line continues: 52.Rxc7 e2.



The endgame reaches its climax. White is winning, but further precision is needed because the opponent threatens to get a queen.

A21) 53.Rg5!?! Kd8 54.Rb7! (one extra credit point) wins, but it's a little less convincing than the other line: 54...e1Q (54...Ne7 55.Rb1) 55.Bxc6 Re2+ 56.Kh3 Qf1+ 57.Kg4 Qd1 58.Rd5+;

A22) 53.Bf3! (two extra credit points) is the quickest finish: 53...e1Q 54.Bh5+. White begins threading the mating net around the black king. 54...Kf8 55.Rf5+ Kg8



56.Rc8+!. The final precise move, forcing a mating finale: 56...Kg7
57.Rf7+ Kh6 58.Rh8#.

Unfortunately, in the game Carlsen-Giri, Wijk aan Zee 2017, the 16th World Champion dropped the ball right before the finish line with 56.Bf7+? Kh8 57.Rh5+ Kg7 58.Bxe6+ Kf6. White is still winning, but it's not so easy to prove it anymore. The game eventually ended in a draw.

B) 47.Rd5+ Ke6

B1) 48.Re2!?! (one point) is a good technical solution, preventing the opponent's counterplay with ...Nd4. White plans to win slowly rather than directly, in this case, counting on the chronic weakness of the h5-pawn;

B2) 48.Be4?! (no credit) is too static and allows Black to fight back with 48...Rf7!;

B3) 48.Rb5!! (two points) is the strongest continuation. This subtle move aims to prepare an attack along the sixth rank with both rooks, forcing the knight to move. After that, the bishop's check on h3 will force the black king to retreat to the eighth rank, where it's

most vulnerable. Black has several options here; you can get extra credit for analyzing them:

B31) 48...Nd4 49.Bh3+ (or 49.Rb6+!? Kd7 50.Bh3+) 49...Kd6 50.Rf6+ Ne6 51.Bxe6 Rxe6 52.Rb6+, winning a rook (one extra credit point);

B32) 48...Kd6 49.Rf5 Ke6 50.Rxh5 (one extra credit point) and White wins;

B33) 48...Kd7 49.Rf6! (one extra credit point; 49.Bh3+?! Ke8). The key move. White tightens the noose around the black king. Now Black loses in all lines: 49...Rh7 50.Be4 Rh8 51.Rc5 Ne7 52.Rxe5 or 49...Nd8 50.Rd5+ Ke8 51.Bf3.

C) 47.Ra6!?

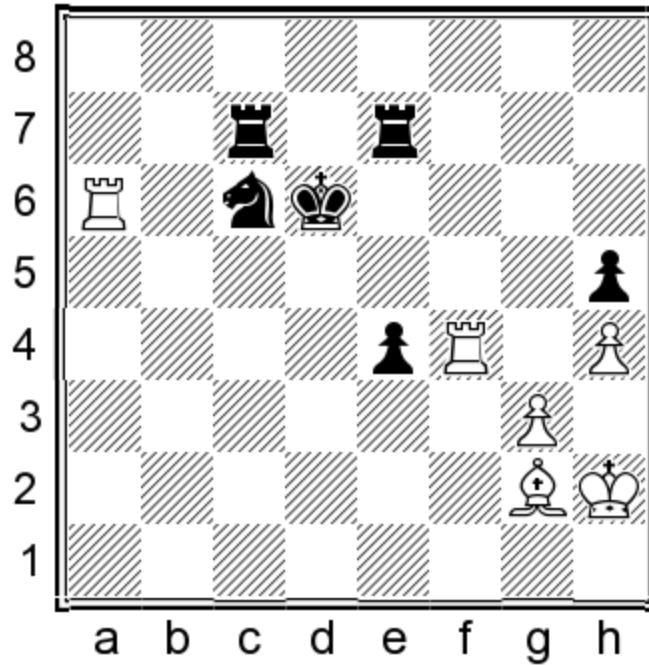
White gives no checks but simply exploits the opponent's weaknesses.

47...e4

This is necessary because Black is practically in zugzwang in the event of 47...Re6 48.Be4.

48.Rf4!

(two points)



Simple and straightforward. White coordinates his pieces well in the attack against Black's weakest links: his king, knight, and the e-pawn. You can get extra credit for analyzing the following critical line:

48...e3

48...Kd5 loses to 49.Ra4.

49.Bxc6 e2

In case of 49...Rxc6, White can force a winning rook endgame with 50.Rf6+ Kd5 51.Rfxc6 e2 52.Rc1 e1Q 53.Rxe1 Rxe1 54.Ra5+ Ke6 55.Rxh5 (one extra credit point).

50.Be4+ Ke5 51.Ra1

One extra credit point. The pawn has been stopped, but Black can fight on:

51...Rf7! 52.Rxf7 Rxf7 53.Bd3 Kd4

Fortunately, White can transition into a rook endgame where the h-pawn eventually falls:

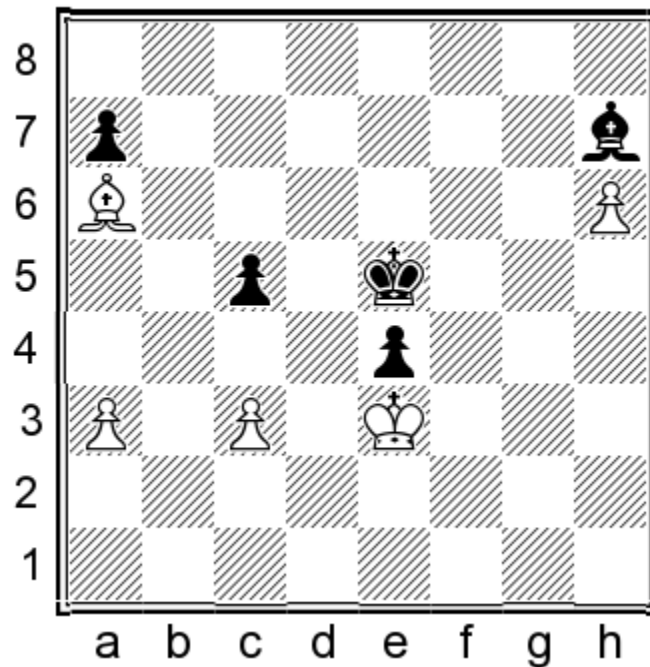
54.Bxe2 Rf2+ 55.Kh3 Rxe2 56.Ra4+!

Not 56.Ra5? (no extra credit) 56...Re5=.

56...Kd3 57.Ra5

(one extra credit point)

Your score = /6 points + extra credit



Black has a tough defensive task ahead of him because of White's outside passed pawn. Nevertheless, he can achieve a draw with precise play. Please analyze the following two moves, 53...Kf5 and 53...Bg6, to determine which one should be played.

SOLUTION

Analysis – Exercise 15-

This endgame is deceptively simple. It might seem like White cannot make progress if Black just defends passively, but this is not true. Black needs to take the first step:

A) 53...Kf5!

A1) In case of 54.Bb7 Ke5 55.a4, the key difference compared to a similar position in the B) line is that Black can block the advance of the a-pawn with 55...a5!= (one point);

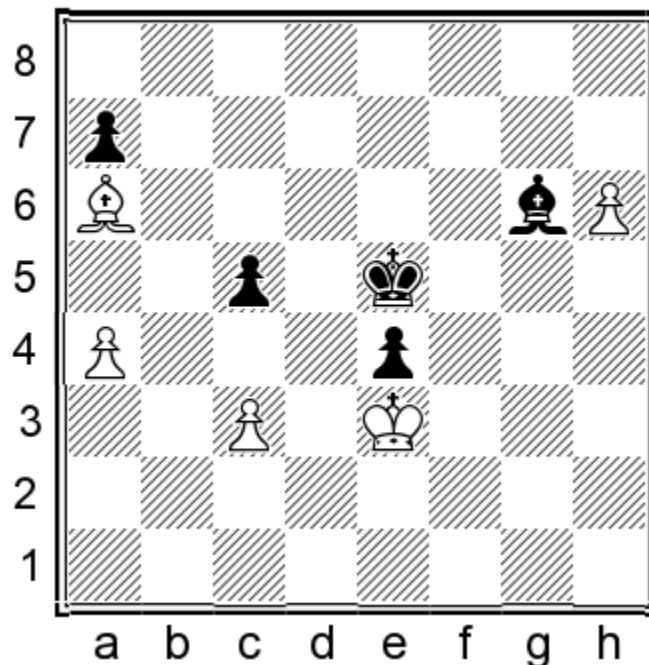
A2) White can try the same idea as in the game, 54.a4, but he is one tempo short here. Black should not waste time capturing the h-pawn, or he will end up in a losing position, as demonstrated in the 53...Bg6 line: 54...Kg5! 55.Bb7 Kxh6 56.Bxe4 Bg8. The king and pawn endgame is losing because the white king gets to the pawn first, but the similar one with the bishops is not: 57.Kf4 Kg7 58.Ke5 Kf8 59.Kd6 Ke8 60.Kxc5 Kd7 (one point). White cannot win the a-pawn, so Black will hold a comfortable draw here.

B) 53...Bg6?

This waiting strategy backfires on Black.

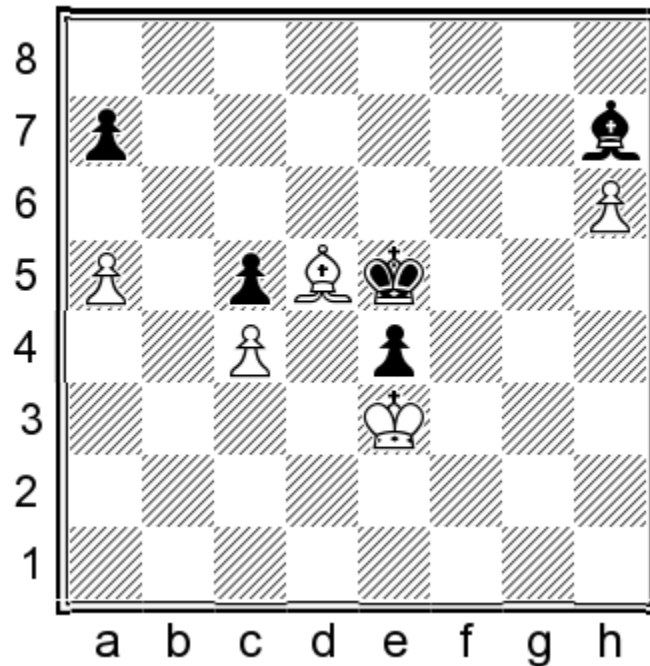
B1) 54.Bc4? (no credit) 54...Bh7 55.Bb3 (55.a4 a5!) 55...Kf5 56.Bd5 Ke5 57.c4 Bf5! 58.Bg8 Kf6 59.Kf4 Kg6 60.Bd5 e3! 61.Kxe3 Kxh6 62.Kf4 Bc2! 63.Ke5 Kg7 64.Kd6 Kf6 65.Kxc5 Ke5! 66.Kc6 Bb3 67.Kb7 Kd6 68.Kxa7 Kc5=;

B2) 54.a4!! (two points).



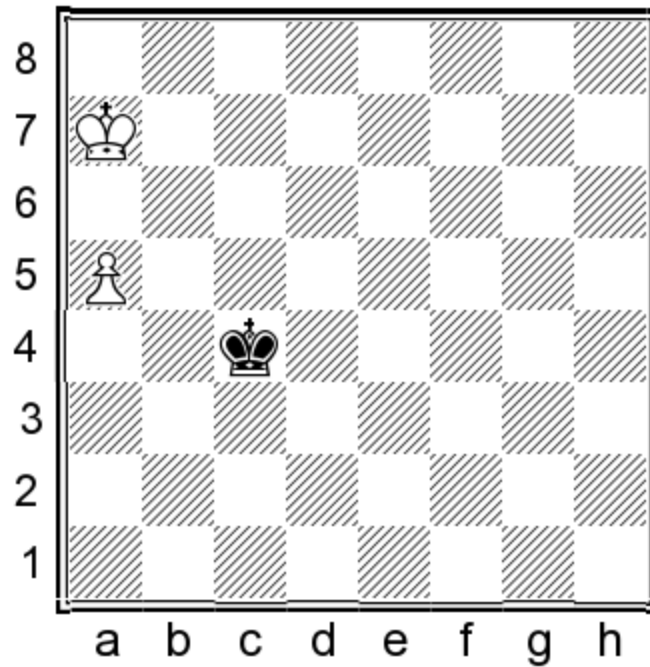
This pawn advance is the first crucial point. White wants this pawn on a5 instead of a3 when he goes for the kingside breakthrough. 54...Bh7 (in case of 54...Kf5, White forces the black king back to e5

with 55.Bb7! Ke5 and then pushes 56.a5, eventually transposing to the main line) 55.a5 Bg6 56.Bc4 Bh7 57.Bb3! (one point; the first little zugzwang for Black. He can only move his king because of the Bb3-g8 threat if the black bishop leaves h7) 57...Kf5 58.Bd5 Ke5 59.c4! (two points).



This is the second crucial idea for White in this endgame. Black is now in genuine zugzwang because ...Kf5 is unavailable. So, he has to play 59...Bf5 when White can finally make real progress with 60.Bg8 Kf6 61.Kf4 Kg6. White faces the last obstacle. But he can overcome it with 62.Bd5! (it was still possible to go wrong with the premature pawn advance 62.h7? (no credit), which runs into 62...Kg7!= since the black bishop is taboo) 62...e3 63.Kxe3. Black resigned here in the game Bosiocic-Kurajica, Bjelovar 2019.

You can get extra credit for proving how White wins after 63...Kxh6: 64.Kf4 Bd3 65.Ke5 Kg5 66.Kd6 Kf6 67.Kxc5 Ke5 (or 67...Ke7 68.Kc6 Kd8 69.Kb7 Kd7 70.c5 (one extra credit point)) 68.Kc6 Kd4 69.Kb7 Bxc4 70.Bxc4 Kxc4 71.Kxa7 (one extra credit point).

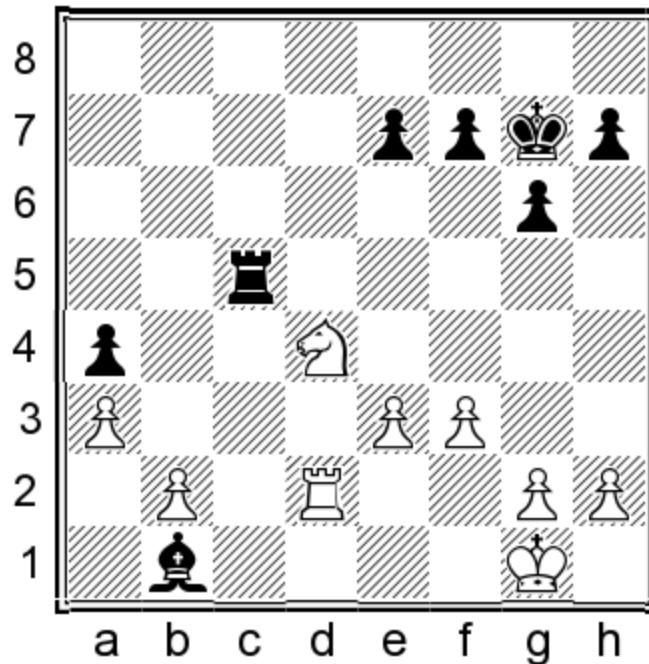


In this final position, we see why the pawn's position on a5 instead of a3 makes a big difference in this endgame.

Your score = /7 points + extra credit

Total points for Endgame Analysis exercises = /80 points

Endgame Simulation: Exercises and Solutions



White's extra pawn in this endgame is backward, adding a layer of challenge to converting his advantage. It requires good endgame technique, making it a perfect challenge for our first endgame simulation.

EXERCISE 1: Please suggest the best continuation for White.

SOLUTION

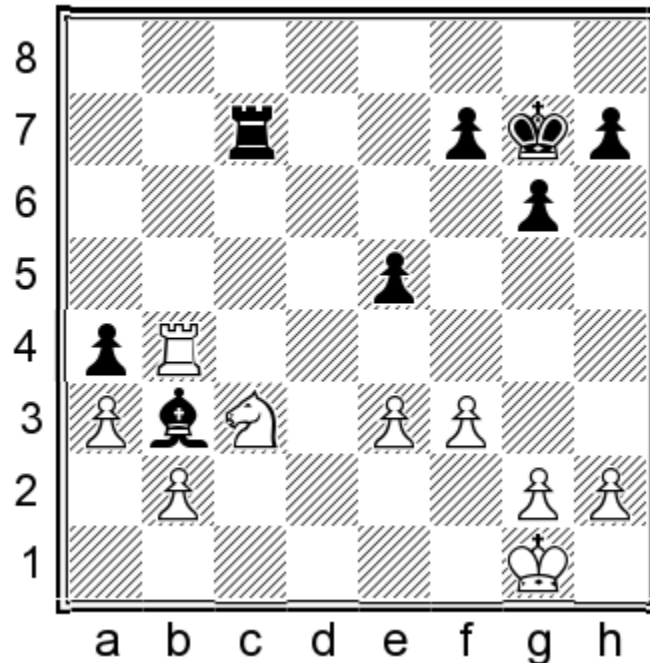
Simulation 1 Kuljasevic 2555-Ostovic
Zagreb-2017

30.Ne2!

Two points. This move aims to reroute the knight to c3, from where it will attack the opponent's a-pawn and block the c-file where his rook is looking for counterplay. The white rook will take its place on d4, tying the black pieces to the defense of the a-pawn. It also makes sense to centralize the king with 30.Kf2!? (one point), but you should still have the knight maneuver 30...Ba2 31.Ne2! (one point) in your plans to receive full credit for this exercise.

White has a few other reasonable options, such as 30.e4 (one point) 30...Rc1+ 31.Kf2 Ba2 32.Ne2 Rh1 33.h3 Bb3 and 30.f4 (one point) 30...Rd5 31.Rd1 Be4 32.Rc1 e5 33.fxe5 Rxe5. However, these are much less convincing than the text.

30...Ba2 31.Nc3 Bb3 32.Rd4 e5 33.Rb4 Rc7



Black cleverly uses the power of his rook on the c-file to defend the a-pawn indirectly, avoiding total passivity with 33... Ra5. Now, the question is, how should White proceed after successfully executing the mini-plan of improving his knight and rook?

EXERCISE 2: Please suggest the best continuation for White.

SOLUTION

34.h4!

Two points. When the opponent has one weakness covered (the a4-pawn here), it's a good strategy to consider creating a second weakness (something on the kingside) in their position. This often involves pushing our pawns and modifying the pawn structure in a way that the opponent eventually gets the second weak pawn on the other flank. 34.h4! is a great start to this plan.

A) 34.g4 (one point) is an inferior way to achieve the same goal due to 34...Rd7! and the fact that White's second rank is wide open prevents him from winning the a-pawn: 35.g5 (35.Nxa4?! Bxa4 36.Rxa4 Rd1+ 37.Kf2 Rd2+ 38.Kg3 Rxb2 with a very drawish rook endgame despite being up a pawn) 35...Rd2 36.h4 is still considerably better for White, but there was no need to allow the rook to reach the second rank;

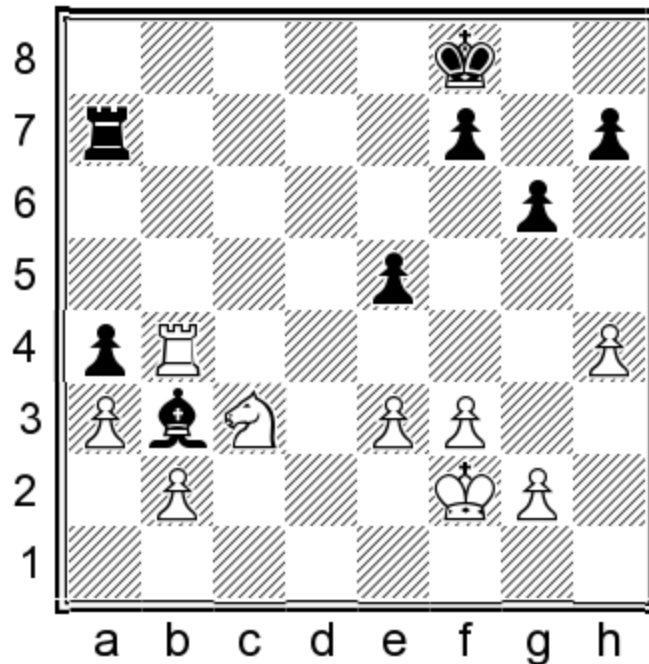
B) 34.Kf2 (one point) 34...Rd7 35.Ke1 is a reasonable plan, as usual. However, White would still need to show a convincing plan for improvement since 35...Rc7 prevents 36.Nxa4? due to 36...Rc1+ 37.Kd2 Rc2+;

C) Lastly, 34.Nxa4 (no credit) 34...Rc1+ 35.Kf2 Rc2+ 36.Kg3 Bxa4 37.Rxa4 Rxb2 is also very drawish.

White's last move also has a tactical advantage: Black's active defense of the a4-pawn fails because White can hide his king on h2 after a check on the first rank. This forces the black rook into passivity:

34...Ra7 35.Kf2 Kf8

Things are going well for White since the opponent has been forced to a passive defensive stance. What is the next step?



EXERCISE 3: Please suggest the best continuation for White.

SOLUTION

36.g4!

Two points. This continuation aligns perfectly with the ‘second weakness’ plan outlined earlier. By threatening to push the pawn to g5, White creates potential weaknesses on e5, f7, and h7. This move sets the stage for a decisive attack on Black’s weaknesses on both flanks, leveraging White’s overwhelming advantage in piece activity.

Regarding the alternatives, the rook moves are fine: 36.Rb5 (one point) 36...f6 37.Ne4 Ke7 38.Rb6 Be6, but eventually, you need to launch the g-pawn to count on full credit: 39.g4! (one point). The same goes for 36.Rb8+ (one point) 36...Ke7 37.Rb5 f6 38.g4! (one point).

36.Ne4 (one point) isn’t the best idea because of 36...Rc7 and White would need to repeat the position with 37.Nc3.

The last notable idea is 36.e4 (one point) when the game could continue 36...f6 37.Ke3 Kf7, but since it is difficult for White to

transfer his king to the queenside, his main plan should still involve some sort of kingside action.

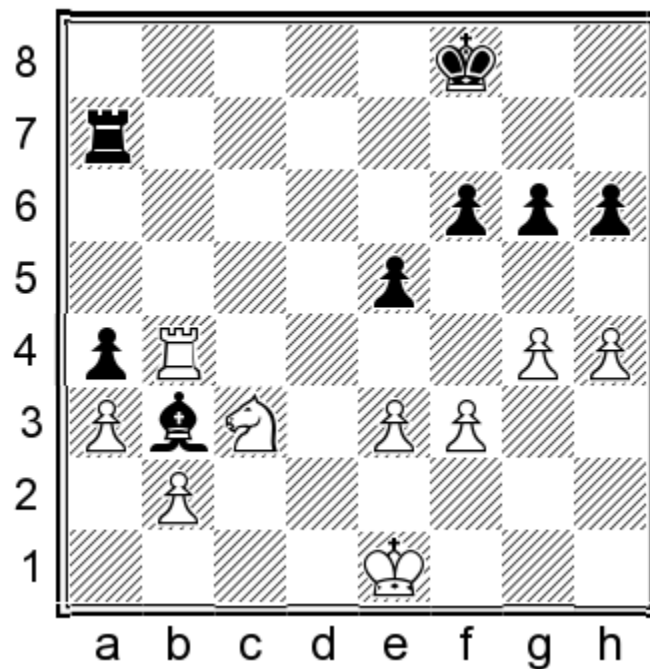
36...h6 37.Rb5 Rd7

Black, desperate for counterplay, is left empty-handed. The power of pushing the g-pawn is evident in the following line: 37...f6 38.g5! (here, the g-pawn acts as a battering ram, shattering the opponent's kingside structure) 38...hxg5 39.hxg5 fxg5 40.Rxe5 Rd7 41.Kg3 Rd2 42.Rb5!, winning.

38.Ke1 f6 39.Rb4!

Just in time to cover the c4-square and prevent 39...Rd3 40.Ke2 Bc4 with counterplay. Black has to go passive again:

39...Ra7



Black did his best to contain the white g-pawn, but this leaves his kingside structure quite vulnerable.

EXERCISE 4: Please suggest the best continuation for White.

SOLUTION

40.Rb6!

Two points. The most accurate move.

40.Ne4 (one point) 40...Ke7 41.Rb6 looks similar, but in this case, Black still holds with 41...Be6, and the maneuvering continues.

40...Kf7

A) Choosing 40...Ke7 would leave the g6-pawn undefended, opening the opportunity for White to play 41.g5! hxg5 42.hxg5 fxg5 43. Rxg6, which would be decisive;

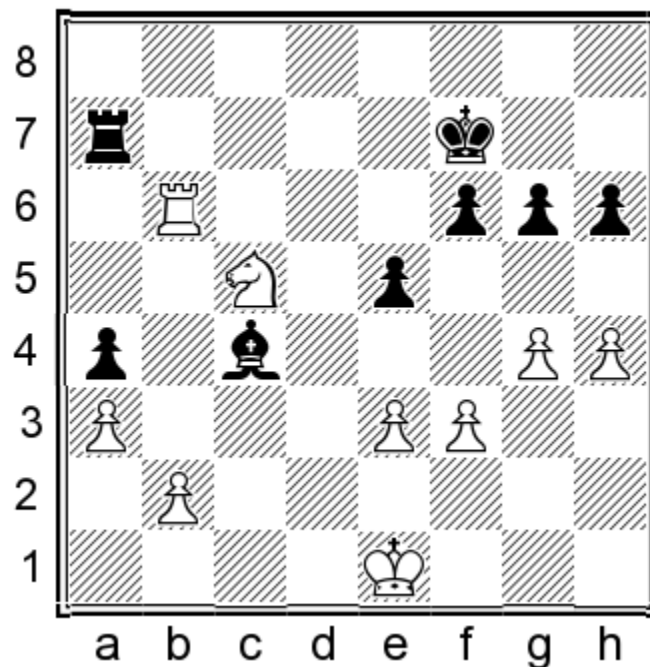
B) Alternatively, opting for 40...Kg7 would allow 41.Ne4, as 41...Be6 is not a viable option. This would lead to a winning endgame for White, either through 41...Bd5 42.Nxf6 Bxf3 43.g5 hxg5 44.hxg5 etc., or through 41...f5 42.Nc5.

41.Ne4 Be6

Black has drawn the last line of defense on the sixth rank.

42.Nc5 Bc4

In case of 42...Bd5 43.e4 Ra5!?, White can force a winning rook endgame with 44.Nxa4! Bxe4 45.fxe4 Rxa4 46.Rb4.



The bishop can no longer go to the b3-square, which weakens the a4-pawn. That's the beauty of attacking two weaknesses – the opponent has to scramble to defend both until he cannot. Let's see how we can prepare for the final push.

EXERCISE 5: Please suggest the best continuation for White.

SOLUTION

43.e4!

Two points. No rush! White ensures that Black cannot go ...Bd5 before he plays Rb6-b4.

A) 43.Ne4 Be6 44.g5! (two points) was another strong plan, fixing weak pawns on g6 and e5 and the f6-square;

B) 43.Rb4 (one point) is slightly premature due to 43...Bd5 44.e4 Bc6 when Black improves his bishop;

C) 43.Kd2 (one point) 43...Ke7 44.Kc3 is a very reasonable plan, with the only downside being that it leaves the kingside pawns unattended. You will need to find 44...Be2 45.g5! hxg5 46.hxg5 fxg5 47.Rxg6 (one point) to get the full credit for this idea.

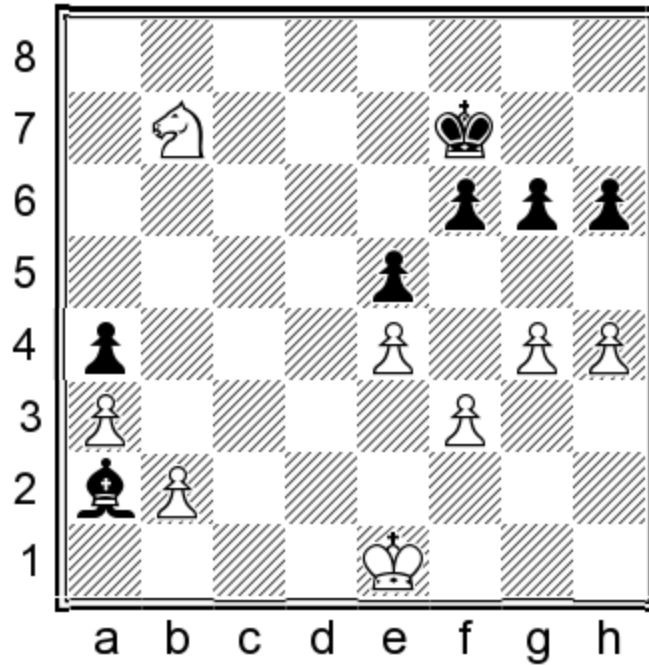
43...Ba2

Black avoids the 44.Rb4 double attack. I decided to win the game artistically, demonstrating the knight's domination over the bishop.

44.Rb7+!?

White would also win with the brute-force continuation 44.Rb4 Rc7 45.Nxa4 Rc2 46.Nc3 Be6 47.a4.

44...Rxb7 45.Nxb7



The geometry of the remaining pieces is such that Black has no way to save the a-pawn.

45...Ke7

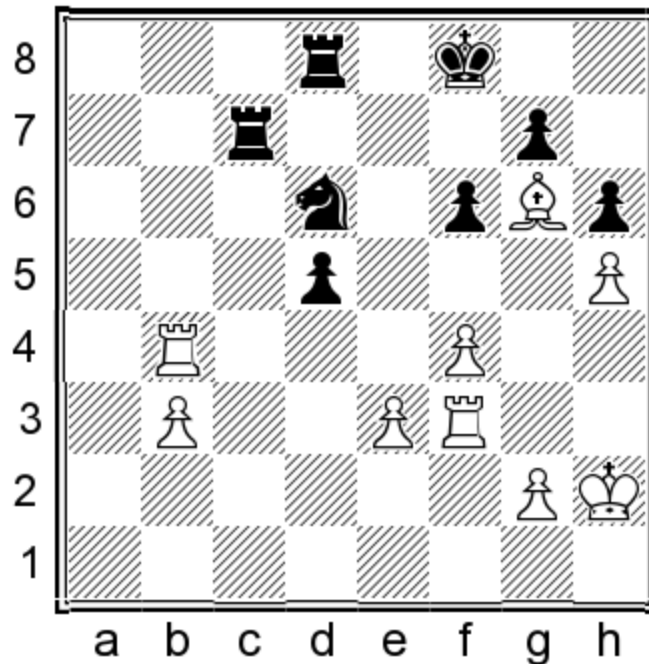
The following short lines summarize Black's issues: 45...Bc4 46.Nd6+; 45...Ke6 46.Nc5+; 45...Bb3 46.Nc5 Bc2 47.Kd2.

46.Nc5 Kd6 47.Nxa4

White finally captures the pawn; the rest was not difficult.

47...Bb3 48.Nc3 Kc5 49.Kd2 Kd4 50.Ne2+ Kc5 51.Nc1 Be6 52.Kc3 f5 53.gxf5 gxf5 54.Nd3+ 1-0

Your score = /10 points



White is up a healthy pawn, like in the previous endgame simulation. However, he already has an outside passed pawn here, which makes his conversion task easier, at least in theory. Let's explore how one of the world's best players proves this.

EXERCISE 6: Please suggest the best continuation for White.

SOLUTION

**Simulation 2 Nepomniachtchi 2720-Naiditsch
Dortmund-2015**

43.Rf1

Two points. White starts by bringing his more passive rook into the game. He threatens to increase pressure on the isolated d-pawn, hindering the opponent's counterplay.

A) 43.Rf2!?! (two points) could also be considered;

B) If White were to play 43.♭g3 (one point), Black would have enough time to isolate the bishop with 43...Rc1 44.Rf2 f5! due to the 45... Ne4+ threat;

C) 43.Rd4 (one point) also makes sense. However, Black can trade the active white rook with the help of 43...Nb5 44.Rd3 Rc3, keeping hopes alive of saving the game.

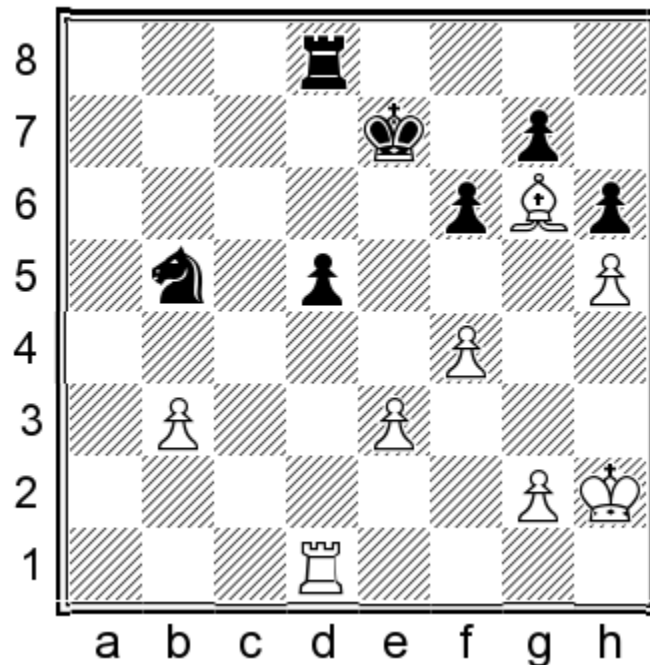
43...Ke7

The more active defensive attempts don't work for Black, as the following two lines show: 43...Rc3 44.Rd1 Rxe3 45.Rxd5 Ke7 46.Rb6 and 43...f5 44.Rd1 Rc5 45.Rbd4.

44.Rd1 Rc5 45.Rb6

The white rooks got too active, and Black has to trade a pair of them.

45...Rb5 46.Rxb5 Nxb5



There hasn't been a significant change in the endgame compared to the initial position. White has succeeded in activating his rook, but his passed pawn remains blocked. Further improvements are needed while keeping an eye on the opponent's counterplay.

EXERCISE 7: Please suggest the best continuation for White.

SOLUTION

47.Kg3

Two points. The two-time World Championship contender demonstrates his strategic prowess with this methodical move. By centralizing his king, he not only improves his position but also hampers the opponent's potential counterplay, particularly the ...d5-d4 push.

A) 47.Ra1 (one point) is also a very reasonable move. The a-file looks inviting for the white rook, especially considering the potentially vulnerable g7-pawn (the second weakness). Nevertheless, Black can set up a solid defense along the seventh rank with 47...Rd7 48.Ra5 Rb7;

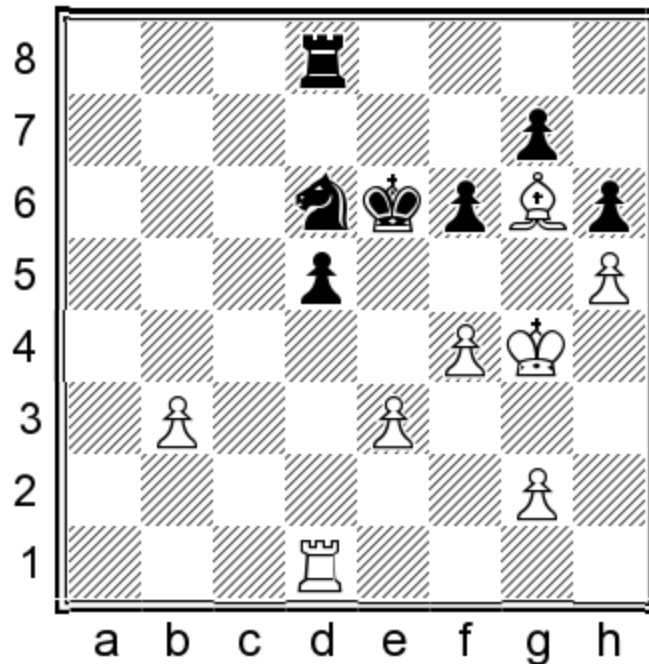
B) 47.b4 (one point) is a little premature due to 47...d4, and White might miss his king if the center opens up;

C) 47.g4 (one point) is the last move worth mentioning. White keeps a clear advantage; for example, 47...Nc7 48.Kg3 or 47...d4 48.Rd3!, followed by the king's run to f3.

47...Ke6

If Black attempts to eliminate the isolated pawn with 47...d4, White would respond with 48.Kf3!. This move sets up excellent winning chances after 48...Rc8 49.Rd3! dxe3 50.Kxe3.

48.Kg4 Nd6



Nepomniachtchi played his previous move to control the f5-square, but Naiditsch reinforced his ...f5 threat, which would cut off the bishop on g6. What can White do about this?

EXERCISE 8: Please suggest the best continuation for White.

SOLUTION

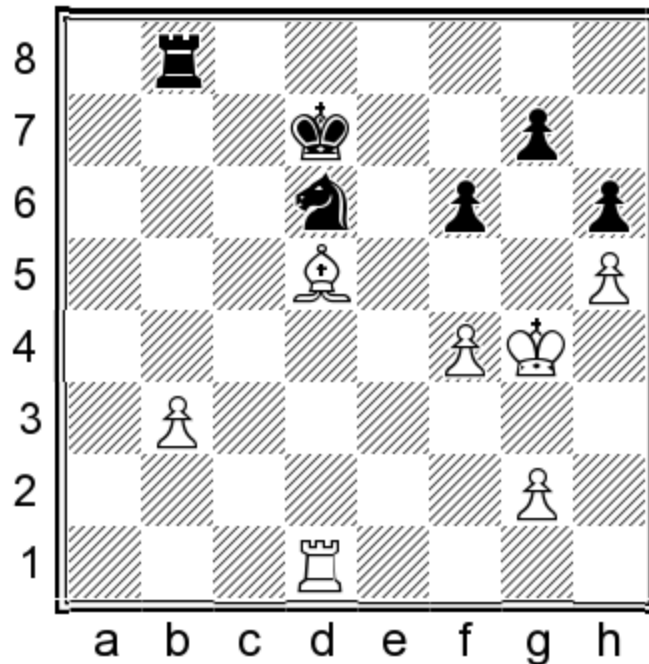
49.e4!

Three points. A very strong move. White uses tactics to achieve a major positional goal – bringing his bishop into the game.

49.Kf3 (two points) is decent, but it allows the opponent to play 49...f5. Even though White could still get his bishop out after 50.Ra1 Rb8 51.Ra3 Rb6 52.g4 fxg4+ 53.Kxg4, the center would remain relatively closed, favoring the black knight more.

49.Rc1 or any other reasonable move (one point) is similar to the previous note. For example, 49...f5+ 50.Kf3 Rb8 51.Rc3 and White would eventually have to play g2-g4 to release the bishop.

49...dxe4 50.Bxe4 Rb8 51.Bd5+ Kd7



The bishop assumes an imposing central outpost, a clear promotion from the ‘provincial’ position on g6. Now, we need to devise a plan to increase our advantage.

EXERCISE 9: Please suggest the best continuation for White.

SOLUTION

52.Ra1

Two points. The rook was begging to go to the a-file, and this was the best choice. 53. Ra7+ is an unpleasant threat.

In case of 52.Kf3 (one point) 52...Rb5 53.Ke3, White tries to improve his position gradually rather than immediately. However, the text is more convincing because it provokes a new weakness.

52...f5+

Black doesn’t really want to play this move because the pawn automatically becomes more exposed on f5. However, he had no choice since 52...Nb5 allows the white king to infiltrate the kingside via 53.Kf5.

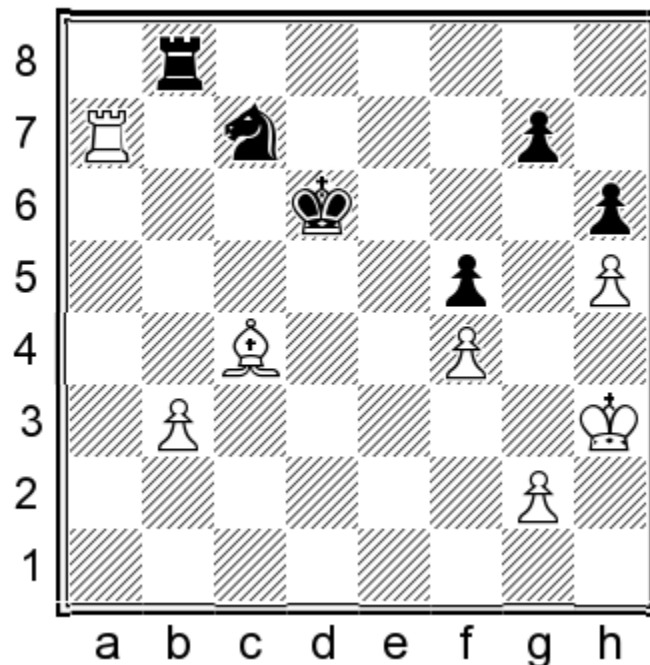
53.Kh3

53.Kf3 was more logical. Perhaps Nepomniachtchi disliked the fact that Black could create some counterplay via 53...Ne4. However, this was not an issue due to 54.Ra7+ Kd6 55.Bc4 Nd2+ 56.Ke2 Nxc4 57.bxc4 and White wins.

53...Ne8

In case of 53...Nb5, White gradually improves his position with 54.g3.

54.Ra7+ Nc7 55.Bc4 Kd6



Black has drawn his next line of defense on the seventh rank. His rook controls the b-passer. However, as often happens in such positions, a sinking ship has too many holes to plug.

56.Ra5!

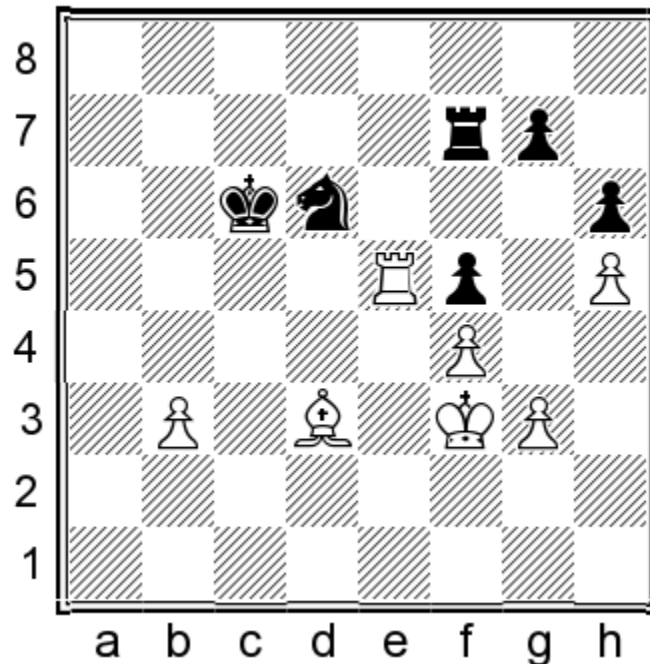
Nepomniachtchi exploits the newly created weakness on f5, stretching the black defenses even more.

56...Rf8 57.Kg3 Rf6 58.Kf3 Kc6 59.g3

The Russian super-GM is in absolutely no rush. His rook holds the opponent's pinned down on the f-file, and his bishop dominates the

black knight. His pacing in this endgame is very instructive, as he exchanges periods of energetic play with quiet, position-building maneuvers.

59...Ne8 60.Re5! Nd6 61.Bd3 Rf7



The f5-pawn is under siege, but Black's defenses still seem to hold for now. White needs to come up with another mini-plan to utilize his advantages.

EXERCISE 10: Please suggest the best continuation for White.

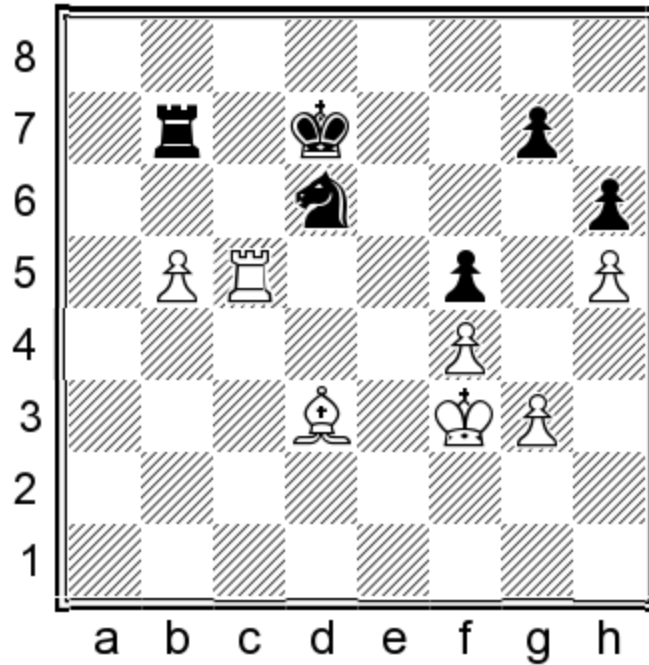
SOLUTION

62.b4!

Two points. White finally advances his passed pawn. It's ready to make a difference now.

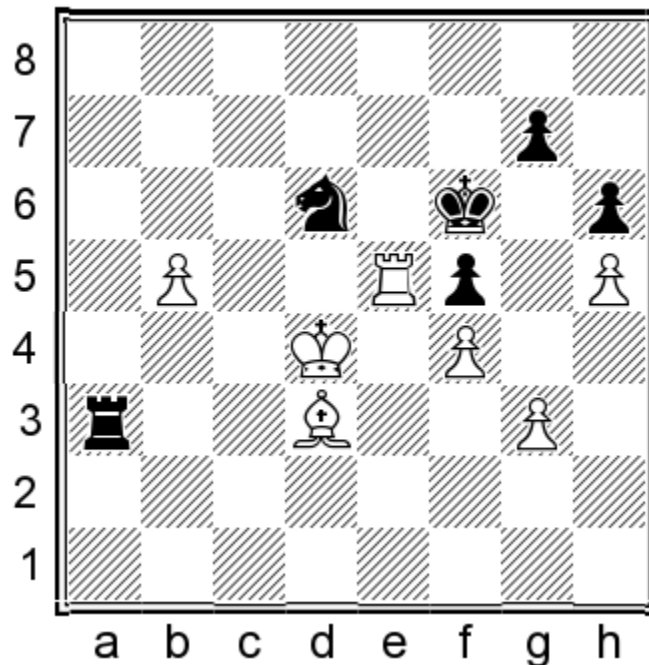
Centralizing the king with 62.Ke3 (one point) is not a bad idea, but you would need to find 62...Rb7 63.Bc4! (one point) for full credit.

62...Rb7 63.Rc5+ Kd7 64.b5



One point. You get a maximum of three points for this exercise if you had planned to achieve this position before going 62.b4. White dominates completely, and only a few finishing touches are needed to force Black's resignation.

64...Ke6 65.Re5+ Kf6 66.Ke3 Ra7 67.Kd4 Ra3



The position in the diagram is a testament to Nepomniachtchi's world-class endgame technique. He has activated all his pieces and united them in a common goal. All White needs now for complete success is the precise winning idea.

EXERCISE 11: Please suggest the best continuation for White.

SOLUTION

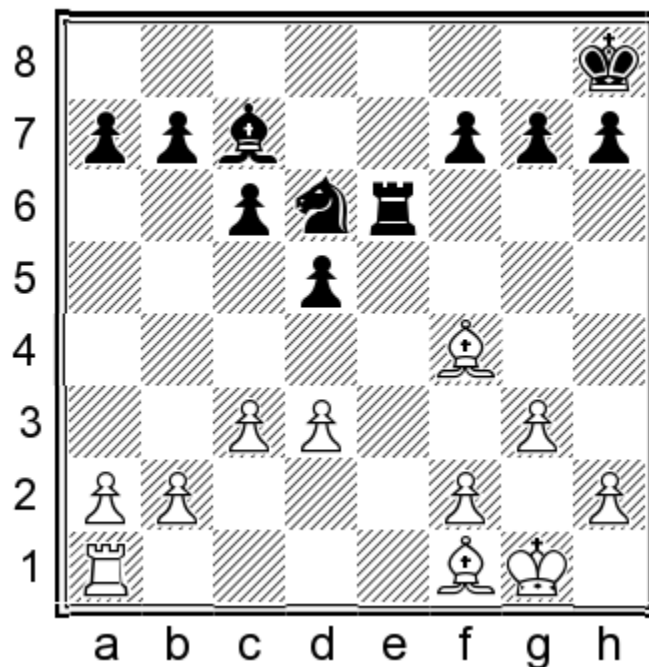
68.Bc4!

Two points. This move forced Naiditsch's resignation. The 69. Re6+ threat forces Black to enter a hopeless rook endgame: 68...Nxc4 69.Kxc4 Rxc3 and the b-pawn decides the outcome: 70.b6 Rg1 71.b7 Rc1+ 72.Kd5 Rb1 73.Kc6 followed by Rb5.

68.Bc2! (two points) is just as good, preventing ...Rb3 and preparing to push the b-pawn: 68...Rxc3 69.b6.

The alternatives don't spoil the win; only slow it down: 68.Re3 Rb3 69.Re5 (one point) or 68.Rd5 (one point) 68...Ke6. In both cases, White needs to reset the rook to e5 to make progress.

Your score = /14 points



The endgame where one side has a bishop pair advantage was already featured in the introductory example. However, there is only one open file in this position (and Black controls it), so it seems more challenging to create something tangible for White here at first glance. Still, if you play your cards right, Black is in for a tough defense.

EXERCISE 12: Please suggest the best continuation for White.

SOLUTION

Simulation 3 Vachier-Lagrave 2758-Sargissian Baku-2015

23.c4!

Two points. This move is essential to White's ambitions to open the position for his bishops. It's also the only way to exploit Black's temporary lack of piece coordination; Bc7, Re6, and Kh8 would all like to be on better squares.

A) White could also start the queenside expansion with 23.a4 (one point) 23...Re7 (23...a5?! 24.Bh3 Re7 25.b4±) 24.a5 (24.b4 transposes to 23.b4) 24...a6, fixing the b7-pawn as a potential weakness;

B) Alternatively, 23.b4 (one point) 23...Re7 24.a4 K g8 25.Rb1, preparing to push b4-b5, also gives White a long-term initiative. However, MVL's move is more to the point.

23...dxc4

Black's attempt to close the position with 23...d4 wouldn't work due to 24.c5! Ne8 25.Bh3 Re7 26.Bd2! and the b7/c6 pawn chain will be very vulnerable. For example, 26...Nf6 27.Bc8 b6 28.Rc1 and Black's position is no fun.

It was also possible to keep the d-file closed with 23...Ne8. In that case, White continues similarly: 24.cxd5 cxd5 25.Bh3 Re7 26.Bg5 f6 27.Bd2. This time, White's successes are the open c-file and the

creation of the isolated d5-pawn. That shows that Black has to give away something, no matter his reply.

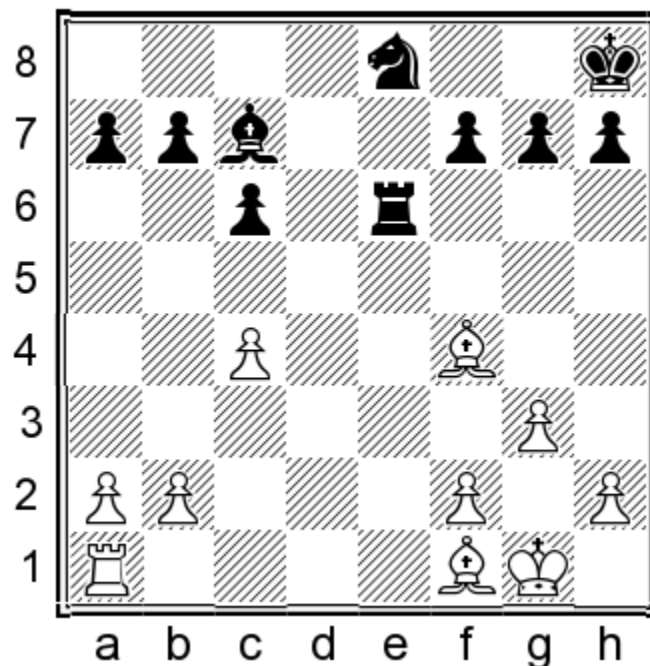
24.dxc4

This pawn exchange works in White's favor, as he can now activate his rook on the d-file and his bishop on the f1-a6 diagonal.

24...Ne8?

This was the wrong way to answer the c4-c5 threat. 24...Bb6 was a better choice. In that case, White could solidify his advantage with the following forcing sequence: 25.Bh3 f5 26.Rd1 Ne4 27.c5! Nxc5 28.Bxf5.

Black becomes too passive, and White can exploit this.



EXERCISE 13: Please suggest the best continuation for White.

SOLUTION

25.Bxc7!

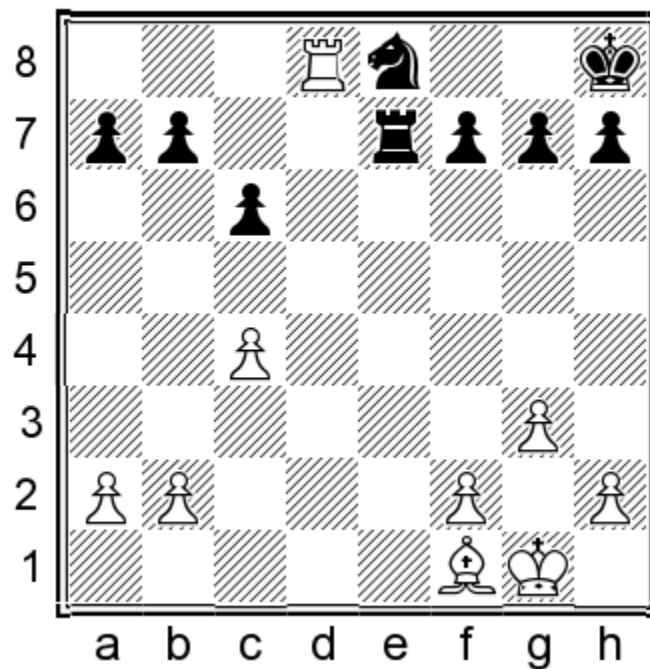
Two points. The concrete approach is usually the best. White realizes he can transform his long-term bishop pair advantage into a more tangible one. The critical point is that Black cannot

simultaneously protect the rook's invasion to the seventh or eighth rank.

White keeps a sizeable advantage after 25.Bh3 (one point) 25...Re7 26.Be3 a5, but Black would have some chances to consolidate there with ...Nf6, etc. 25.Be3 (one point) is similar to 25.Bh3.

25...Nxc7 26.Rd1 Re7 27.Rd8+ Ne8

A sad necessity since 27...Re8 would give up the seventh rank to 28.Rd7.



White is clearly in the driver's seat now. But what is the best way to exploit his large advantage?

EXERCISE 14: Please suggest the best continuation for White.

SOLUTION

28.Bh3!

Two points. This is the most precise continuation, winning a tempo for Bc8 since the Bd7 threat forces the opponent to waste another move.

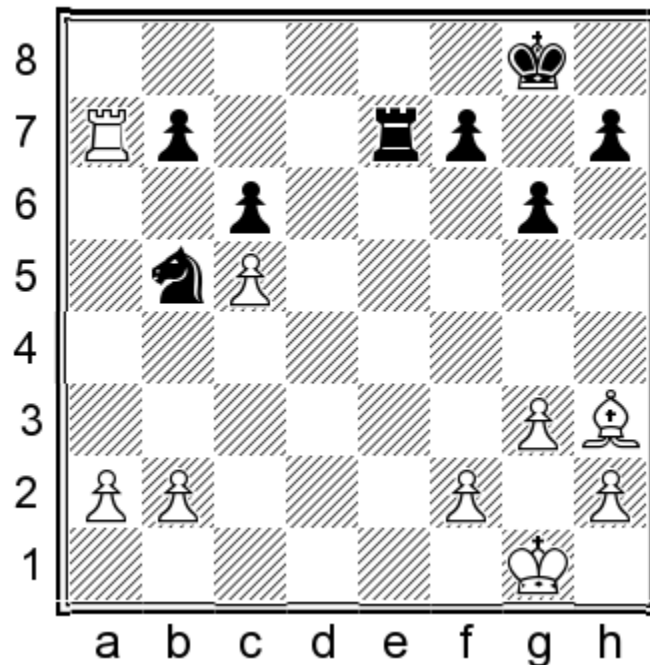
28.Ra8 a6 29.b4 (one point), preparing to smash the queenside with b4-b5, is also good but not as decisive as the text (29.Bh3 (no credit) is inaccurate now because Black can unpin with 29...g6 30.Bc8 K g7). After something like 29...g5 30.b5 axb5 31.cxb5 K g7 32.bxc6 bxc6 Black can still offer a fight.

28.b4 (one point) 28...g5 29.Ra8 transposes to the line above.

28...K g8 29.Ra8 g6

Black is virtually forced to give up the a-pawn since 29...a6 allows the opponent to capture the b7-pawn with 30.Bc8 K f8 31.Rb8.

30.Rxa7 Nd6 31.c5 Nb5



White has won a healthy extra pawn as a reward for his efforts. However, Black has consolidated and activated his forces and is determined to put up strong resistance. We need to keep showing a high level of endgame technique to convert his advantage.

EXERCISE 15: Please suggest the best continuation for White.

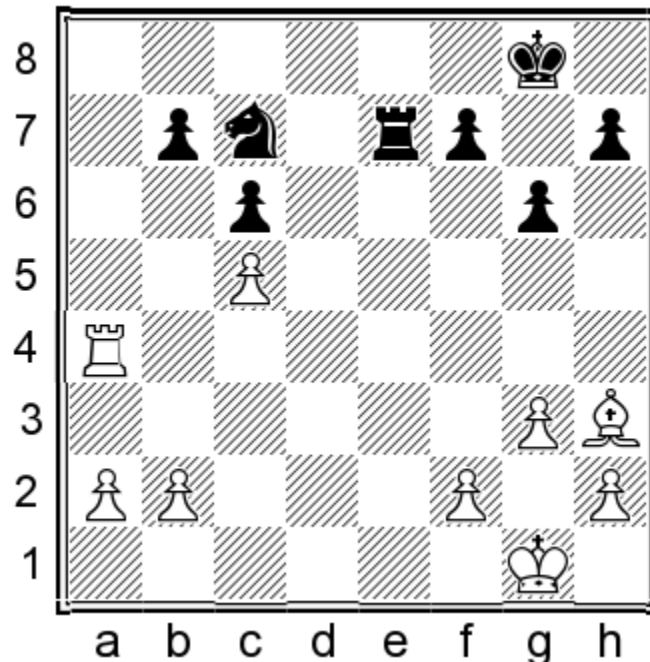
SOLUTION

32.Ra4!

Three points. I will stress again: the key rule of converting an advantage is limiting the opponent's counterplay. It is instructive to see how MVL prevents ...Nd4 and all the possible tricky knight geometry that comes with it.

We can see why this prophylaxis was important in lines such as 32.Ra8+ (two points) 32...Kg7 33.Bc8 Nd4 34.Rb8 Re8! and suddenly, the black pieces coordinate better than White's; and 32.Ra5 (one point) 32...Re1+ 33.Bf1 Rb1 34.b3 Nc3, with counterplay.

32...Nc7



Black wants to complicate the opponent's conversion task by rerouting his knight to d5, e6, or a6. How should White proceed?
EXERCISE 16: Please suggest the best continuation for White.

SOLUTION

33.Rd4

Two points. Centralizing the rook is very sensible. This way, pushing b2-b4 without cutting it off on the a-file will be easier.

A) 33.Bc8! (two points) was perhaps even more clinical, forcing the opponent to resort to passive defense: 33...Na6 (33...Nd5 34.Ra7) 34.Ra5 Rc7 35.Bg4 Re7 36.Kf1 Kg7 37.Be2 and White will gradually convert his advantage;

B) 33.Bf1!? Ne6 34.b4 (one point) is also fine but slightly worse than the other two options because the black knight is more active here.

33...f5?!

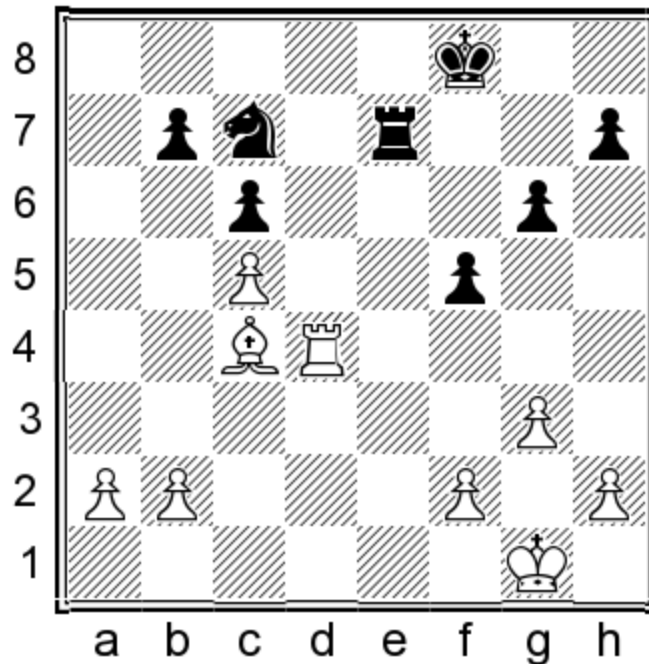
Sargissian wants to cut off the bishop, but the timing of this move is wrong. 33...Kg7 was more accurate, and only after 34.b4 Black can go 34...f5 since 35... Nd5 becomes possible here.

It was important to calculate in advance that the minor piece endgame after 33...Re1+ 34.Kg2 f5 35.Rd8+! (35.Rd7? is tempting, but gives the opponent a chance to survive with 35...Na6! 36.Rxb7 Nxc5) 35...Kf7 36.Rd7+ Re7 37.Rxe7+ Kxe7 38.b4 is winning for White thanks to the g3-g4 resource, which releases the bishop from captivity on h3.

34.Bf1!

Of course, the bishop had no business on the h3-c8 diagonal anymore. However, the critical point is that Black is not in time to put his knight on d5 because 35. Bc4 pins it. That's why Black should have played 33...Kg7 first.

34...Kf8 35.Bc4



White has established complete piece domination, similar to Endgame Simulation #2.

35...Re1+ 36.Kg2 Ke7 37.Bg8!

Now, he proceeds to exploit the second weakness.

37...Re4 38.Rd2

Black tried to defend his kingside pawns with the help of tactics, counting on 38.Rxe4+ fxe4 39.Bxh7? Kf7 to trap the bishop. MVL decided to stick to his safe conversion strategy, but nothing was wrong with the rook trade followed by 39.b4!. The minor piece endgame is hopeless, for example: 39...Nb5 40.f4 Nc3 41.Kf2.

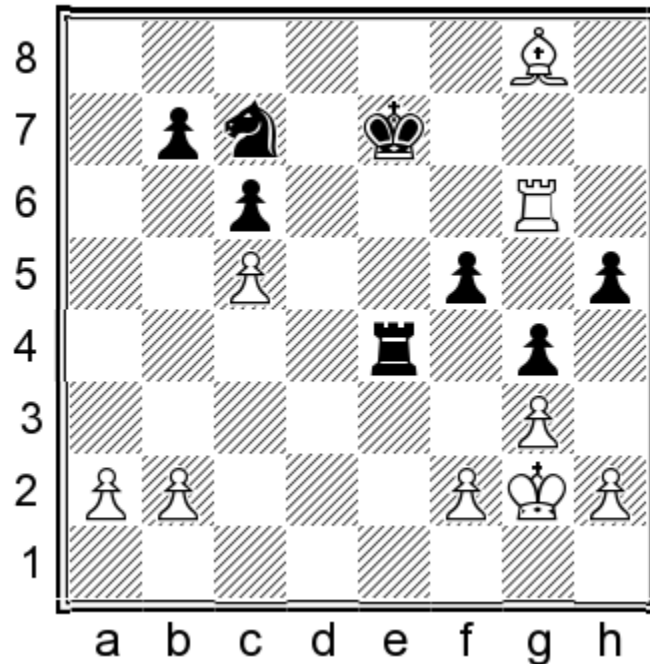
38...h5

Black could have posed a greater challenge for his opponent with 38...g5! 39.Bxh7 Re5, which is still winning for White, but he could still go wrong with a natural move like 40.b4?! allowing Black to activate his pieces with 40...Nd5 41.a3 Kf7.

39.Rd6

White swiftly exploits new weaknesses in the opponent's position.

39...g5 40.Rg6 g4



Black kingside pawns are overextended. Moreover, all black pawns are on the light squares, which makes them an easy target for the white pieces. What is the most accurate way to close out the game?
EXERCISE 17: Please suggest the best continuation for White.

SOLUTION

41.Rg7+!

Two points. White uses the principle of two weaknesses to maximum effect. The black king is torn between defending weaknesses on both sides of the board, and with this clever check, White forces the king one way, only to exploit the weaknesses on the other side.

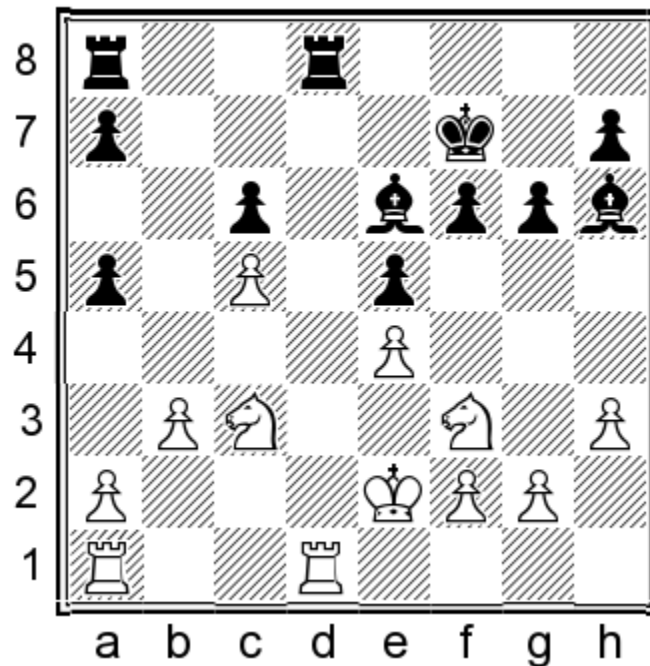
In case of 41.Rh6 (one point), Black could still have offered some resistance with 41...Nb5 42.Rxh5 (or 42.Rh7+ Kf6 43.Rxb7 Nd4) 42...Kf6 43.Rh7 Nd4, and the same goes for 41.Rg5 (one point) 41...Kf6 42.Rxh5 Na6 43.Bh7 Re5. Black's ability to protect the f-pawn by putting his king on f6 is key in both these lines, which explains why 41.Rg7+ is so important.

41...Kd8 42.Rg5 Re8

42...Na6 is too late due to 43.Rxf5.

43.Bc4 1-0

Your score = /13 points



This game is an excellent example of how the power of the bishop pair can be maximized in a relatively closed position. Superficially, the endgame doesn't seem too promising for Black since he has no leverage on the only open file. His damaged queenside pawn structure doesn't help his chances, either. These static weaknesses favor the knights, who will be happy to take posts on c4 and a4. Nevertheless, Black can take the initiative with a series of precise moves.

EXERCISE 18: Please suggest the best continuation for Black.

SOLUTION

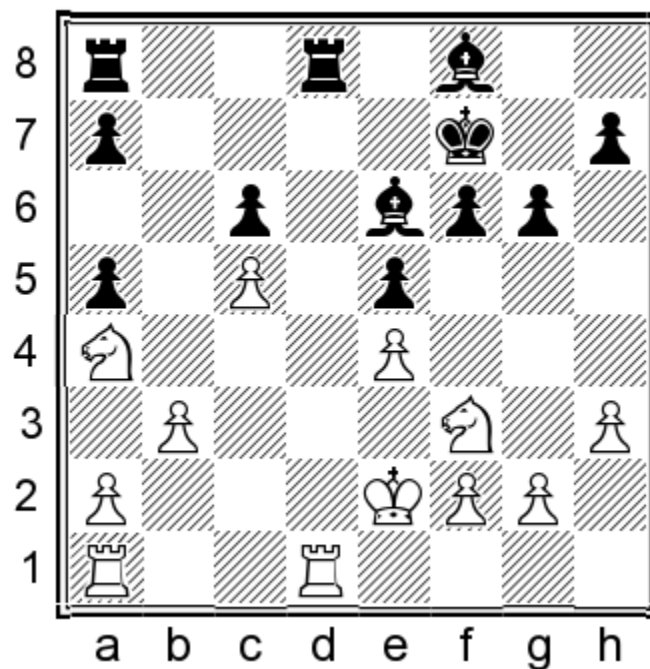
Simulation 4 Almagro Llamas 2433-Fressinet
Spain team competition-2015

20...Bf8!

Two points. First, we tie one of the knights to the c5-pawn and take the weak d6-square under control. We could also do this with 20...Rxd1!? (one point) 21.Rxd1 Bf8! (one point) – you get full credit only for finding both moves in this sequence.

20...Rab8 or any other reasonable move (one point) gives White time to play 21.Rxd8 Rxd8 22.Rd1. Since trading both pairs of rooks leads to a drawish minor-piece endgame, Black would need to play 22...Rc8 to keep some winning chances. However, White would have plenty of time to reroute his knights to better squares, which is much more difficult to achieve in the game.

21.Na4



EXERCISE 19: Please suggest the best continuation for Black.

SOLUTION

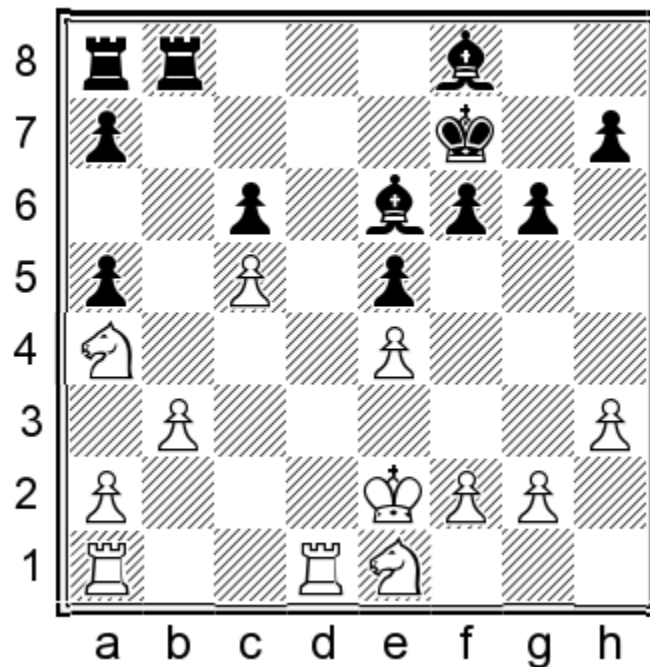
21...Rdb8!

Two points. A super-important move. Black retains both rooks to increase his winning chances. There is no reason to worry about White's rook on the d-file because the bishops protect the d6- and

d7-squares. You also get full credit for 21...Rxd1 (one point)
22.Rxd1 Bc8! (one point).

21...Rab8 or any other reasonable move (one point) again allows the opponent to win a tempo with a rook trade: 22.Rxd8 Rxd8 23.Rd1 Rc8 24.Ne1!, with a very solid position after Nd3, etc.

22.Ne1



White logically moves his knight to a more central position. From d3, it protects the important b4- and c5-squares. Black needs to find a good plan against this.

EXERCISE 20: Please suggest the best continuation for Black.

SOLUTION

22...Bc8!

Two points. This is a perfect antidote to White's plan. The bishop wasn't doing much on e6 anyway, and it will be more effective on the f1-a6 diagonal, harassing the white king and the d3-knight.

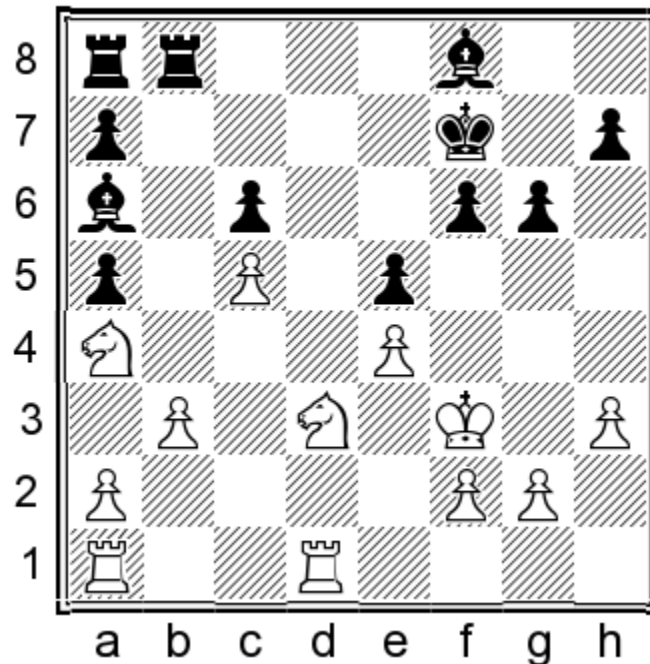
A) You get partial credit for any other reasonable move, including 22...Be7 and 22...Rb4 (one point). In those cases, White would not have any obstacles solidifying his position with Ne1-d3 and f2-f3;

B) However, 22...f5?! (no credit) was premature due to 23.Nd3 Kf6 24.exf5 gxf5 25.f4! and White gets serious counterplay with his knight: 25...exf4 (25...e4 26.Ne5) 26.Nxf4.

23.Nd3?!

Natural, but quite inaccurate. White should have kept the d-file open for his rook so that Black could not play ...Ba6 so easily. It was necessary to unpin with 23.Ke3 first, not fearing 23...Bh6+ 24.Kf3 f5 because 25.Nc3 is still solid enough.

23...Ba6 24.Kf3



Black has improved the positions of his bishops, and now they silently dominate the opponent's knights. But what is the next step?
EXERCISE 21: Please suggest the best continuation for Black.

SOLUTION

24...Ke6!

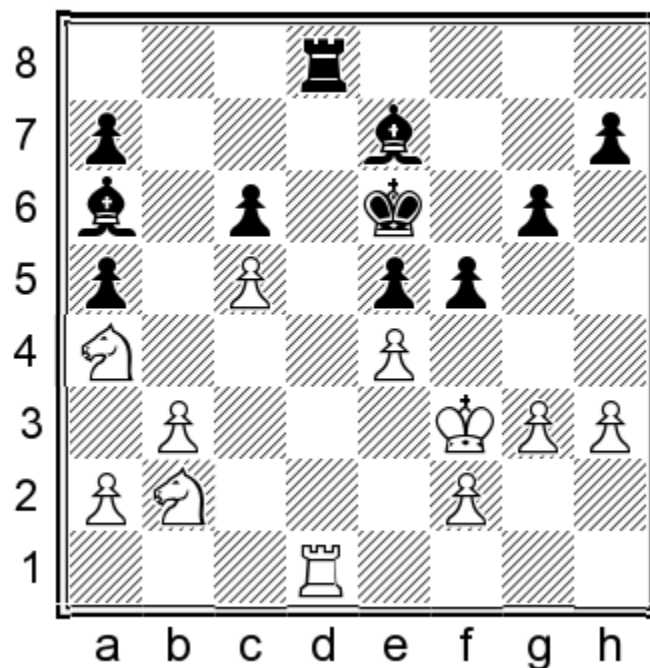
Two points. Fressinet probably planned to use this vacated square for his king before moving the bishop to c8. This regrouping allows Black to prepare the ...f5 break most efficiently. Black can achieve something similar with 24...Rd8!? 25.Ndb2 f5 (two points).

24...Be7 or any other reasonable move (one point) doesn't spoil Black's position, but there is no point in delaying pushing the f-pawn.

25.Ndb2 f5 26.Re1 Rd8 27.Rad1 Be7

Black has made huge improvements over the last seven moves. The white knights are paralyzed on the queenside, and his center is unstable because he cannot defend the e-pawn with f2-f3. Things are moving a little slower in this phase of the game, but we will soon reach another critical moment.

28.g3 Rab8 29.Rxd8 Rxd8 30.Rd1



Almagro is hoping to solve his problems by trading rooks. How should Black react to this?

EXERCISE 22: Please suggest the best continuation for Black.

SOLUTION

White overprotects his weaknesses to the best of his ability. The f2-pawn is safe for now, but it's clear that his position is extremely shaky. How can Black use this attacking momentum to inflict more damage on his opponent?

EXERCISE 23: Please suggest the best continuation for Black.

SOLUTION

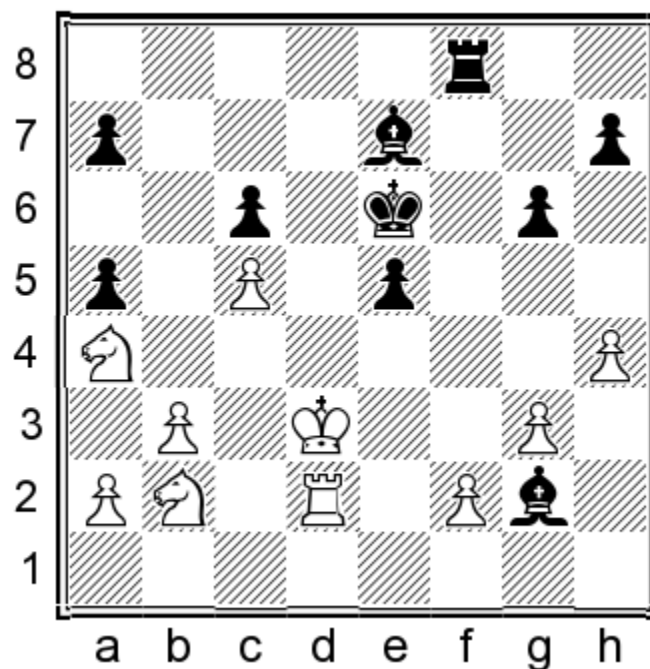
31...Bf1!

Two points. The light-squared bishop joins the party. It has come a long way from e6, winning a tempo now to force a favorable resolution of the central tension.

A) 31...fxe4+ (one point) 32.Kxe4 Bf1 looks equivalent, but it is not. White can sacrifice a pawn with 33.f3! Bxh3 and then activate the passive knight with 34.Nc4, creating some unnecessary counterplay;

B) 31...h5 or any other reasonable move (one point) still deserves partial credit since Black also retains a large advantage.

32.h4 fxe4+ 33.Kxe4 Bg2+ 34.Kd3



Black has finally managed to open the center, and now the bishops will have a field day. How can we best utilize this advantage?

EXERCISE 24: Please suggest the best continuation for Black.

SOLUTION

34...g5!

Two points. Preparing to include the dark-squared bishop in the fight for central squares. This is the best move from both the functional and the aesthetic point of view.

A) 34...e4+ (one point) is not unreasonable, but after 35.Ke2 Bf3+ 36.Kf1, Black would still need to play 36...g5! to make something happen, although under slightly worse circumstances here since White can recentralize his knight after 37.hxg5 Rf5 38.Nc3;

B) Black also dominates in the minor-piece endgame after 34...Rd8+ (one point) 35.Ke3 Rxd2 36.Kxd2 Bd5, but it remains to be seen whether it is winning or not.

35.hxg5

35.h5 Bf3 36.h6 Rf6 doesn't help.

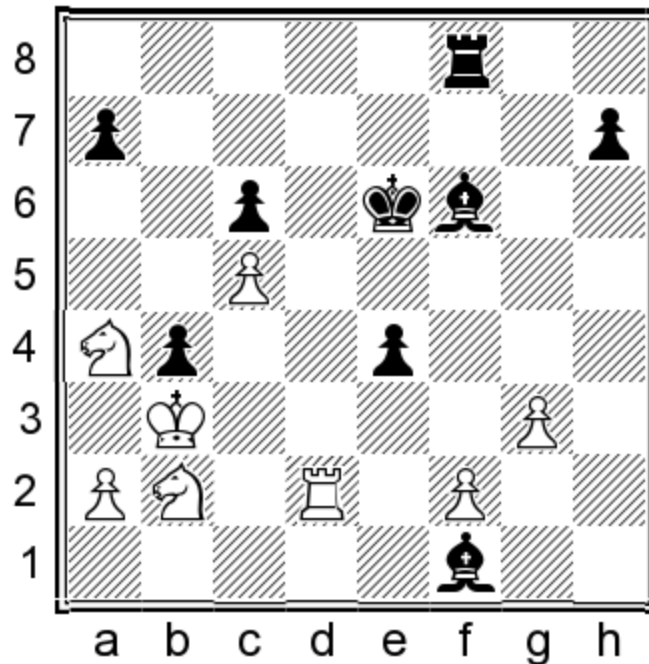
35...Bxg5 36.Rc2 e4+

Black is simply pushing the white pieces around, and it's a small miracle that there hasn't been a decisive breakthrough yet.

37.Kc4 Bf6 38.b4

White is desperate to get some space for his pieces. In case of 38.Nc3, 38...Bf1+ is almost checkmate. White has to play 39.Ne2 and then 39...Bxb2 40.Rxb2 Rxf2 gets the job done.

38...Bf1+ 39.Kb3 axb4 40.Rd2



Black can win in many ways. Fressinet's solution is the most elegant and thematic:

40...Be5! 41.Kxb4 e3! 42.fxe3 Bxg3

The material balance remains undisturbed, but White is helpless against the march of the h-pawn.

43.Nd3 h5 44.Nc3 h4 45.Ne4 Kf5 46.Ndf2 Bg2 47.Nd6+ Ke6

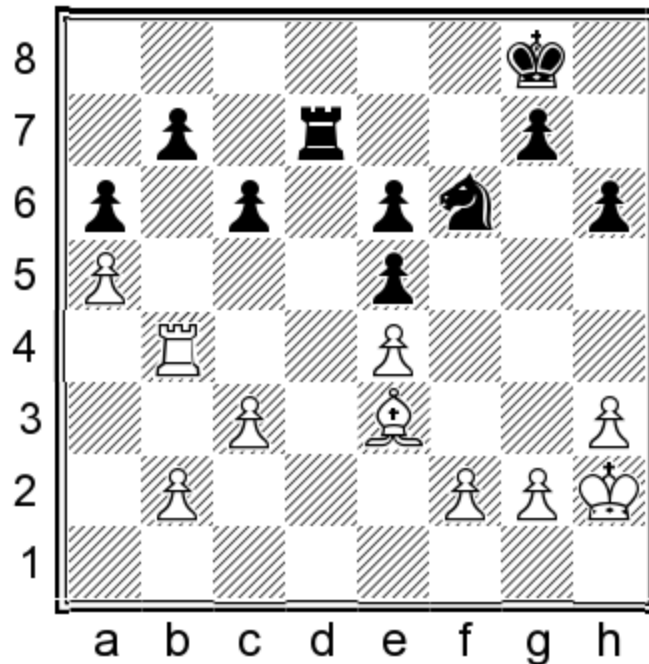
White resigned. A very instructive endgame!

Your score = /14 points

Endgame Simulation 5 Michael Adams 2751

Jon Ludvig Hammer (2628)

Sharjah 2017

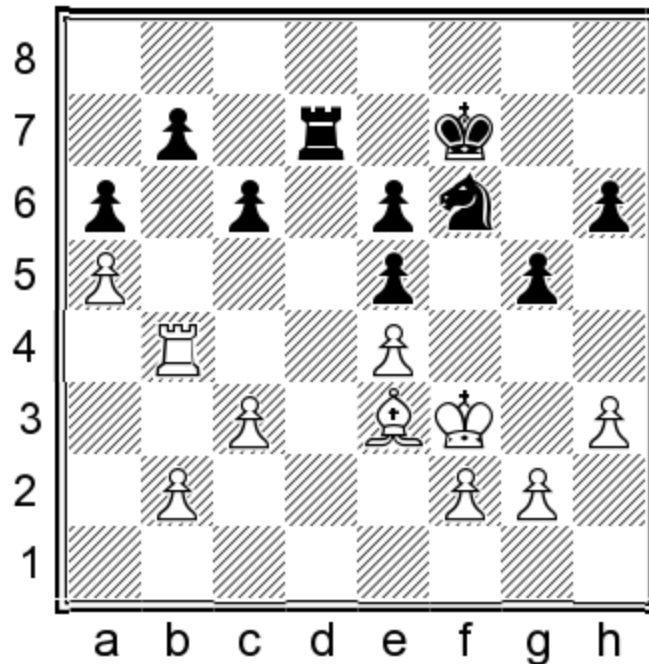


Our final endgame simulation features a vintage Michael Adams performance, where he gradually breaks his opponent's resistance with a combination of clever maneuvering and timely exploitation of his weaknesses. And, boy, does Black have weaknesses in this endgame. The b7- and e5-pawns are hopelessly weak. Black is destined for a passive defense, all his hopes hinging on the fact that the position is not simple for White to break open.

26. Kg3

Centralizing the king is the essential first step.

26...Kf7 27. Kf3 g5



Perhaps this pawn advance was not required, but understandably, Hammer wants to take space on the side of the board before White does.

EXERCISE 25: Please suggest the best continuation for White.

SOLUTION

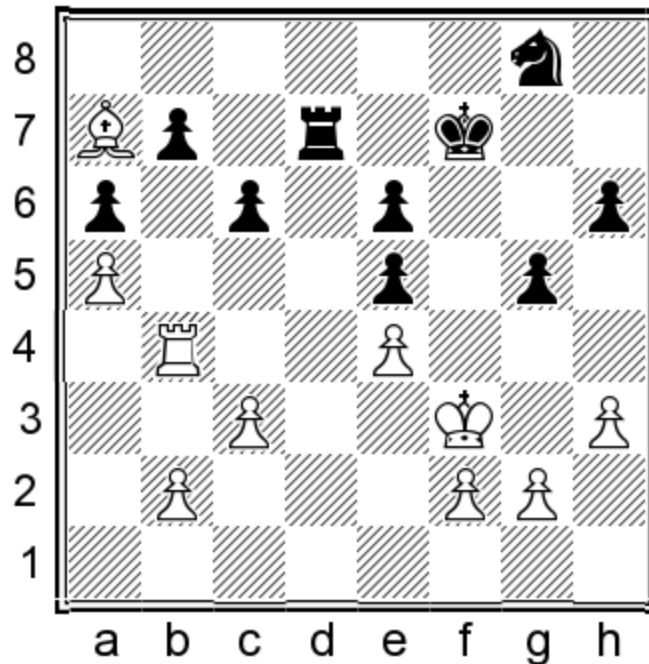
28.Ba7!

Two points. Reminding Black of his e5 weakness before he can regroup.

A) After something slower, like 28.Ke2 (one point), Black could overprotect his biggest weakness with 28...Ng8 29.f3 Ne7 30.g3 Ng6, and it wouldn't be easy for White to make progress compared to the game;

B) 28.g3 (one point) 28...Kg6 29.Ke2 h5 is also pretty solid for Black.

28...Ng8



Black clears the f6-square for the king, but this move contains a downside that White can exploit.

EXERCISE 26: Please suggest the best continuation for White.

SOLUTION

29.h4!

Two points. The g4-square is not covered now, and White should waste no time creating another weakness for Black. Pawn breaks are precious in such positions, and we need to take the chance to play them when they present themselves.

There is nothing wrong with 29.Ke2 (one point) 29...Ne7 30.Ra4, rerouting the rook to the kingside, or 29.Bb8 (one point) 29...Kf6, but these moves are less efficient than the text.

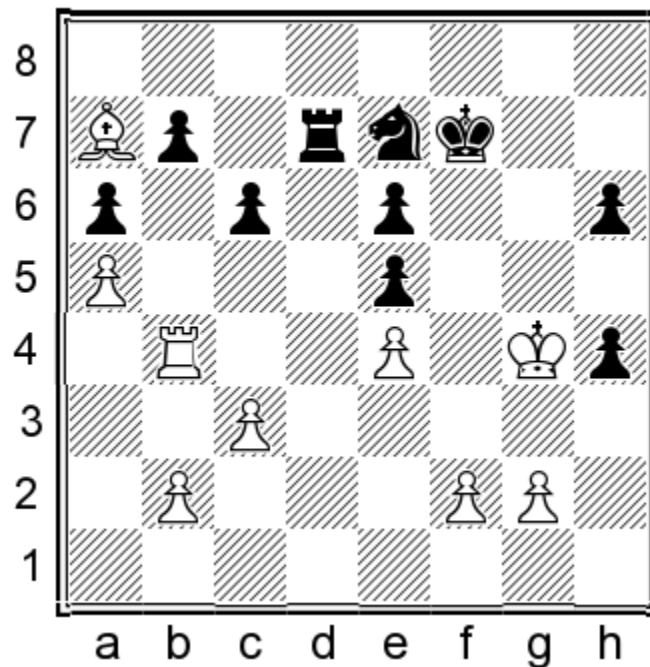
29...gxh4

Black would not mind maintaining the status quo on the kingside with 29...Kf6, but the problem is that 30.h5! fixes the weakness on h6 and takes the g6-square away from the black knight. This would be an unfortunate position for Black, who could only wait for White to carry out the f2-f4 break at the right moment.

29...K_{g6} doesn't help either in view of 30.B_{b8} K_{f6} 31.h₅!

30.K_{g4} N_{e7}?!

Black would have remained competitive only in case of 30...N_{f6}+ 31.K_{xh4} N_{h7}! (not an easy move to find!). If White plays 32.B_{b8}, Black protects his weaknesses with 32...K_{f6} 33.K_{h5} N_{g5}!, forcing White to retreat.



Hammer commits a barely perceptible inaccuracy, and it's all downhill from here.

EXERCISE 27: Please suggest the best continuation for White.

SOLUTION

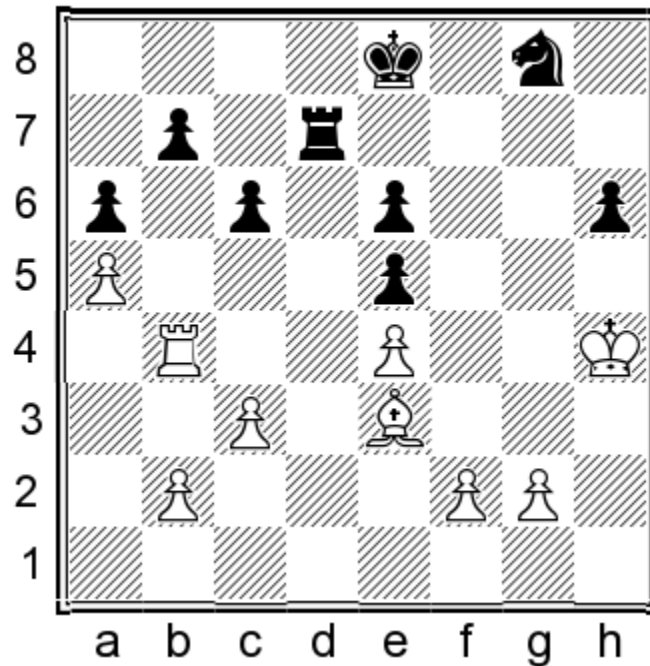
31.Be3!

Two points. Prophylaxis first! White doesn't want to allow the ...N_{e7}-g₆-f₄ maneuver. However, even more crucially, the bishop returns to e3 to target the newly created weakness on h6. The h4-pawn will not run away.

31.K_{xh4}? (no credit) allows 31...N_{g6}+ 32.K_{g3} N_{f4}, with counterplay.

31...Ng8 32.Kxh4 Ke8?!

This passive move spells trouble. 32...Kg6 was a more stubborn defense. Perhaps Hammer wanted to bring his king to c8 to relieve the rook from defending the weakling on b7. However, the monarch was needed on the kingside to protect the other two weaknesses.

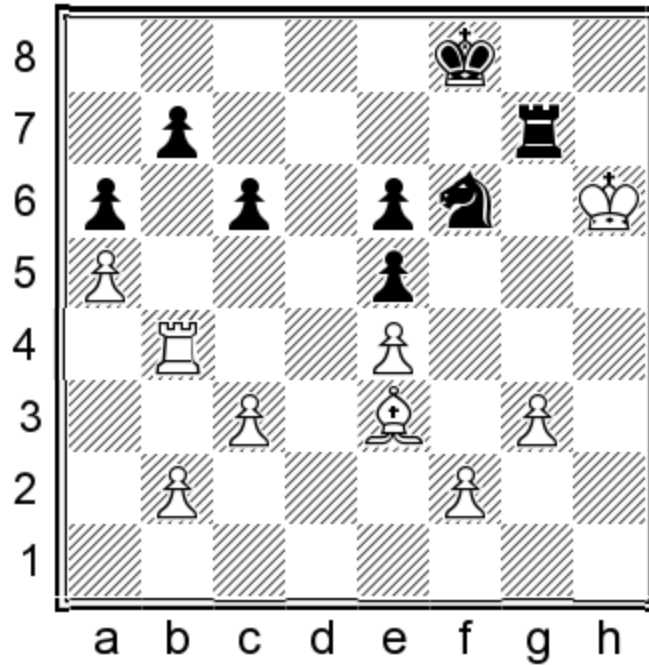


EXERCISE 28: Please suggest the best continuation for White.

SOLUTION

33.Rb3

One point. Not a big mistake, but Adams misses a direct win. He should have called Black's bluff with 33.Kh5! (two points). My best guess is that he missed a little detail in the following line: 33...Rg7 (White wins trivially in case of 33...Kf7 34.Bxh6 Nf6+ 35.Kh4 c5 36.Rc4 or 33...Nf6+ 34.Kxh6 Ng4+ 35.Kg6 Nxe3 36.fxe3) 34.g3 Nf6+ 35.Kxh6 Kf8.



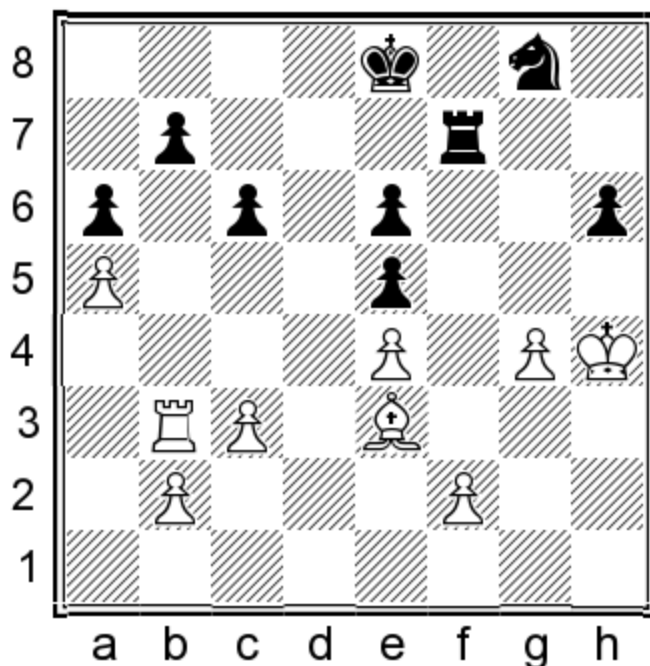
analysis diagram

The white king seems trapped, but we have 36.Bg5! and Black couldn't demonstrate his compensation since 36...Ng4+ 37.Kh5 Nxf2 runs into 38.Bh6.

33...Rg7

It was still not too late to admit the mistake with 33...Kf7 and ...Kg6, but Hammer sticks to his original plan instead.

34.g4 Rf7



White has fixed the pawn on h6 as a permanent weakness. Black now has to juggle the defense of three weaknesses (b7, e5, and h6), and this is too much for him. White can already start thinking about the final assault.

EXERCISE 29: Please suggest the best continuation for White.

SOLUTION

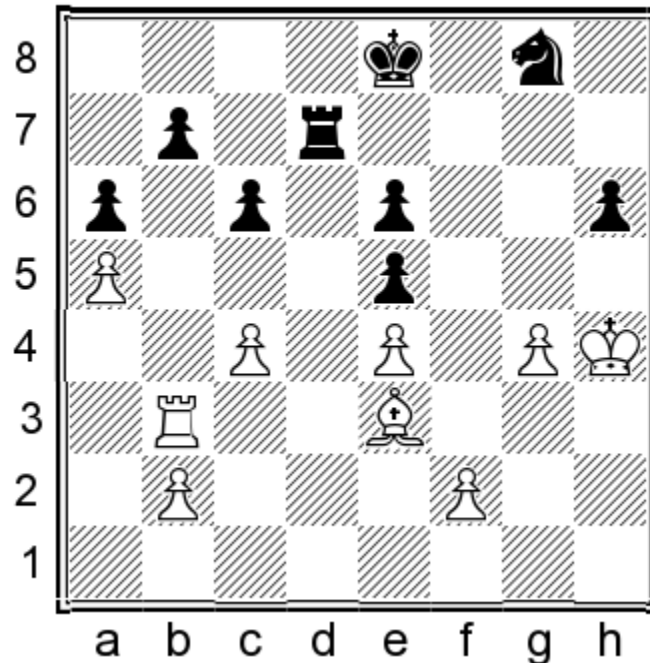
35.c4!

Two points. Adams has shown a masterclass in schematic, mini-plan-based play up to this point, and this move is yet another example of deep strategic thinking required in this type of endgame. He opens the third rank to facilitate f2-f3 and protect the e4-pawn. His rook will do a perfect job of simultaneously attacking the b7-pawn and protecting the one on f3 when the bishop clears the third rank.

A) It was possible to achieve this goal with 35.♔g3 (one point), too. However, White would prefer to have his king on h4 to threaten ♔h5, so this is an inferior option. For example, 35...Rd7 36.f3 ♔f7 and Black is still kicking;

B) In case of 35.Ba7 (one point), Black can distract the white pieces from the queenside by attacking his kingside pawns: 35...Nf6 36.Rb4 Rg7 37.f3 Rf7 38.Be3 Ng8 39.Kg3 Rd7 and, again, it's still a game.

35...Rd7



Now comes the crucial moment. Black won't have a proper defense if we play our cards right.

EXERCISE 30: Please suggest the best continuation for White.

SOLUTION

36.Ba7!

Three points. This bishop has swung back and forth from e3 and a7 throughout the endgame, which shows how important it is to 'recycle' the same ideas, depending on the opponent's defensive constellation. This strategy often keeps the defender guessing your plans, and it's easy for him to make a mistake.

A) 36.Bc5! (two points) also works, but after 36...Kf7, you would need to have found 37.Bb4! (one point) to earn full credit. Black doesn't have a good way of defending against Bc3, and the

rook endgame after 37...Ne7 (37...Nf6 38.f3 Nh7 39.Bc3 Nf8 40.Kh5) 38.Bxe7 Rxe7 39.Rd3 is utterly hopeless for him;

B) 36.f3 (one point) is also possible. However, you would still need to demonstrate that 36...Kf7 37.Ba7! (one point) is the right winning idea to earn two points in total. For example, 37...Ne7 38.Kh5 Kg7 39.Be3 (but not 39.Bb8 Ng6) 39...Ng8 and White still needs to maneuver a bit to break Black's defense, but it's not far away, either.

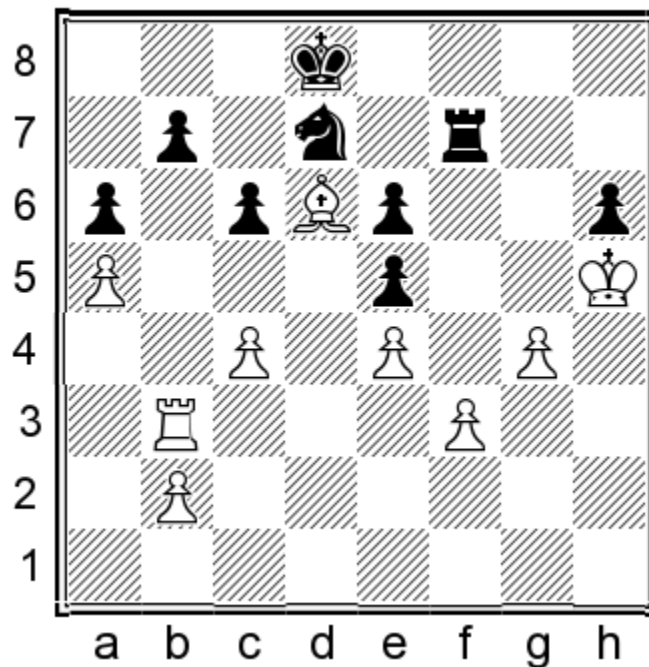
36...Nf6

36...Ne7 runs into 37.Kh5, making one wonder why Black ever moved his king away from these squares.

37.f3 Rf7 38.Bb8 Nd7

A sad necessity.

39.Bd6 Kd8 40.Kh5



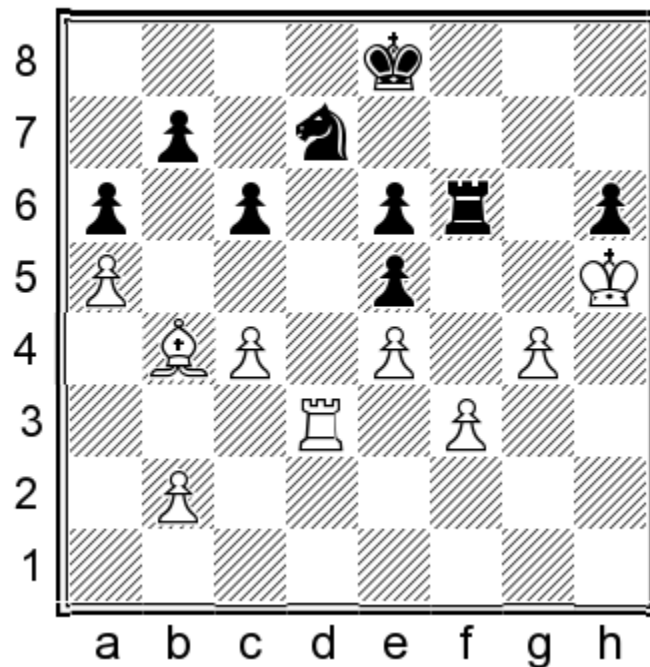
The position of the white and black pieces in the diagram tells the whole story. Adams 'flew like a butterfly and stung like a bee' in this endgame, brilliantly alternating between gradually improving

his pieces and swiftly exploiting the smallest mistakes in his opponent's defense. The rest was agony for Hammer:

40...Rf6 41.Rd3

41.Rxb7 Rxf3 42.Kxh6 also worked, but Adams is faithful to his 'zero counterplay' policy.

41...Ke8 42.Bb4



The final bishop maneuver. There is no defense for the h6-pawn.

42...c5 43.Bd2 Rf7 44.Bxh6 Nf6+ 45.Kg6 Ng8 46.Bg5

Finally, Black is completely dominated, so he resigned – simply brilliant endgame technique by Adams.

Your score = /13 points

Total score for Endgame Simulation exercises = /64 points

Total scores and grading scale

1) Total score for Endgame Simulation section = /64 points

The grading scale for the Endgame Simulation section:

Your total score Corresponding Elo rating

0-31 pts	Below 2100
32-44 pts	2100-2250
45-56 pts	2250-2400
57-64 pts	2400+

2) Total points for Endgame Analysis exercises = /80 points
 Total extra credit points for Endgame Analysis exercises = extra credit

Total score for Endgame Analysis section = points

The grading scale for the Endgame Analysis section:

Your total score Corresponding Elo rating

0-39 pts	Below 2100
40-55 pts	2100-2250
56-71 pts	2250-2400
72 or more pts	2400+

3) Total score for Chapter 5 = /144 points

The grading scale for Chapter 5:

Your total score Corresponding Elo rating

0-71 pts	Below 2100
72-100 pts	2100-2250
101-129 pts	2250-2400
130 or more pts	2400+