

Dan Heisman

# Is Your Move Safe?



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*This book is dedicated to my parents, Dr. Harvey L. Heisman and Mildred Heisman, who encouraged my sister Eileen and me in whatever we wanted to do, and gave us great values to base our decisions. Eileen is now President of the National Philanthropic Trust and raises large donations to help those in need. I teach and write chess books. I will leave it to the reader to determine whether both of us succeeded.*



# Contents

Acknowledgements	7
Symbols	8
Introduction	9
Chapter 1: Basic Safety Issues	25
<i>Answers for Chapter 1</i>	33
Chapter 2: Openings	51
<i>Answers for Chapter 2</i>	73
Chapter 3: Middlegame	111
<i>Answers for Chapter 3</i>	138
Chapter 4: Endgame	184
<i>Answers for Chapter 4</i>	200
Chapter 5: How Many Safe Moves?	230
<i>Answers for Chapter 5</i>	244
Bibliography	269



# Acknowledgements

I would like to acknowledge my students for two reasons. First, they provided much of the material in the book, which is good because that material is therefore both original and instructive. Secondly, working on my students' main problems made me aware of the need for this book. If one of the most frequent errors they made was making unsafe moves, then a book that helps them concentrate on consistently recognizing and discarding such moves must also be greatly helpful to the typical chess player.

As always, I would like to thank Mongoose Press and its editor, Jorge Amador. Every author should be so lucky to be allowed to work closely with the editor, as we do, to minimize the chances of unhappy "surprises" when the book gets published.

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Finally, I would like to thank my wife, Shelly. She knows keeping busy is a key to good physical and mental health, and encourages me to create books like *Is Your Move Safe?*. Without her support, not only this book, but any other projects I have as I move past the outer edge of "middle age," would have been less likely.

# Symbols

+	Check
±	White is slightly better
∓	Black is slightly better
±	White is clearly better
∓	Black is clearly better
+−	White has a winning advantage
−+	Black has a winning advantage
#	Checkmate
=	The position is equal
∞	The position is unclear
!	A good move
!!	A brilliant move
!?	An interesting move
?!	A dubious move
?	A weak move
??	A blunder
□	A forced (only) move
1-0	White wins
0-1	Black wins
1/2-1/2	Draw



# Introduction

What does “safety” mean in relation to chess moves?

Sometimes when I ask lower-rated students why they did not trade queens or give up a queen for two rooks, they answer “*Because I did not want to lose my queen.*”

I think their confusion as to what constitutes the loss of a queen can be traced to the two connotations to the meaning of *safe* outside the chess world:

Suppose I give a friend two dollars and tell him, “*Don’t lose it!*” The friend then goes to the park, eventually gets hungry, and buys a tutti-frutti ice cream for the two dollars. He eats it and is satisfied. Did he lose the two dollars? Well, it is no longer in his possession but he didn’t lose it – he traded it, with fair value, for one of the best purposes he could: nourishment. If I had given him a *million* dollars and he foolishly traded it for a dish of ice cream we would think differently. But in the two-dollar case we should think of that money as not being lost – the exchange was a safe “move.”

Our second meaning of “safety” is used for living beings. Suppose a friend is in a war zone and is tragically killed by a sniper. In turn, the sniper is spotted and also killed, but it’s too late: nothing can bring back your friend. I think everyone would agree that the sniper’s fate has no bearing on whether your friend is safe – he is not. There is no trading of equal value where life is concerned.

So the word *safe* can take on a different meaning when discussing material objects versus life. In the former, we are familiar with making safe, equal, transactions, but we rarely think that way in terms of loss of human life.

In chess, we should use the material definition: a piece is “safe” if it remains on the board or can be traded for equal or better value. But defining a *move*, as opposed to just a piece, as “safe” has to be

## Is Your Move Safe?

extended even further – it can't allow the opponent to forcibly win material or checkmate anywhere on the board.

So in our earlier example, the lower-rated students would *not* have lost their queen by trading it for an opponent's queen. They are (mis-)using safety in the “living” sense: that their queen was lost just as the friend had been shot by the sniper.

This leads to our “chess” definition:

**Safe:** A move is *safe* if, in response, the opponent has no forcing sequence which wins material or checkmates.

Let's add another helpful definition:

**Candidate move:** A move that is being considered as a possible one to be played. A candidate move is often referred to just as a “candidate.”

If possible, a candidate does something desirable like starting or preventing a tactic, or making the moving players' pieces better. A candidate might make some of the pieces more mobile, or prevent the opponent from making his pieces better.

The first thing I usually do after I identify a candidate is to ask “*Is it safe?*”

When my *opponent* moves, the first two things I ask are:

- “*Is it safe?*”, and
- “*What are all the things that move does?*”

As I have written several times, unless your opponents are beginners, *you will have many more opportunities to use your tactical skill to prevent making unsafe moves than you will to win material.* The reason is simple: each time you consider a move, you could have several reasonable strategic candidates that must be discarded as not safe.

However, your opponents are doing the same thing – discarding unsafe candidates. When they are successful, as strong players are a great majority of the time, they “filter out” your opportunities to win material on your reply.

Therefore, in a game you usually have to use your tactical skill to discard dozens of unsafe but reasonable moves. However, your opponent may give you very few opportunities to win material (although you should not miss any easy ones!).

This naturally creates a discrepancy toward *using tactics mostly to discard your own unsafe moves*. Despite this, in the great majority of tactical books almost every problem asks the reader to win material or force a draw or checkmate; there are few puzzle books about how to avoid losing material.

It only takes one bad move to lose a game, so identifying unsafe candidate moves (to likely discard those candidates) in addition to taking advantage of your opponent’s unsafe moves, is as important as any other chess skill.

The fact that tactics are primarily used to rule out candidates – and this is one of the very few books that addresses that issue – should make *Is Your Move Safe?* a valuable and unique addition to your chess library.

Unless your opponents are beginners, you will have many more opportunities to use your tactical skill to prevent making unsafe moves than you will to win material.

This book uses instructive puzzles and comprehensive answers to help the reader learn two things: 1) how to analyze if a candidate is safe and, just as importantly, 2) to consider multiple candidates and consistently ask if all those moves are safe. The difference between this book and a regular tactics book can be summarized as follows:

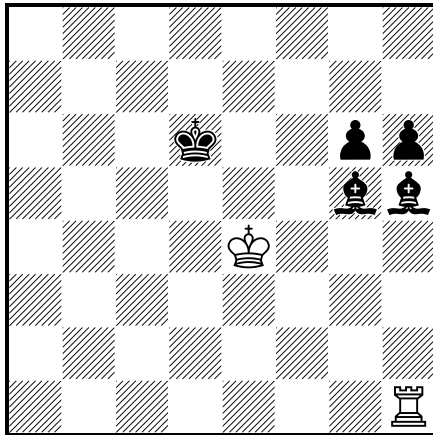
## Is Your Move Safe?

- In a tactics book the reader is given positions with a specific requirement to find an existing tactic, e.g. “White to play and win.”
- In this book you are asked that *if* you play a given candidate, does the opponent have such a winning tactic on the next move? In that sense the problems in this book are more practical than a tactics book: in a real game, you should always be asking if moves (for both sides) are safe, while you are never told that the opponent’s previous move was not safe (the condition for knowing there is a tactic to find).

### Which Moves Are Safe Isn’t Always So Clear

The definition of “safe” near the start of the Introduction seems simple enough and does apply to most cases. However, this definition is insufficient for all of the problems we will present. Take the following counter-example:

#### White to play



White is behind in material and with “normal” play would lose, but he does have the saving pseudo-sacrifice 1. ♖xh5! gxh5 2. ♔f3, when he easily draws by running his king into the h1 corner. Black cannot win with only rook pawns of the “wrong” color of the remaining bishop.

So in the deep endgame it is not always the material balance which matters, but whether one side can force a win. In this case Black cannot win after White gives up material with 1.♖xh5!.

In a very real sense the move 1.♖xh5!, which *loses* material, is the only safe move. So, for these situations, our definition is inadequate; we need to augment it. For *deep endgames*, I would suggest:

*In the deep endgame, a move is safe if it achieves the desired goal of drawing or winning a game.* If a player cannot win but can achieve a draw, moves that do this are safe. If a player is trying to win and a move achieves this, then the move is safe. If the move throws away the win or draw, then it is not safe.

This is very similar to GM John Nunn’s modified meaning of “!” for his endgame books. In those books he uses “!” if it is the only move to achieve the goal.

Suppose we extend this endgame idea to the entire game. Then, in that sense, the move that solves each “Play and win” problem in any tactics book, assuming there is only one correct answer, is the only “safe” move. Thus any tactics book, assuming it has unique answers to each problem, could be considered a special case of finding the only safe move, the one that preserves the win in a winning position.

Using this endgame definition, White’s 1.♖xh5 in the previous diagram, which loses material, is now considered safe.

In the deep endgame, a move is safe if it achieves the desired goal of drawing or winning a game.

Let’s extend this idea of sacrifice:

When you sacrifice, you intentionally give up material to get some other type(s) of compensation, such as superior development, more coordinated forces, exposed enemy king, superior pawn structure, or almost any other advantage you can name.

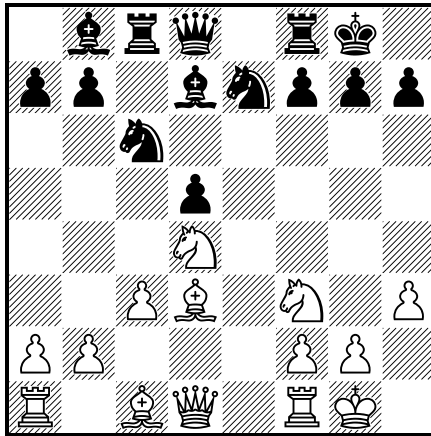
## Is Your Move Safe?

If the sacrifice yields immediate results with no risk, then it is a *pseudo-sacrifice*, such as 1. ♖xh5 above. If the compensation is more unclear and long-term, it is a *real sacrifice*, as Rudolf Spielmann explained it in his book *The Art of the Sacrifice*.

If a player in an otherwise slightly inferior or equal position intentionally and speculatively gives up material for an unclear position, we can consider that move safe. If he intentionally gives up material temporarily to forcibly gain back even more material or checkmate, that is even more clearly safe.

In the following position, is the move 1. ♗xh7+ safe?

### White to play



After 1. ♗xh7+ ♔xh7 2. ♘g5+ ♔g6 3. ♕d3+ f5, White has a dangerous attack, but Black can defend. So 1. ♗xh7+ is a speculative sacrifice.

However, sometimes weak (and even strong!) players intentionally sacrifice material for clearly inadequate compensation. We would have to say that such a move is not safe, no matter what the player's evaluation was. That's not to say that improving players should not attempt to make such sacrifices – they should, at the very least to learn something. However, we need to label those moves “unsafe,” no matter how well-intentioned the sacrifice.

Is there a gray area between not enough compensation and enough for a sacrifice? Of course! In these cases the move would lie on the borderline between safe and not-safe, and we could label these sacrifices as speculative.

It is important to keep in mind that many safe moves are not best, or sometimes even close to best. For example, suppose a move messes up your pawn structure for no compensation. It may be possible that in 30 or 40 more moves, the opponent could take advantage of that inferior pawn structure, win material, and then win the game. But if there are no immediate forced wins of material after the move, then for the purposes of this book that move is safe, even if it is not desirable.

### **Safety Dominates Strategy**

Many weaker players place strategic desirability above safety. It may be that considering strategy is more fun for some than analyzing safety. However, if a move is not safe, unless you are willing to sacrifice, that candidate move likely should be discarded. Safety usually dominates strategy: if your pieces are not safe, then they can't do anything once off the board. This is illustrated by the following story:

Several years ago I was reviewing a game with a student. I don't remember the exact position but I remember the situation. He was playing Black, was ahead a piece, but his king was still in the center. Castling queenside was possible, but his queen was still on d8. So I assessed the situation and told him,

*“You are ahead a piece and should win easily if you get your king into safety. You need to castle queenside, so you have to move your queen out of the way. The only reasonable square is e7. However, I can see that if you play 1... ♖e7, your opponent has 2. ♗b5+ winning the bishop on a5. Therefore, the correct idea is to play something like 1... ♗b6 first to put the bishop on a safe square, then 2... ♖e7 followed by 3... 0-0-0 and you should win easily.”*

Upon hearing that, my student replied with something indicative of the way many other students have played:

*“Well, Dan, I went through all the same logic exactly the same way you did with one exception. When I saw I had to move the queen to e7, I did not check to see if that move was safe, so I played 1...♖e7 first, my opponent checked, I lost the bishop, and I lost the game.”*

This is not an isolated case and that student was not a beginner.

I had another student who chose to lose a pawn rather than suffer an isolated pawn(!). While occasionally there are positions where it is better to lose material than to have a positional weakness, those are certainly a minority. Until you are a very good player and can make those infrequent distinctions correctly with a high percentage of accuracy, it's very likely you should just put safety first.

I find the following principle helpful: *Strategy is the tiebreak of equally safe moves.*

Get in the habit of first checking if a candidate is safe so you don't make the same mistake the student did when he played 1...♖e7?.

Strategy will initially help you choose your candidate moves, but safety usually determines if they remain candidates. I call this concept *Initial and Final Candidate Moves*. Initial candidates are those that do something (offensive or defensive). Final candidates are subsets of the initial candidates that either pass the safety test or are willing sacrifices.

Strategy is the tiebreak of equally safe moves.

## **Determining if a Move Is Safe**

Over the course of providing private lessons to about 1,000 players, I have given many, many “Is it safe?” problems. Some you will find in this book.



In actual play, students often do not even ask if a candidate is safe, which certainly makes it difficult to determine if it is. Therefore, *the first step in finding out if a move is safe is the willingness to consistently check for its safety!*

I am not going to do an extensive discourse on how to determine move safety here in the Introduction. To some extent, that's what the remainder of this book, as well as every tactics book ever written, are partially trying to do. But I should provide an overview of some of the issues involved in finding piece safety. This I will do below and continue through some initial problems in Chapter 1, "Basic Safety Issues."

Another reason weaker players often do not find that a move is safe is that they depend too much on their pattern recognition, especially defensively, when determining if their own candidate is safe. From this aspect, the three ways one can determine whether a move is safe are:

- Purely pattern recognition – this almost exclusively occurs in the early opening or late endgame when the exact pattern studied appears on the board,
- A mixture of pattern recognition and analysis; this is the most common case. A position might have elements closely or loosely resembling those that were studied before. Once recognition is made, careful analysis is required to determine, *"Is the answer to this move's safety the same as the similar position that I studied previously?"*
- Pure analysis – there is no similar pattern studied previously, or at least none that is triggered by examining the current position. In this case, careful analysis is required to determine if the move is safe. *You can't assume a move is safe just because you don't immediately recognize any danger.*

You cannot always tell which of the three is required. For example, you may think that your opponent has fallen into a book opening trap (pure pattern recognition) and that his move is not

safe. However, unless the position is identical to the one you studied, it may be that the trap does not work if even one piece is in a slightly different position. Therefore, when in doubt, never rely purely on pattern recognition.

Pattern recognition study (tactics, openings, endgames) is necessary and extremely helpful; however, it is usually not sufficient. Even in patterns that seem identical to something studied previously, it makes sense to ask, “*Does the solution I remember really work in this position?*” and augment with double-checking analysis. This takes time, which is one reason those who play faster chess on the internet often have trouble developing the skills and habits which would help them become strong over-the-board players in slower time controls.

When you are doing a puzzle, you are told if the previous move was not safe, i.e. “White to play and win.” In a game, you have to determine the safety situation on each move – and for each candidate move.

The keys to seeing that a move might not be safe are certain “danger” patterns in a position such as loose pieces, a weak back rank, or an exploitable geometric pattern like two pieces lined up for a pin or skewer. I call these the *Seeds of Tactical Destruction*, but other authors have different names.

No matter what you call these seeds, a position must possess them if there is to be a tactic. World Champion Steinitz correctly postulated that you need something wrong with the opponent’s position to win material; you can’t make something out of nothing just by your brilliance (although if the safety issue is obscure enough, it may require great brilliance to discover it!).

Contrarily, if those seeds do exist, that does not mean there has to be a tactic. In my book *Back to Basics: Tactics*, I included a chapter of puzzles called, “Is There a Tactic?”, meaning that the side to move may or may not have a tactic, even though seeds existed in every position.

If a move is not safe, it will require a forcing move in response to win the material or mate. These forcing moves are the responding player's checks, captures, and threats.

For example, when you are determining if a candidate move is safe, you have to consider the opponent's checks, captures, and threats to see if one of these can force the win of material or mate. A threat that can be met is *not* a tactic. Similarly, to determine if your *opponent's* move is not safe, you have to consider your own checks, captures, and threats to see if one of them can forcibly win material or mate.

Unless a position is unclear, you usually have to analyze to *quiescence* before you can come to a conclusion and evaluate. A "quiescent" position is one where further checks, captures, and threats either do not exist, or further analysis of them would not change the evaluation of the position.

As an absurd example, you would not analyze that you could capture your opponent's queen, stop analyzing, and conclude you are ahead a queen if the opponent had a simple recapture of your queen!

As a more practical example, suppose you analyze that you lose your queen but don't get sufficient compensation or mate in return. At that point, you can stop your analysis and reject that candidate. You can do so even if analyzing further forcing moves after that point might reveal that you could eventually win, say, a pawn.

In most positions, you don't have to know how many moves are safe. But you *do* have to determine if each of your candidate moves is safe (and if not, are you willing to sacrifice?).

In certain defensive situations, it is efficient to ask, "*How many safe moves do I have?*" before trying to find the best one. But in most "normal" situations once you have determined that your candidate moves are safe, it is a waste of time to know what other safe moves you have.

Determining if a candidate move is safe is necessary, but it is not sufficient for determining which move you want to play. The move actually played is often the best one you can find in a reasonable amount of time. Moreover, in many non-critical positions, especially dead-drawn positions, any safe move might do.

Determining whether a move is not safe may require skills and knowledge that range from simple pattern recognition to world-class analysis. Partly for this reason, I could not include all easy problems nor all extremely difficult ones. The problems will range from relatively trivial to quite difficult, but most are fairly challenging. I hope that almost all the problems will also prove thought-provoking and instructive.

## Value of the Pieces

For purposes of “Is it safe?” evaluation, we have to determine a baseline of what constitutes losing material. Beginners – and some intermediates – often use the popular 1-3-3-5-9 valuation system (which I call the “Reinfeld” system in honor of the prolific 20<sup>th</sup> century American author Fred Reinfeld) for average piece values.

We shall use a more accurate value system that was determined via computer analysis by GM Larry Kaufman, most recently noted in his book *The Kaufman Repertoire for Black & White* (White’s p. 12):

- Pawn = 1
- Knight = 3.5
- Bishop = 3.5
- Rook = 5.25
- Queen = 10
- Bonus of 0.5 pawns for the *bishop pair* (one side has two bishops and the other does not)

Using GM Kaufman’s system, if the difference in the total value between each side’s traded pieces comes out to a quarter-pawn or less, that would usually be considered a fair trade. More than

a quarter pawn would require some other type of compensation, else that trade would be winning material for one side and losing it for the other.

## Structure of the Book

When I first conceived this book, I thought that I would present positions with one or more candidate moves and ask if these were safe. After an initial chapter presenting some problems illustrating and discussing some basic issues about safety, I would divide the book into chapters corresponding to which part of the game these positions occurred: opening, middlegame, or endgame.

However, it turned out there is another type of safety issue which deserved its own chapter. This often arises after the opponent makes a serious threat, or check, on the previous move and you have to determine how many safe moves are in the position. (One of the things I am proud to be known for is my principle, “*You can’t play what you don’t see!*”) So I created a new chapter called, “How Many Safe Moves?”

Thus the five chapters are:

1. Basic Safety Issues
2. Openings
3. Middlegame
4. Endgame
5. How Many Safe Moves?

What about purposely unsafe moves? These, of course, are sacrifices, and many books have been written about sacrifices, so that’s a little outside the scope of this work. Still, any book with many practical positions and questions about move safety cannot hope to escape the idea of sacrificial moves completely. However, the main scope of the book will not be to address purposeful sacrifices, but rather to develop the ability to determine if moves are safe.

## Is Your Move Safe?

For the first four chapters, the answer to the question for each candidate move, “Is it safe?”, could be either

- Safe;
- Not safe; or occasionally
- Speculative/sacrificial

When a puzzle suggests multiple candidate moves and thus requires multiple answers, it may be that none of the moves, or all of them, or any number in-between are safe.

In “How Many Safe Moves?” the answer, of course, will be the number of safe moves in the position. However, the reader should not just give the number of safe moves, but attempt to identify which moves are safe.

Except for sets (multiple problems linked by a common theme/game), the order of problems is roughly as follows:

- ECO code for *The Opening* (Chapter 2),
- Level of difficulty – easy to hard – for *The Middlegame* (Chapter 3) and for *How Many Safe Moves?* (Chapter 5), and
- Type of endgame (multi-piece through king-and-pawn) for *The Endgame* (Chapter 4).

Answers can be found at the end of each chapter.

For the most part, the problems in *Is Your Move Safe?* are derived from recent student or grandmaster games, my old games, and openings and endgames that raise interesting “is it safe?” questions.

With a few instructive exceptions, I have tried to minimize addressing positions that were examined in my other books. There is a minor overlap in De Groot (think out loud) subject matter from another of my books, *The Improving Chess Thinker*. And there is a certain “mirror” effect from *Looking For Trouble*, which deals with

opponent's threats from the *previous* move, versus *Is Your Move Safe?*, which addresses the issue of whether *your* candidate move is safe. This mirroring of safety issues resulted in a small overlap between the two books, especially for a couple of theoretical end-game problems. You can probably consider *Is Your Move Safe?* and *Looking for Trouble* as companion puzzle books. In all cases, the problems are examined here from a different "is the move safe?" angle so the material is completely new.

*Is Your Move Safe?* does have another aspect in common with *Looking for Trouble*: the problems range from pretty easy to very difficult, so the book is not intended for one small, focused level of reader. My best guess is it would be helpful for most players in the wide range 1100-2400(!). So this is *not* a book for beginners. While a few of the problems are not that difficult, many, if not most, would challenge tournament players of almost any level.

The puzzle positions and answers were checked by a strong chess engine. At the time of this writing I am using *Stockfish 6* (rated over 3200). When I write "*Best is...*" or "*White should play move X...*", that is not my opinion; it is the move generated or checked via the engine.

It should be clear from the above that *this is not a book of entirely black and white answers*, like a tactics puzzle book. GM John Nunn once wrote that a good tactics problem should not have multiple answers. For example, you should not be able to find a winning line and have the author imply that your answer is wrong because he doesn't mention your line and his answer also wins. Dr. Nunn has a great point.

But in this book, as in practice, safety is often an uncertain issue. A move can be safe, but not very desirable. Or a move might not be safe, but it could still be playable, such as in an endgame where a pawn deficit might not be enough to lose. There could be no safe moves or multiple safe moves, just like in a game.

For tactics puzzle books, Dr. Nunn is correct: all the answers should be clear and correct. Such problems and answers facilitate

learning and help ensure you have solved the puzzle. However, positions that arise in games are often not like that, and studying a “safety” book that includes the gray areas can be very helpful, too.

One of the concerns an author needs to address in creating a puzzle book is, “how much detail to place in the answers?” It is impossible to give all of the reasonable lines for every answer. Even if you could cover all the reasonable first-move replies, that doesn’t mean there aren’t many additional replies you could show for moves further down those lines. In the answers in this book, I have tried to provide the engine’s top line, the most dangerous line, and/or the line that most humans would try. Of course, this requires some judgment, and each reader’s judgment might be different than mine. In any case, keep in mind that I did attempt to balance the scales, so if you wonder why your answer is not addressed, it may likely have been considered, but rejected as “too much.” When in doubt, consult your local engine as to the validity of the line you had in mind.

To address the goals and concerns above, the answers are rather extensive and include quite a bit of instructive discussion (including helpful principles) in addition to the critical lines of analysis.

In conclusion, if you are looking for a book where the answers are all clear and indisputable, this is not it! But if you are looking for a practical book where you can learn quite a bit about the most important issue in determining the value of candidate moves – piece safety – you have come to the right place!



# Chapter 1



## Basic Safety Issues

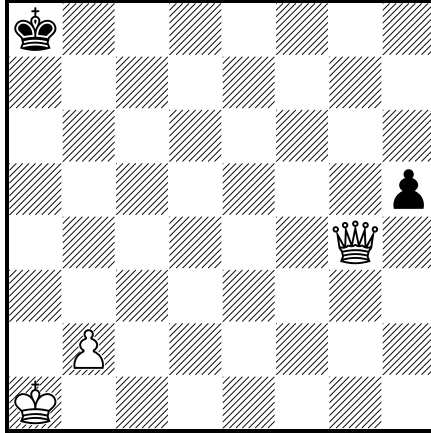
This chapter contains some relatively easy problems that illustrate basic safety points. The problems have been picked primarily from those I give my students in early lessons to demonstrate various aspects of determining the safety of candidate moves.

Once these basic issues are understood, they will be used to solve more complicated safety questions that arise during practical play. It always pays to understand – and to master – not only the most commonly occurring positions and themes, but also the most commonly occurring principles.

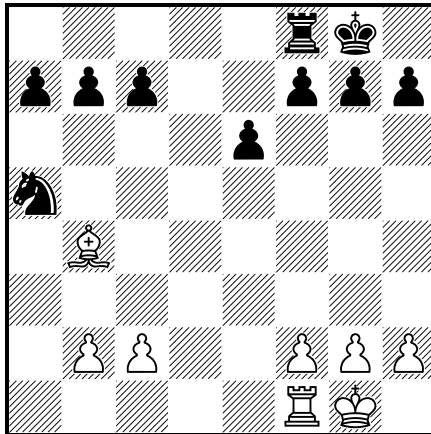
Along the way, we will be introducing key concepts that belong in most “Is it safe?” thought processes that players should use for each candidate move, where appropriate.

As noted in the Introduction, answers can be found at the end of each chapter.

**1-1**  
**White to play:**  
Is 1.b4 safe?



**1-2**  
**Black to play:**  
Which of the following are safe?  
a) 1...♖c4   b) 1...♖c6   c) 1...b6   d) 1...♞d8

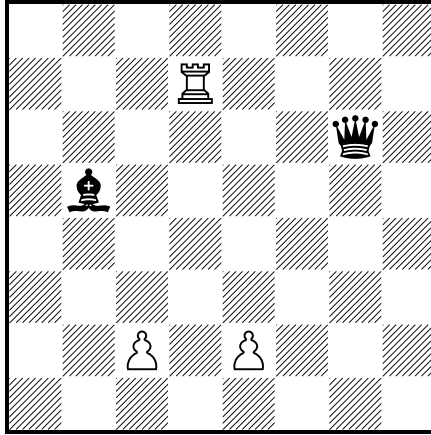


**1-3**

(kings intentionally removed)

**White to play:**

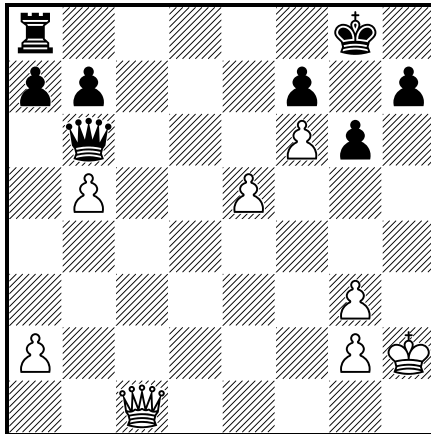
Is 1.♖d3 safe?



**1-4**

**Black to play:**

Is 1...♕xb5 safe?



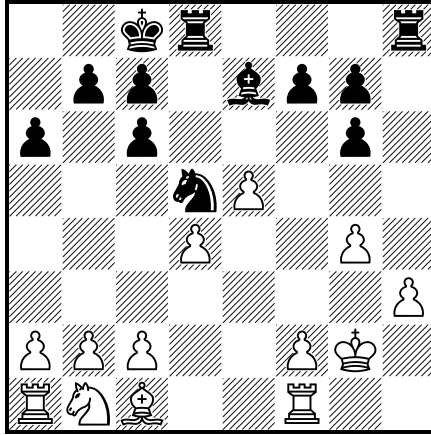
Chapter 1

1-5

White to play:

Which of the following are safe?

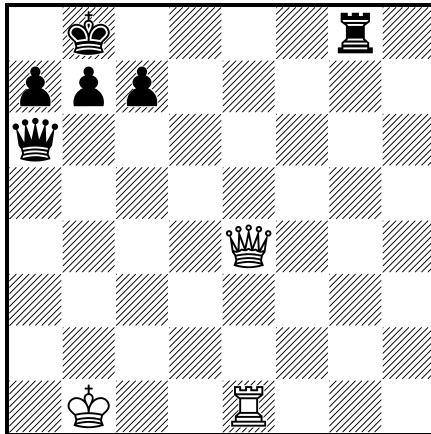
- a) 1. ♔e3   b) 1. ♖c3   c) 1. c4



1-6

White to play:

Is 1. ♕e8+ safe?

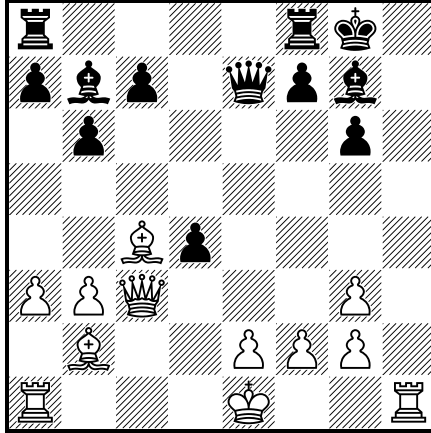


Basic Safety Issues

1-7

**White to play:**

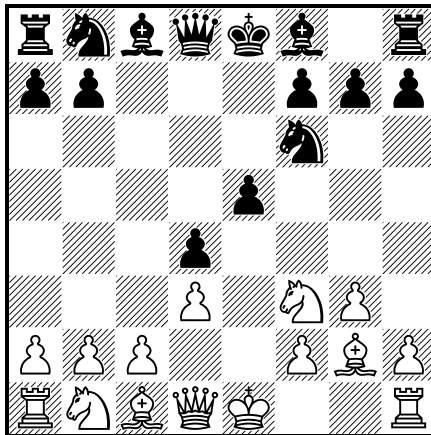
Is 1. ♖xd4 safe?



1-8

**White to play:**

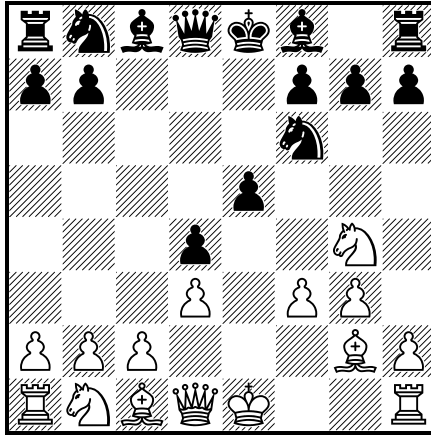
Is 1. ♘xe5 safe?



**1-9**

**White to play:**

Is 1.  $\text{Nxe5}$  safe?

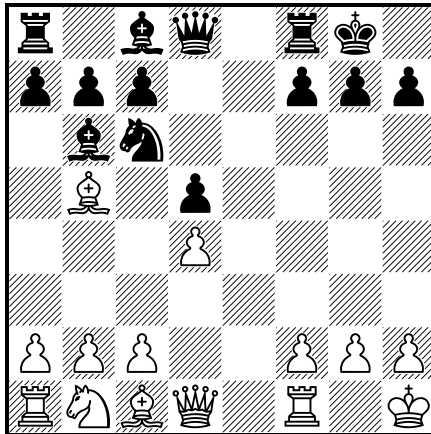


**1-10**

**Black to play:**

Which of the following are safe?

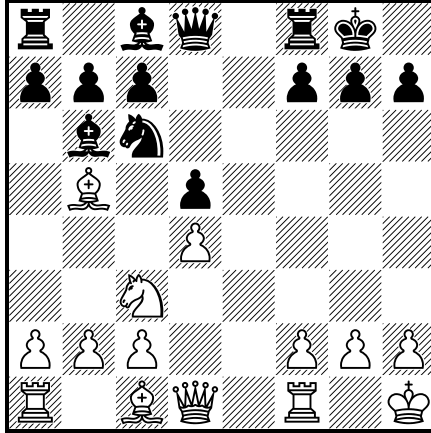
- a) 1...  $\text{Nxd4}$     b) 1...  $\text{Qxd4}$



**1-11**

**Black to play:**

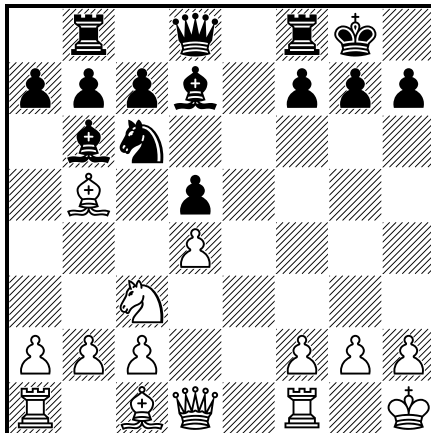
Is 1...♗xd4 safe?



**1-12**

**Black to play:**

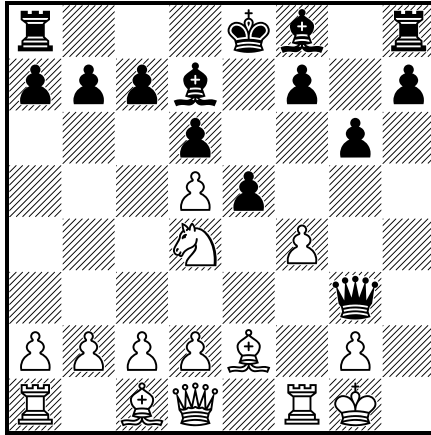
Is 1...♗xd4 safe?



**1-13**

**Black to play:**

Is 1...♗h3 safe?

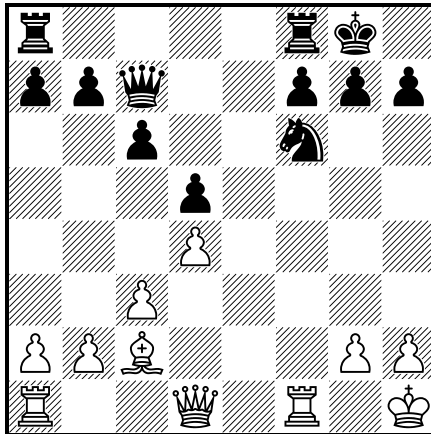


**1-14**

**White to play:**

Which of the following are safe?

- a) 1.a3   b) 1.♖d3   c) 1.♞xf6

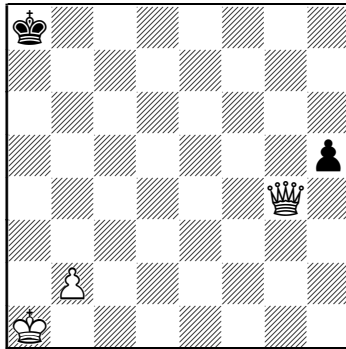




# Answers for Chapter 1

## Answer 1-1

**White to play:** Is 1.b4 safe?



No, of course 1.b4 is not safe because White would lose his queen to 1...hxg4. But the more important question is, “*Why is this simple problem in the book?*” The answer to that question provides one insight as to why many lower-rated players have problems with safety issues.

When I give a more complicated, but similar, position to a lower-rated student and ask if the move is safe, they sometimes get it incorrect by stating that the move was safe. When they explain why they think the move was safe, they often state, “*Because the piece (the one that moved) is not attacked*” or “*the piece is adequately guarded.*” This is a very error-prone way of considering safety because, while it is *necessary* for the moved piece to be safe, it is hardly *sufficient* since it is necessary for all the other pieces to be safe as well.

When you ask if a move is safe, you are really asking, “*Is the **position** that the move would create safe?*” – which, of course, includes much more than just the piece that moved.

So every time a student answers, “*Because the move piece is not attacked*” or “*Because the moved piece is guarded as many times as it is attacked,*” I show this problem. Everyone gets this problem correct, and then I say,

“OK, but you have to apply what you learned from this simple example to all situations. You can’t just look at the square where the moving piece lands and determine if the piece is safe on that square. That is necessary, but hardly sufficient. Remember the queen example, and make sure that all your pieces are safe before saying that a move is safe.”

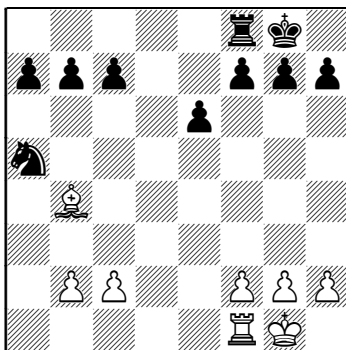
Consider another example of where the “piece landing” thought process would fail: suppose the moving piece was guarding an important square or another piece, and by moving away it is no longer doing so. Result: not safe!

When you ask if a move is safe, you are really asking, “Is the **position** that the move would create safe?” ...which, of course, includes much more than just the piece that moved.

### Answer 1-2

**Black to play:** Which of the following are safe?

- a) 1...♘c4   b) 1...♘c6   c) 1...b6   d) 1...♞d8



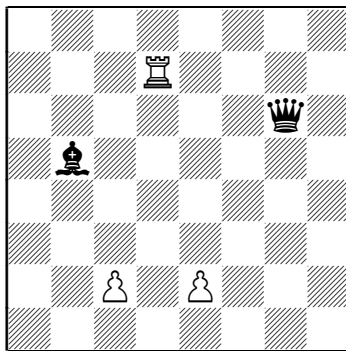
Since Black has no moves which save all material, it could be correct to state that none of the moves are safe. However, from a practical point of view, Black starts ahead two pawns, so what he really needs to do is minimize material loss so that he is still competitive. This is not an uncommon decision.

Viewed this way, all three moves that save the knight (1...♖c4, 1...♖c6, and 1...b6) are equally safe (not equally good, but close enough) because on each the continuation will be 2.♙xf8 ♔xf8 and, if we use GM Kaufman's material values (see the Introduction), Black has a very slight lead – we could call the position roughly equal. On each of these three moves, Black loses the exchange (rook for bishop or knight) and ends up with a knight and two pawns for a rook. So in a very practical sense, those are the safe moves.

But quite different is 1...♖d8? when after 2.♙xa5 Black loses an entire piece and, instead of being equal, is down two pawns for a bishop and would lose with best play.

Using Kaufman's values, it is easy to see why. After the three safe moves, Black only loses (5.25-3.5) or 1.75 pawns. But after 1...♖d8 2.♙xa5 he loses 3.5 pawns, which is exactly twice as much! Since it only takes about a pawn disadvantage to be losing in most positions, playing 1...♖d8? and losing an additional 1.75 pawns would be disastrous. I have given this problem to hundreds of students and many if not most players rated under 1300 choose 1...♖d8 – one reason I had to include this problem in the book.

**Answer 1-3** (kings intentionally removed)  
**White to play:** Is 1.♖d3 safe?



No – 1...♙xd3 wins the exchange.

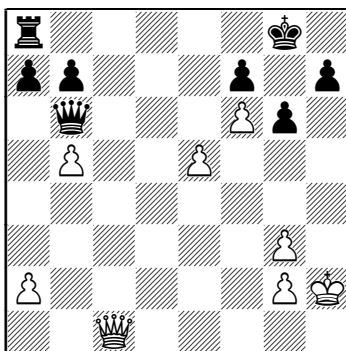
This is another easy puzzle that sometimes traps beginners. There are two important issues to this simple problem:

- Chess is not checkers! You don't have to capture unless you feel it is beneficial. After 1...♙xd3 2.cxd3 (or 2.exd3) Black is under no obligation to make a further capture on d3 with the queen; and
- A move is not safe if the opponent has *any* capturing sequence that wins material by force. Just because most of the lines are good for you doesn't mean there isn't one sequence that is not. If the opponent even has one forcing sequence that wins material or checkmates, then you almost always have to assume that they are going to find it, and that the move is not safe.

There is a big exception to the “*don't assume the opponent will make a mistake*” principle: you are dead lost and would resign. However, there is a candidate that allows a sequence where the opponent has a chance to go wrong and let you get back in the game. In that situation, it is often great strategy to try it. The reason? Even if there are lines that make your loss more immediate than if you did not try, that's basically no risk at all.

### Answer 1-4

**Black to play:** Is 1...♙xb5 safe?



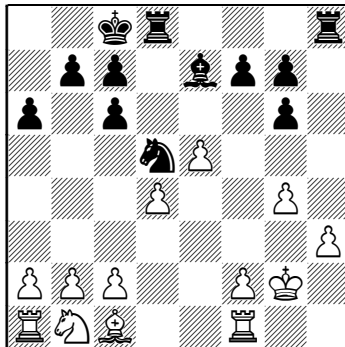
No, 1...♙xb5 is not safe because White can play 2.♙h6 and mate on the next move is unstoppable. This is an important basic example because it illustrates two important points:

- In chess, it is easy to generate unstoppable threats. That means if you don't look for your opponent's checks, captures, and threats that he can make *in reply to your candidate move*, it is entirely possible you will make a move like 1...♙xb5 and your opponent will counter with an unstoppable threat that will win the game. In this case I purposely picked a very familiar mating pattern so that 2.♚h6 would “jump out” at you if I asked about 1...♙xb5. But not every unstoppable threat is so easily spotted...
- It's extremely important and helpful to study basic tactical patterns. That's not news. Pattern recognition should help prevent you from making a move like 1...♙xb5. The more patterns you know, the better. *But you can't rely on only knowing those patterns*; spotting the opponent's tactics in reply to your move often requires careful analysis. And even in well-known positions like this, once you spot 1...♙xb5 2.♚h6, you *still* should double-check to make sure Black would have no defense. Even for common patterns, double-checking – at the very least – with careful analysis is always sensible, except in speed games. There's too much riding on making one huge mistake.

### Answer 1-5

**White to play:** Which of the following are safe?

- a) 1.♙e3   b) 1.♘c3   c) 1.c4



- a) Yes, 1.♙e3 is safe. If Black plays 1...♗xe3, then 2.fxe3 protects the d-pawn. Doubling White's pawns, as explained in the In-

roduction, may not be desirable (here it is fine), but doesn't count as "not safe" unless it causes White to lose material or get checkmated. With the d-pawn already guarded, other knight discoveries such as 1...♖b4 only threatens the c2-pawn, which can be made safe with, say, 2.♗a3.

- b) 1.♗c3 would be my first candidate move in this position but I would have to reject it because it is not safe. No, it's not because of 1...♖xc3 2.bxc3 where the doubled pawn nicely goes toward the center and guards the important d-pawn. It's because the discovered attack 1...♖b4! hits both the d-pawn and the c-pawn, and the c-pawn cannot be saved.

If you failed to find 1...♖b4 when doing the problem, the following is one way that may have helped you find it. After 1.♗c3, identify which white pieces are not guarded by another white piece: ♔g2, ♙a1, ♖c2, ♖d4. But we don't have to worry about guarded kings, so the other three are "loose" pieces. How many Black moves in reply to 1.♗c3 would attack at least two of these other three (♙a1, ♖c2, ♖d4)? The answer is two: 1...♖b4 and 1...♗e3+. But 1...♗e3+ itself is not safe, so the move to be concerned about is 1...♖b4.

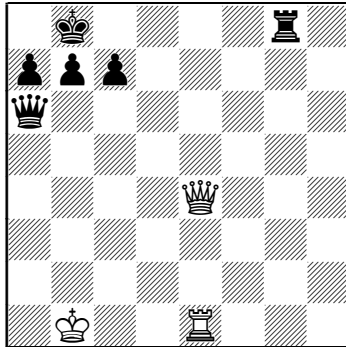
It is very instructive to compare the situation in Position 1-4 with 1...♗xb5 with the one here with 1.♗c3. Both allow unstoppable threats 2.♗h6 and 1...♖b4. While 2.♗h6 in 1-4 is a mate threat and 1...♖b4 here "only" wins a pawn, the principle of not allowing unstoppable threats through careful play on the previous move is the same. What differs, however, is whether or not you can depend on your prior pattern recognition to prevent making the error. The pattern after 1...♗xb5 2.♗h6 is a purposely well-known one, while the pattern here after 1.♗c3 ♖b4 is a purposely rare one, and unlikely to be in your mental database of dangerous patterns. Both cases call for analysis, but whereas 2.♗h6 should "jump out" at you to trigger this analysis, usually 1...♖b4 is only found after some care.

- c) Having seen the answer to the previous move (b), it should come as no surprise that the "aggressive" 1.c4 also has similar problems after 1...♖b4, hitting c2 and d4. Even though c2 is

empty, 2...♘c2 would trap the rook. But any knight move by White would only save the rook – it can't save d4 as well.

### Answer 1-6

**White to play:** Is 1.♙e8+ safe?



This is another easy problem to illustrate a point. Of course 1.♙e8+ is safe, for although it immediately “loses” a queen for a rook with 1...♖xe8, White gets mate on the recapture 2.♗xe8#.

This is a problem that only the rawest beginners fail to recognize, and they soon learn it, too.

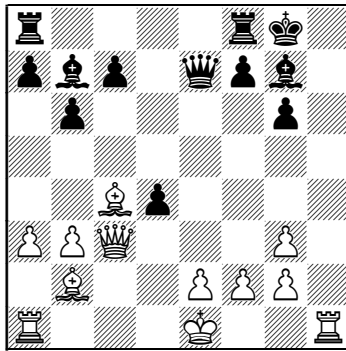
This is another example of basic pattern recognition, but with a specific purpose: to show how to avoid a “*quiescence error*” of stopping too soon in the analysis. Here, to stop after 1.♙e8+ because it loses the queen would be incorrect.

Quiescence errors are one of the biggest problems for intermediate players. In games if they can't recognize the pattern, they often stop their analysis and miss “pseudo-sacrifices.” These same sacrifices they would often find when doing a puzzle in a book, where the guarantee of a solution ensures that if they search further in some lines it will be worthwhile.

However, relying solely on pattern recognition is the problem; if you don't recognize a safe pattern, you still should always ask if further analysis might show the initial sacrifice to be reasonable. This issue is discussed further in Answer 1-7.

**Answer 1-7**

**White to play:** Is 1. ♖xd4 safe?



It is interesting that posing the problem this way, in the form of an “Is it safe?” question, makes it so much easier than if this position were encountered in a game.

Like the previous problem, this one is meant to illustrate the safety of pseudo-sacrifices, where stopping analysis too soon is a quiescence error. However, unlike the previous problem, which everyone recognizes, this one could more easily be missed by players at intermediate level and below in the heat of battle.

Rather than simply observing that 1. ♖xd4 doesn’t seem safe because it loses the queen for a bishop after 1... ♗xd4 and then abandoning that candidate, a correct continuation of the thought process would be to ask the following question: “*If I play 1. ♖xd4 and my opponent wins my queen with 1... ♗xd4, are there any other further forcing moves (checks, captures, and threats) that would cause me to believe that further analysis might be fruitful?*”

The answer here is yes: After 1. ♖xd4 ♗xd4 2. ♗xd4 White threatens mate with 3. ♖h8#. Therefore, the potential risk is less than the potential reward, and this line must be investigated further to determine whether the mate can be stopped. Black would like to block the diagonal with 2... f6, but that is illegal due to the well-placed bishop on c4 (not there by coincidence). But then it becomes apparent that Black has a major problem and that 1. ♖xd4 is indeed worthy. The best Black can do is postpone things with moves like

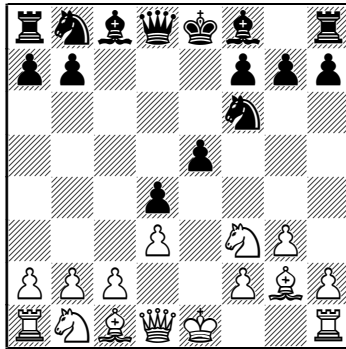


2...♖xe2+ 3.♔xe2 ♜fe8+ 4.♔f1 ♔f8, but then 5.♙f6! shuts the door and ♜h8# will follow shortly.

Avoiding quiescence errors in positions like these, by asking the correct questions, should help most players more than does memorizing a few more moves from their opening book...

### Answer 1-8

**White to play:** Is 1.♘xe5 safe?



No, 1.♘xe5 is not safe due to 1...♔a5+ winning the knight.

This is one of the standard puzzles I give to students rated under 1800 in an early lesson. Having given it to hundreds, I have learned quite a bit about how they look for tactics and what some of their common errors are.

The majority of players spot the easy pin 1...♔e7 as the first candidate move that might make 1.♘xe5 unsafe. There are two key points to spotting 1...♔e7 first:

- It's OK. You want as many possible tactical dangers to "jump out" at you as potential reasons why your move might not be safe; and
- It very much matters what you do with the information that 1...♔e7 is a candidate for making 1.♘xe5 unsafe. The proper thing to do is to *put it on a list of potential dangerous candi-*

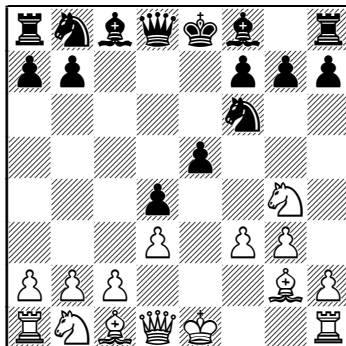
*date replies* to analyze. But, before analyzing, use your tactical vision and consider all of Black's forcing replies (checks, captures, and threats). The purpose is to generate a list of all the moves that might refute 1.♘xe5.

Only after creating this mental list should you decide which one you want to analyze in depth first (of course, like many things in chess, there are exceptions: if the first move you spot is mate in one, such a list is unnecessary!). Creating the list of possible refuting moves is much more efficient than analyzing the first move you see in depth. Cecil Purdy wrote, "*Look wide before you look deep!*"

Many lower-rated players start analyzing 1...♙e7 in depth right away. Some spend 20 minutes or more trying to figure out if 1...♙e7 makes 1.♘xe5 unsafe! After that they usually either forget that other moves by Black were possible, or assume there are no others. When I play this out against them and take Black, they are surprised when I whip out 1...♙a5+ in response to their 1.♘xe5. In the 20 minutes they never even considered this move, which is clearly more forcing than the easily spotted 1...♙e7. If they had created the list first and asked, "*Which move on the list is the most forcing?*", they would likely have found that the check 1...♙a5+ should be investigated before the more obvious, but less forcing threat, 1...♙e7.

### Answer 1-9

**White to play:** Is 1.♘xe5 safe?



After 1.♖xe5 the only difference between this problem and the previous one is that the white f-pawn is on f3 instead of f2. But this makes all the difference as now 1.♖xe5 is safe, e.g. 1.♖xe5 ♖a5+ 2.♕f2 (the move which was not legal in Problem 1-8) and now Black would lose further material if he tried 2...♗xe5? 3.♖e1. Note that this defense is somewhat similar to the line 1.♖xe5 ♖e7 2.0-0 in the first problem: the knight is safe if the king can immediately get out of the way and allow the rook to threaten to go to e1, with a saving pin.

There is an important lesson from comparing puzzles 1-8 and 1-9. *Even the tiniest difference between two positions can cause a candidate to go from safe to unsafe, or vice versa.*

This leads to the important question: When are positions you have studied previously, identical to what you see in front of you over-the-board? There are primarily only two situations where the positions are identical:

- “Book” positions in the opening where *both* sides have their pieces arranged identically to what was studied. For example, if your opponent has fallen into a “book” trap and you are 100% sure the position is identical plus you double-checked it with at least some analysis, then it *may* be that you can rely on that memory and play the line with the expected result. But it has to be identical or else much more careful analysis is necessary; and
- Late endgame positions, such as a trivial queen and king vs. king checkmate or king and one pawn vs. king position. Again, in these cases the position may be identical to the one studied, and only a little bit of analysis may be required to make sure that is indeed the case.

Even the tiniest difference between two positions can cause a candidate to go from safe to unsafe, or vice versa.

However, in all other cases the “familiar tactic” is probably just that – familiar and similar to one studied, but not identical! That means it may or may not work. Often my students blunder when they see a *Seed of Tactical Destruction* (aspect of a position that may indicate a tactic) or a position very similar to one they have studied. They jump right in, often with disastrous results. Here is what I tell them:

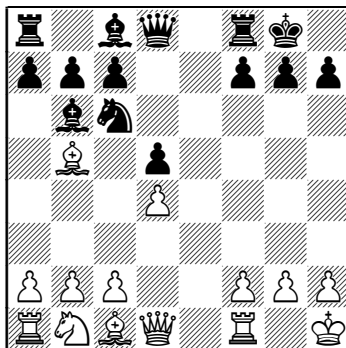
*“There are two possibilities: One, you are correct and the move you are intending does initiate a winning tactic; and two, it just looks like it wins but it doesn’t. Either way that makes the move super-critical. If you are indeed winning, then taking your time to make sure you really are doesn’t cost that much because your remaining time is less valuable if the game is basically decided. If, on the other hand, your move does not really win, then it may not be a good move at all, in which case you need to find out before you play it, so you can switch to a much better move.”*

*When you see a flashing light in chess (a pattern with a strong signal), it’s rarely green. “Go fast, play it!” may be what you feel, but it is a bad reaction. Those who play fast may feel like they are showing others how smart they are to recognize tactics so quickly, but moving quickly in critical positions is not only not smart, it’s unwise. Instead, that flashing light is almost always red, which indicates “This is critical! Be careful! Take your time! Triple-check it!”*

### Answer 1-10

**Black to play:** Which of the following are safe?

- a)  $1... \text{♖xd4}$     b)  $1... \text{♗xd4}$

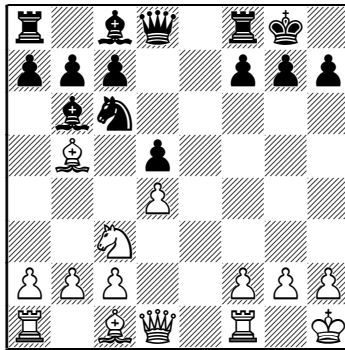


- a) Yes,  $1... \text{Nxd4}$  is safe and Black wins a pawn.
- b) No,  $1... \text{Bxd4}$  is not safe due to the removal-of-the-guard sequence beginning with  $2. \text{Bxc6}$ . At this point Black has the choice of whether to recapture on c6:  $2... \text{bxc6}$  losing a piece to  $3. \text{Wxd4}$ , or saving the hanging bishop with, say,  $2... \text{Bf6}$  ( $2... \text{Bxb2}$   $3. \text{Bxb2}$   $\text{bxc6}$  also ends up a piece behind)  $3. \text{Bxd5}$  and again White ends up ahead a piece.

One good way to look at this is that  $1... \text{Bxd4?}$   $2. \text{Bxc6}$  creates a kind of “equilibrium.” Black can either take White’s bishop or save his own, but either way White can retaliate “in kind” and Black cannot regain his piece. When this type of equilibrium occurs with one side down a piece, then it cannot be regained.

### Answer 1-11

**Black to play:** Is  $1... \text{Bxd4}$  safe?



Yes, this time  $1... \text{Bxd4}$  is safe. The position is identical to Problem 1-10, except that White now has his knight on c3 instead of b1. This makes the difference:  $1... \text{Bxd4}$   $2. \text{Bxc6}$  still attempts to remove the guard. The black bishop on d4, as in 1-10, becomes a “desperado” piece. But in 1-10 there was nothing to do and equilibrium was already reached with Black down a piece.

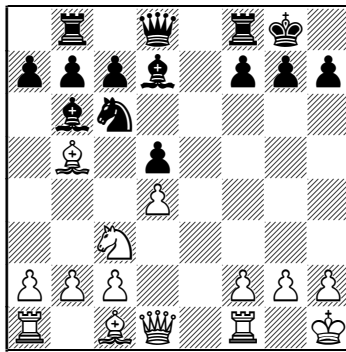
Here in 1-11 it is different. The desperado bishop can “sell” itself for something worth the same by playing  $2... \text{Bxc3}$ . Only after this equalizing capture has equilibrium been reached. But now it is White with the option of how to conclude. He has nothing better

than regaining his pawn with 3.♙xd5, allowing Black to save his bishop with 3...♗f6. Less good for White would be 3.bxc3 bxc6, which regains the piece but not the pawn.

P.S.: Yes, of course 1...♘xd4 is safe, too, and wins a pawn, but that wasn't the issue this time...

### Answer 1-12

**Black to play:** Is 1...♙xd4 safe?



No, 1...♙xd4 is not safe. After 2. ♙xc6 ♙xc3 (2...bxc6 3. ♗xd4 wins a piece as in 1-10), Black attempts to regain the piece as in 1-11. However, this time White has the final piece capture with 3. ♙xd7 and only now is equilibrium reached with White ahead a piece.

After 3. ♙xd7 Black can either save his bishop with 3...♗f6, allowing White to do similarly, e.g. 4. ♙h3, or give up his bishop with 3...♙xb2 4. ♙xb2 ♗xd7 or 3...♗xd7 4.bxc3. Getting an extra pawn for Black is nice, but it's clearly insufficient either way.

This trilogy of problems (1-10 through 1-12) indicates a progressive complexity of a simple removal-of-the-guard tactic by adding further *Counting* issues (as illustrated by the desperado pieces).

I have given this trio to hundreds of students and it is clear that there are talent issues not only in visualizing what is happening, but in being able to track when a piece is being lost and whether or not something can be done about it. It seems that the ability to resolve these seemingly straightforward Counting issues lies quite at the

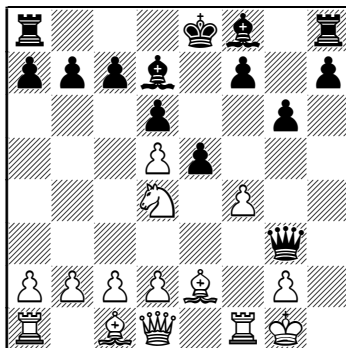
heart of a player's tactical ability. If you are able to quickly and accurately calculate problems like 1-12, you have a big advantage over those who struggle to figure out if the sequence is safe.

My conjecture is that if you have just started playing chess recently and can already easily do a problem like this one, you probably have a bright future, assuming you can spend the time and work hard enough. And I would bet that someone who is able to do problems like 1-12 quickly and accurately would have a big advantage over someone who can't but has a lot more chess knowledge, e.g. additional years of studying opening sequences. This is a big reason why you go to big tournaments and find many youngsters rated 1900+, when there are adults who have read ten times as many chess books but never manage to reach that rating. Chess is partially knowledge; however, analytical ability is the single chess skill with the greatest correlation to playing strength.

Important note: the skills involved in analysis are not black and white (no pun intended). It's not as if you either have them or you don't – it's much more grey than that. Some players are excellent at these types of calculations and some just never get the hang of it, but most fall in that grey area in-between. Moreover, *it is the type of skill that can be improved*; the more you do similar problems and the more you work at it, the better you get. Can someone with little innate skill ever be as good, through hard work, as someone with high innate skill but lesser work? Sure, but it's better to have more skill *and* more work! ☺

### Answer 1-13

**Black to play:** Is 1...♗h3 safe?



White has just captured a piece on d4, and Black could have recaptured 1...exd4. However, 1...♔h3 threatens checkmate, so it is a *Zwischenzug*, an in-between move. Many lower-rated players are captivated with *Zwischenzugs* and play them whenever possible. Some do it because it is fun, and others do it because they want to show they can't be pushed around by being forced into simple recaptures.

However, in every case you have to carefully analyze whether the *Zwischenzug* is helpful, neutral, or harmful. If it is helpful, of course you do it. If it is neutral, then possibly posing the opponent some problems might be worth it. But if it is harmful then you must refrain.

What about this case?

The intended solution is that 1...♔h3 is harmful, and it is. When a student showed me this game, I pointed out that 1...♔h3?? loses to 2.♙f3 exd4 3.♚e1+! (in the game my student played 3.♚e1+?) and Black is forced to trade queens, but after 3...♗xe1 4.♖xe1+ White wins the bishop on h3 whether it retreats to e6 or not. It's a type of the common tactic removal-of-the-guard. So 1...♔h3 is a bad *Zwischenzug*, and unsafe.

However, one student, when presented with this problem, gave a correct answer because he found there is a *second* reason 1...♔h3 is unsafe! White can also play the tricky 2.♔b5+ and Black has no good way to get out of check, e.g. 2...♕d8 3.♗f3 and Black will not have time to recapture the piece without losing his bishop. 2...c6 3.♗f3! is similarly good for White. Good stuff!

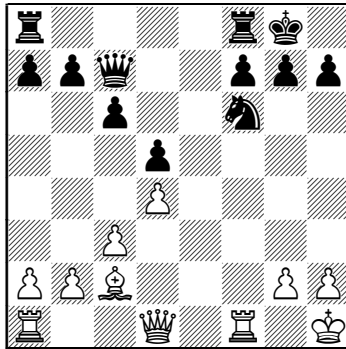
The bottom line remains the same: *Don't play a Zwischenzug (or any move for that matter) just because it is tricky. Play it because it is good no matter how the opponent replies. Only if you are losing and desperate and you need to complicate, then complications are welcome, even if the complications might not favor you with best play.*



**Answer 1-14**

**White to play:** Which of the following are safe?

- a) 1.a3    b) 1.♔d3    c) 1.♖xf6



The purpose of this problem is to apply the traditional “Is it safe?” question to a “Play and win” problem – but not telling the reader it is play and win!

While none of the three moves loses material and thus they are “safe,” what is key is that White is winning and has only one move to retain the real “safety” – winning nature – of his position.

- a) 1.a3 is innocuous and does not lose anything; it just leaves White a pawn behind. Thus it is “safe” but not preservative of the victory, and thus has the equivalency of unsafe moves. *It is relatively the same error to miss a win and go to an equal position as it is to start in an equal position and lose material into a loss. In both cases, the error is the equivalent of giving away a half-point with a bad move.*
- b) 1.♔d3 is an aggressive attempt to win, with the removal-of-the-guard threat 2.♖xf6. Unfortunately for White, Black has the defense 1...♘e4. So while it doesn’t lose material, it doesn’t win any, either. White is still behind a pawn.
- c) 1.♖xf6! is the “Play and win” solution. If White rejects this as losing the exchange after 1...gx6, that’s a quiescence error.

If Black accepts the material with 1...gxf6, however, White mates with 2.♖g4+ (2.♖d3 f5! 3.♖xf5 f6 and Black's queen defends h7) 2...♔h8 3.♖f5 will mate.

Don't play a *Zwischenzug* (or any move for that matter) just because it is tricky. Play it because it is good no matter how the opponent replies. Only if you are losing and desperate and you need to complicate, then complications are welcome, even if the complications might not favor you with best play.

You won't find too many problems like this in *Is Your Move Safe?*. I just wanted to illustrate the difference between the problems in *Is Your Move Safe?* and the types of problems (and answers!) you would encounter in regular tactics books.

## Chapter 2

# Openings

While safety is slightly less of an issue in the opening than in the other phases of the game, every player knows that, if they're not careful, opening disaster may be just around the corner. Once the opposing forces start engaging – which can happen almost at the first move – then safety becomes an issue.

I decided not to include too many well-known opening traps because they can be found in books, websites, and other openings materials. However, I have included a few traps so that as many safety issues as possible are addressed. Many of the opening safety concerns found in the positions have been obtained from students' games where they fell prey to an early safety gaffe.

There is a skill I call *criticality assessment*. It means the ability to look at a position and decide how much the outcome of the game could depend on finding the correct move(s). In the opening, criticality assessment is only slightly less important than in other phases of the game; recognizing complications and danger is still important.

*Botvinnik's Rule* suggests in “normal” openings to play the first 15 moves in about 20% of the first time control. But if the position becomes critical early on, then more time is warranted.

This chapter also includes a five-problem set on the Classical Bishop Sacrifice (“the Greek Gift”). For more on this issue, there is an excellent chapter in Vuković's classic book *Art of Attack in Chess*. I do have one advantage over Vuković – all my lines are checked with a strong engine 😊

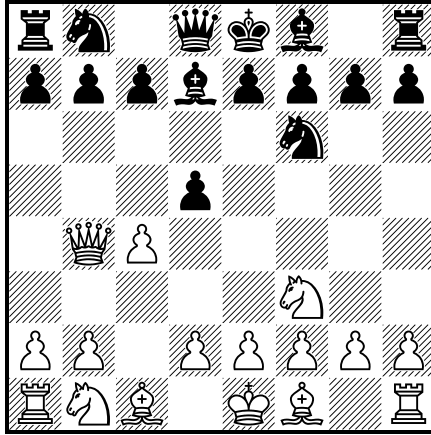
The problems in this chapter, except for the set(s), are in order of *Encyclopedia of Chess Openings* (ECO) standard code.

**2-1: 1.♘f3 ♘f6 2.c4 d5 3.♙a4+ ♔d7 4.♙b4 (ECO A05)**

**Black to play:**

Which of the following are safe?

- a) 4...e6   b) 4...e5   c) 4...♘c6   d) 4...c5   e) 4...b6

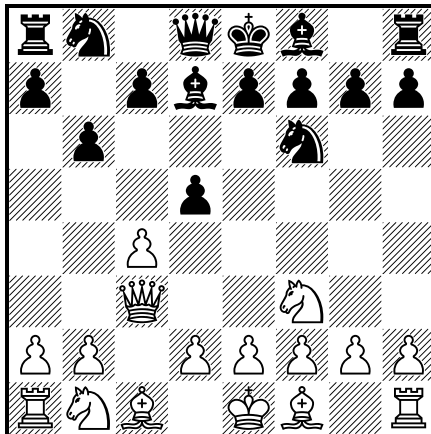


**2-2: 1.♘f3 ♘f6 2.c4 d5 3.♙a4+ ♔d7 4.♙b4 b6 5.♙c3 (ECO A05)**

**Black to play:**

Which of the following are safe?

- a) 5...e6   b) 5...g6   c) 5...dxc4

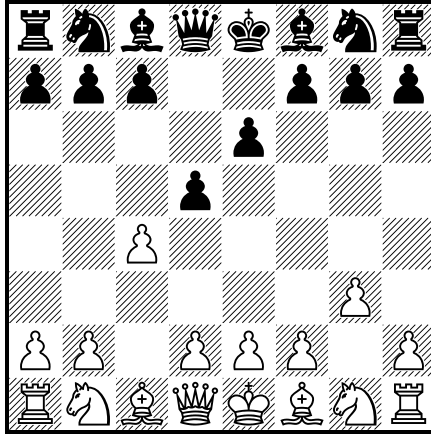


**2-3: 1.c4 e6 2.g3 d5 (ECO A13)**

**White to play:**

Which of the following are safe?

- a) 3.♙g2 b) 3.♘f3 c) 3.b3 d) 3.d3

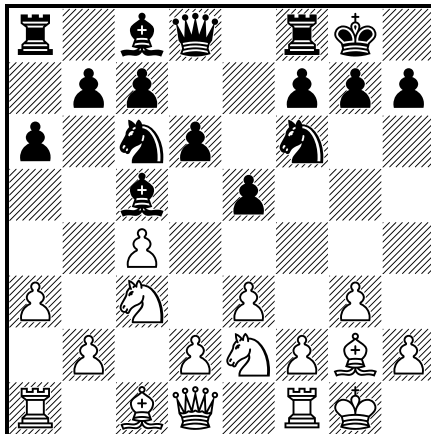


**2-4: 1.c4 e5 2.g3 ♘f6 3.♙g2 ♘c6 4.♘c3 ♙c5 5.e3 0-0  
6.♘ge2 d6 7.a3 a6 8.0-0 (ECO A25)**

**Black to play:**

Which of the following are safe?

- a) 8...♞e8 b) 8...♙f5 c) 8...♙a7 d) 8...♙e6

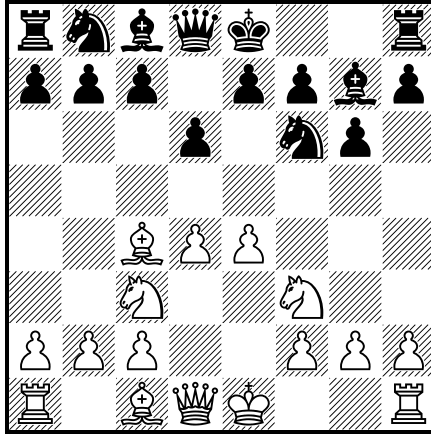


**2-5: 1.e4 d6 2.d4 ♘f6 3.♗c3 g6 4.♘f3 ♕g7 5.♖c4 (ECO B08)**

**Black to play:**

Which of the following are safe?

- a) 5...♗xe4    b) 5...0-0    c) 5...♗bd7

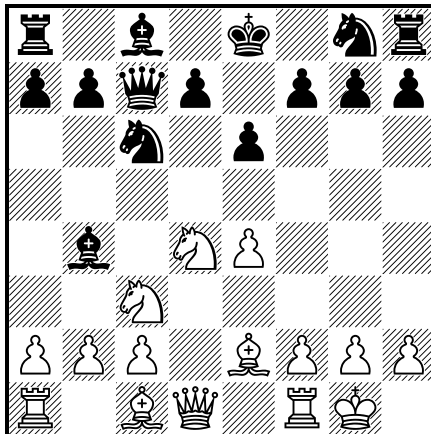


**2-6: 1.e4 c5 2.♗f3 e6 3.d4 cxd4 4.♗xd4 ♗c6 5.♗c3 ♔c7  
6.♕e2 ♖b4 7.0-0 (ECO B47)**

**Black to play:**

Which of the following are safe?

- a) 7...d6    b) 7...♗f6    c) 7...♗xd4    d) 7...♕xc3



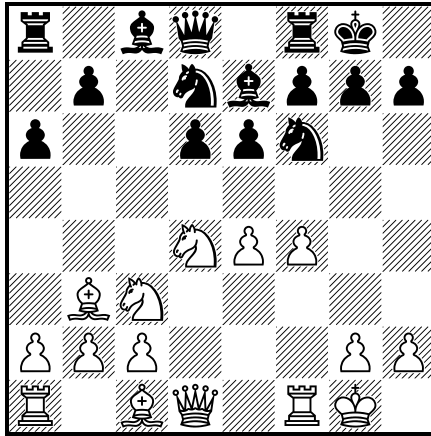
Openings

**2-7: 1.e4 c5 2.♘f3 d6 3.d4 cxd4 4.♗xd4 ♘f6 5.♗c3 a6  
6.♙c4 e6 7.♙b3 ♙e7 8.0-0 0-0 9.f4 ♗bd7 (ECO B86)**

**White to play:**

Which of the following are safe?

- a) 10.♗xe6 b) 10.♙xe6 c) 10.g4 d) 10.♙e3

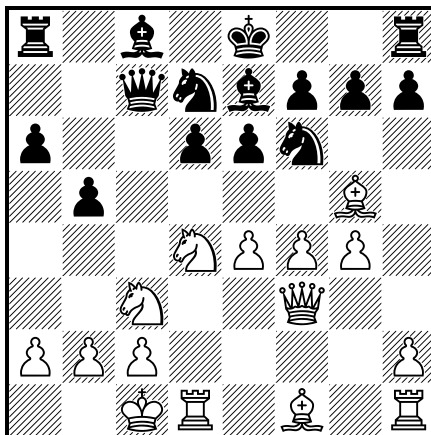


**2-8: 1.e4 c5 2.♗f3 d6 3.d4 cxd4 4.♗xd4 ♗f6 5.♗c3 a6  
6.♙g5 e6 7.f4 ♙e7 8.♚f3 ♚c7 9.0-0-0 ♗bd7 10.g4 b5  
(ECO B99)**

**White to play:**

Which of the following are safe?

- a) 11.♙xb5 b) 11.e5 c) 11.♙xf6

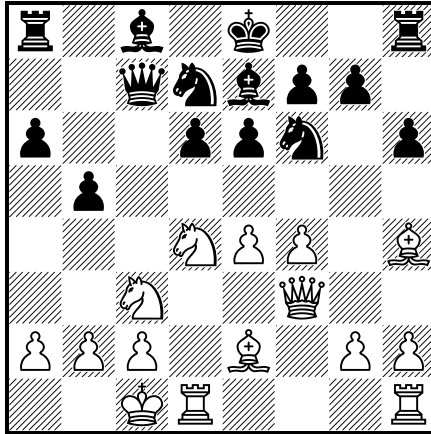


**2-9: 1.e4 c5 2.♘f3 d6 3.d4 cxd4 4.♗xd4 ♘f6 5.♗c3 a6  
6.♙g5 e6 7.f4 ♚e7 8.♝f3 h6 9.♙h4 ♞c7 10.0-0-0 ♗bd7  
11.♙e2 b5 (ECO B99)**

**White to play:**

Which of the following are safe?

- a) 12.♙xb5   b) 12.e5   c) 12.♙xf6   d) 12.g4

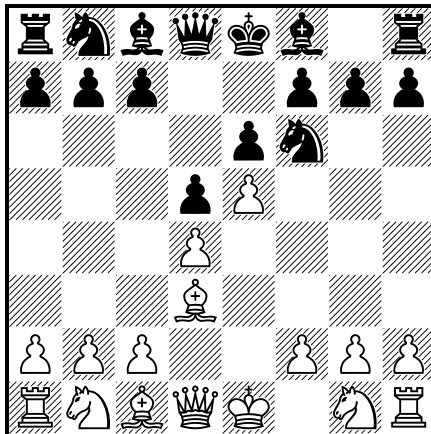


**2-10: 1.e4 e6 2.d4 d5 3.♙d3 ♗f6 4.e5 (ECO C01)**

**Black to play:**

Which of the following are safe?

- a) 4...♗g8   b) 4...♗e4   c) 4...♙b4+   d) 4...♗fd7





## Openings

In the following five problems, we ask whether the Classical Bishop Sacrifice (CBS) is safe. (This sacrifice is now commonly called “the Greek Gift,” which to me seems a misnomer, since the Trojan Horse should not have been accepted, while the move ♕xh7+ almost always has to be accepted else Black simply loses a pawn while White still gets an attack.)

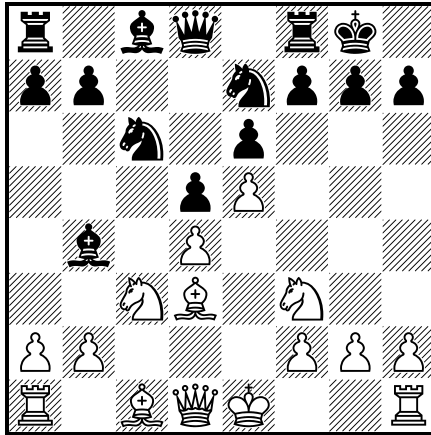
In this first CBS position, we will try the sacrifice with a knight at e7.

**2-11** (CBS problem #1):

**1.e4 e6 2.d4 d5 3.e5 c5 4.c3 cxd4 5.cxd4 ♖b4+ 6.♗c3 ♗e7**  
**7.♗f3 0-0 8.♕d3 ♗bc6** (ECO C02)

**White to play:**

Is 9.♕xh7+ safe?



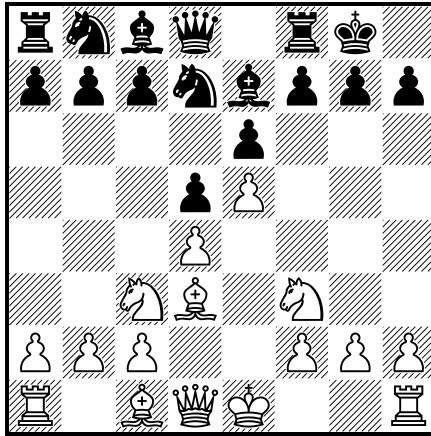
Chapter 2

Does the sac work with the bishop on e7?

**2-12 (CBS #2): 1.e4 e6 2.d4 d5 3.♘c3 ♘f6 4.e5 ♗fd7 5.♙d3  
♙e7 6.♗f3 0-0 (ECO C15)**

**White to play:**

Is 7.♙xh7+ safe?

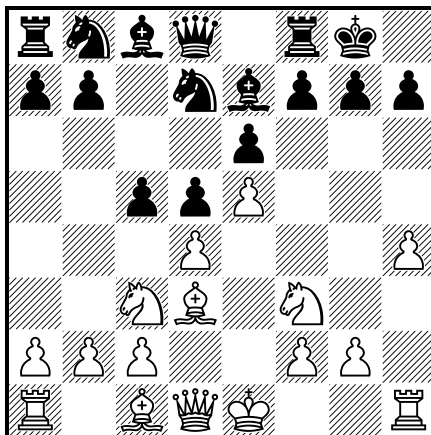


Leave the bishop on e7, but give White a pawn on h4. How much of a difference does that make?

**2-13 (CBS #3): 1.e4 e6 2.d4 d5 3.♘c3 ♘f6 4.e5 ♗fd7 5.♙d3  
♙e7 6.♗f3 0-0 7.h4 c5 (ECO C15)**

**White to play:**

Is 8.♙xh7+ safe?



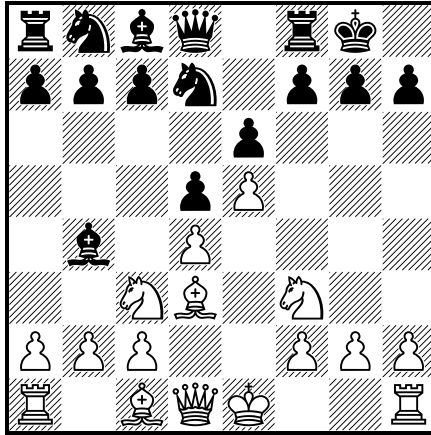
## Openings

What if there is no black piece on e7?

**2-14 (CBS #4): 1.e4 e6 2.d4 d5 3.♘c3 ♘f6 4.e5 ♗fd7 5.♙d3  
♙b4 6.♗f3 0-0 (ECO C15)**

**White to play:**

Is 7.♙xh7+ safe?



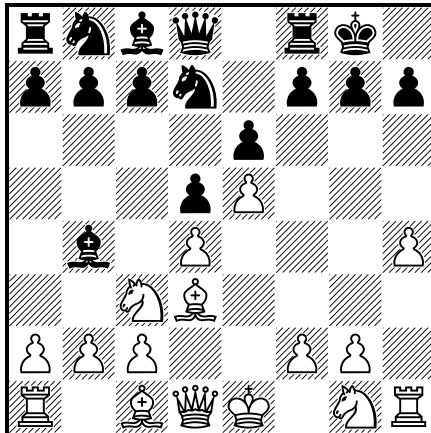
In our final Classical Bishop Sacrifice problem, White does not even have a knight at f3, but he does have that pawn at h4.

Is that enough?

**2-15 (CBS #5): 1.e4 e6 2.d4 d5 3.♘c3 ♘f6 4.e5 ♗fd7 5.♙d3  
♙b4 6.h4 0-0 (ECO C15)**

**White to play:**

Is 7.♙xh7+ safe?

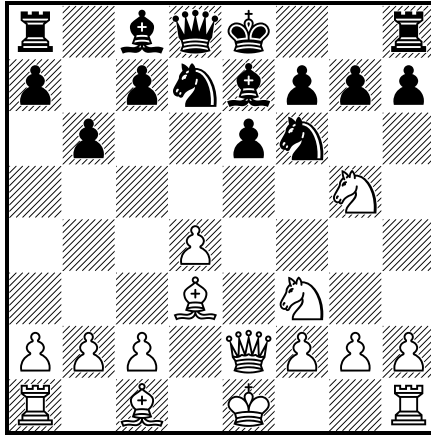


**2-16: 1.e4 e6 2.d4 d5 3.♘c3 dxe4 4.♘xe4 ♙e7 5.♗f3 ♘d7  
6.♙d3 ♗gf6 7.♚e2 b6 8.♗eg5 (ECO C10)**

**Black to play:**

Which of the following are safe?

- a) 8...h6 b) 8...♙b7 c) 8...0-0 d) 8...♙b4+ e) 8...♗f8

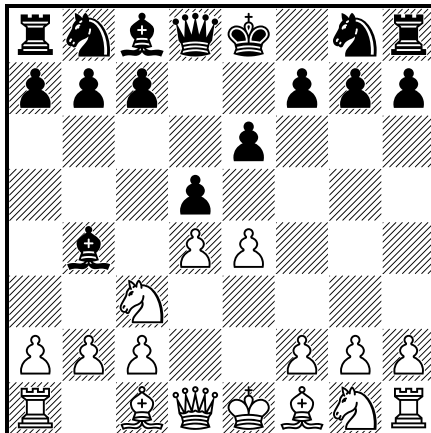


**2-17: 1.e4 e6 2.d4 d5 3.♗c3 ♙b4 (ECO C15)**

**White to play:**

Which of the following are safe?

- a) 4.♙d2 b) 4.a3 c) 4.♗ge2 d) 4.♚g4 e) 4.♗f3

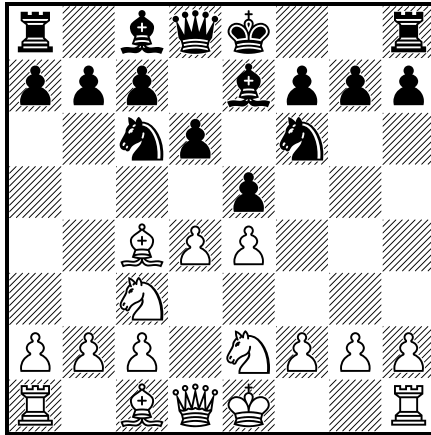


## Openings

The next four problems form a set asking whether the move ♔c1-g5 is safe against Black's setup ♖d8/♗e7/♘f6.

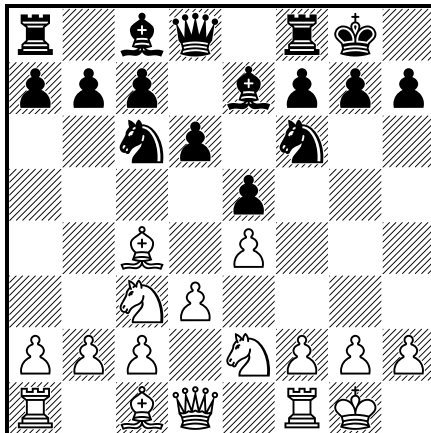
**2-18 (♗g5 #1): 1.e4 e5 2.♗c4 ♘f6 3.♘e2 ♘c6 4.d4 d6  
5.♘bc3 ♗e7 (ECO C24)**

**White to play:**  
Is 6.♗g5 safe?



**2-19 (♗g5 #2): 1.e4 e5 2.♗c4 ♘f6 3.♘e2 ♘c6 4.d3 d6 5.♘bc3  
♗e7 6.0-0 0-0 (ECO C24)**

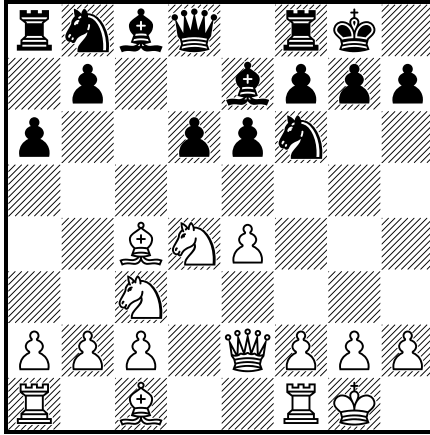
**White to play:**  
Is 7.♗g5 safe?



Chapter 2

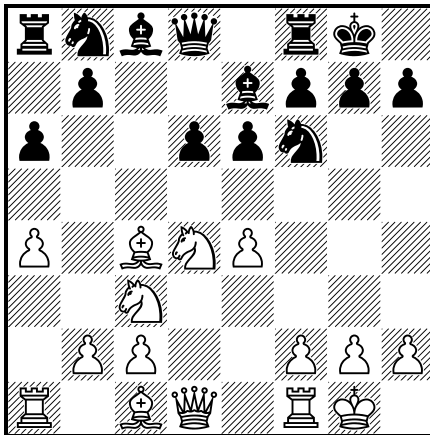
2-20 (♔g5 #3): 1.e4 c5 2.♘f3 d6 3.d4 cxd4 4.♗xd4 ♘f6  
5.♘c3 a6 6.♙c4 e6 7.♚e2 ♙e7 8.0-0 0-0 (ECO B86)

White to play:  
Is 9.♔g5 safe?



2-21 (♔g5 #4): 1.e4 c5 2.♘f3 d6 3.d4 cxd4 4.♗xd4 ♘f6  
5.♘c3 a6 6.♙c4 e6 7.0-0 ♙e7 8.a4 0-0 (ECO B86)

White to play:  
Is 9.♔g5 safe?



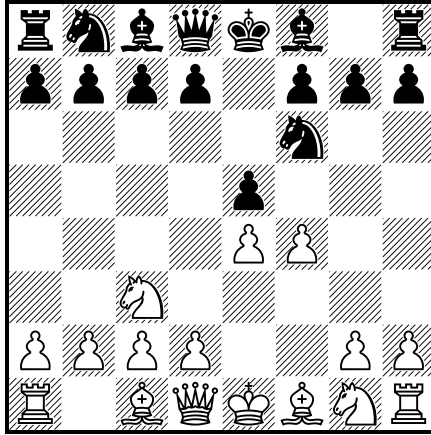
Openings

2-22: 1.e4 e5 2.♘c3 ♘f6 3.f4 (ECO C36)

**Black to play:**

Which of the following are safe?

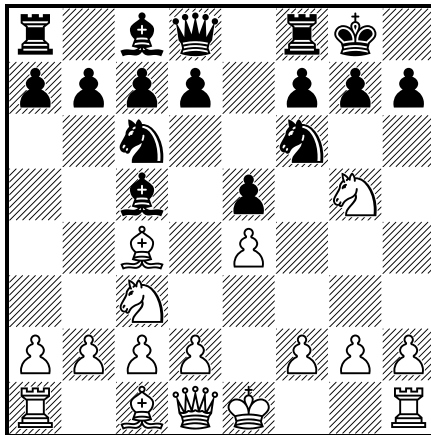
- a) 3...exf4 b) 3...♙c5 c) 3...d5 d) 3...d6



2-23: 1.e4 e5 2.♘f3 ♘c6 3.♘c3 ♘f6 4.♙c4 ♙c5 (4...♘xe4!)  
5.♘g5 0-0 (ECO C47)

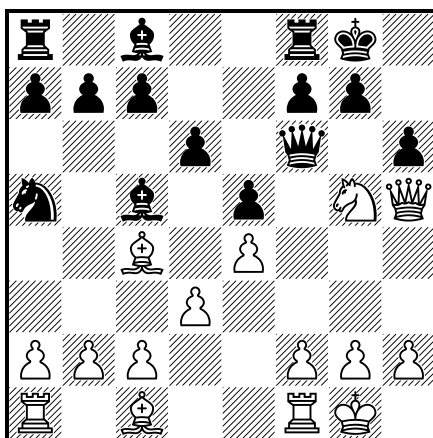
**White to play:**

Is 6.♘d5 safe?



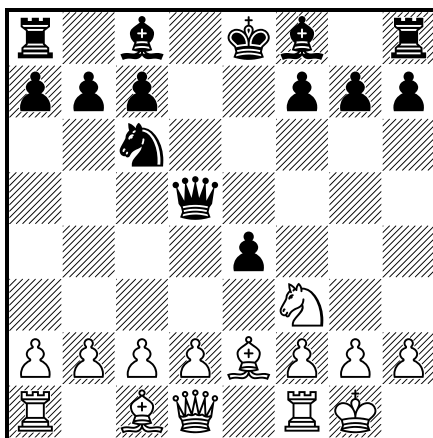
**2-24: 1.e4 e5 2.♘f3 ♘c6 3.♗c3 ♗f6 4.♙c4 ♙c5 5.♗g5 0-0  
6.♗d5 ♗a5 7.d3 d6 8.♗xf6+ ♚xf6 9.♚h5 h6 10.0-0**  
(ECO C47)

**Black to play:**  
Is 10...hxg5 safe?



**2-25: 1.e4 e5 2.♘f3 ♗f6 3.♗c3 ♗c6 4.♙e2 d5 5.exd5 ♗xd5  
6.♗xd5 ♚xd5 7.0-0 e4** (ECO C47)

**White to play:**  
Which of the following are safe?  
a) 8.c4 b) 8.♗h4 c) 8.♚e1 d) 8.♗e1





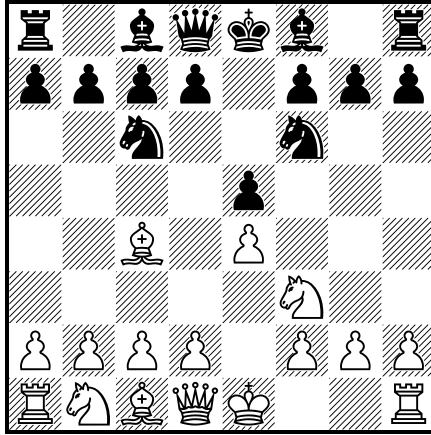
Openings

**2-26: 1.e4 e5 2.♘f3 ♗c6 3.♙c4 ♘f6 (ECO C55)**

**White to play:**

Which of the following are safe?

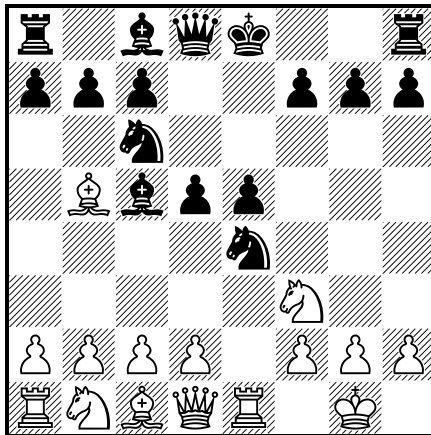
- a) 4.d4 b) 4.0-0 c) 4.♘c3 d) 4.♘g5



**2-27: 1.e4 e5 2.♘f3 ♗c6 3.♙c4 ♘f6 4.0-0 ♗xe4 5.♞e1 d5 6.♙b5 ♙c5 (ECO C55)**

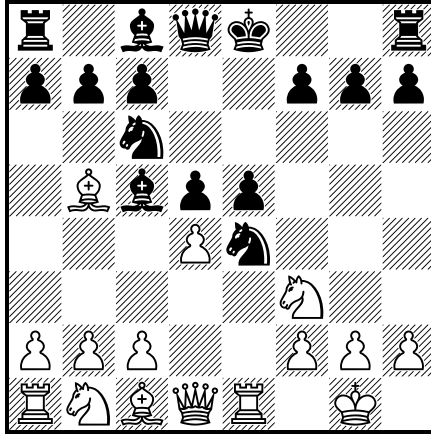
**White to play:**

Is 7.d4 safe?



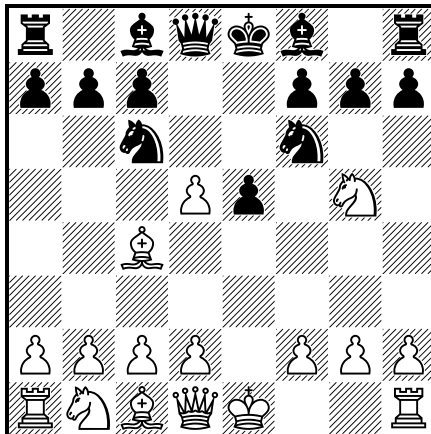
**2-28: 1.e4 e5 2.♘f3 ♘c6 3.♙c4 ♘f6 4.0-0 ♘xe4 5.♖e1 d5  
6.♙b5 ♙c5 7.d4 (ECO C55)**

**Black to play:**  
Is 7...a6 safe?



**2-29: 1.e4 e5 2.♘f3 ♘c6 3.♙c4 ♘f6 4.♘g5 d5 5.exd5  
(ECO C58)**

**Black to play:**  
Which of the following are safe?  
a) 5...♘xd5 b) 5...♘a5 c) 5...♘d4 d) 5...b5

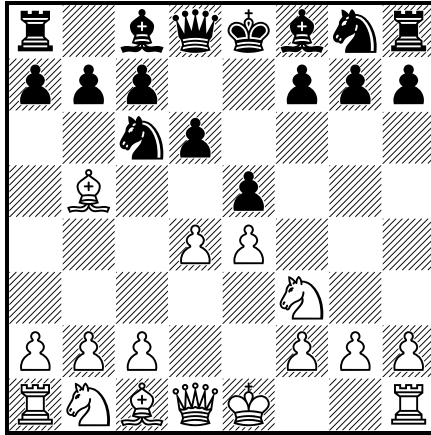


Openings

**2-30: 1.e4 e5 2.♘f3 ♘c6 3.♙b5 d6 4.d4** (ECO C62)

**Black to play:**

Is 4...♘f6 safe?

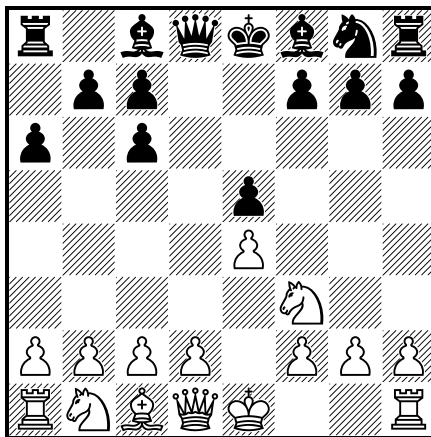


**2-31: 1.e4 e5 2.♘f3 ♘c6 3.♙b5 a6 4.♙xc6 dxc6** (ECO C68)

**White to play:**

Which of the following are safe?

a) 5.0-0 b) 5.d4 c) 5.♘xe5

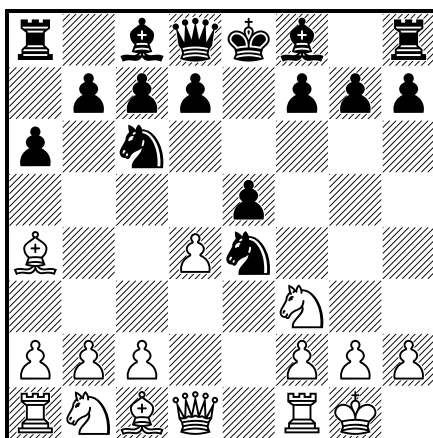


**2-32: 1.e4 e5 2.♘f3 ♘c6 3.♙b5 a6 4.♙a4 ♘f6  
5.0-0 ♘xe4 6.d4 (ECO C80)**

**Black to play:**

Which of the following are safe?

- a) 6...exd4 b) 6...b5 c) 6...d5

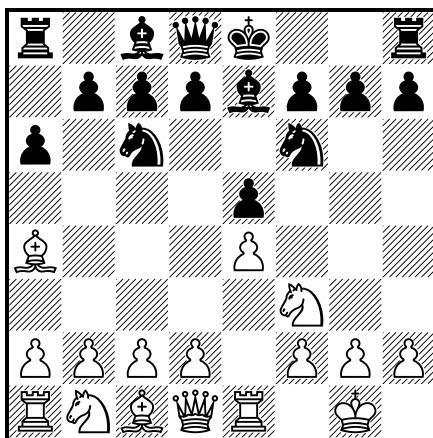


**2-33: 1.e4 e5 2.♘f3 ♘c6 3.♙b5 a6 4.♙a4 ♘f6  
5.0-0 ♙e7 6.♖e1 (ECO C92)**

**Black to play:**

Which of the following are safe?

- a) 6...0-0 b) 6...b5 c) 6...d6 d) 6...♘d4



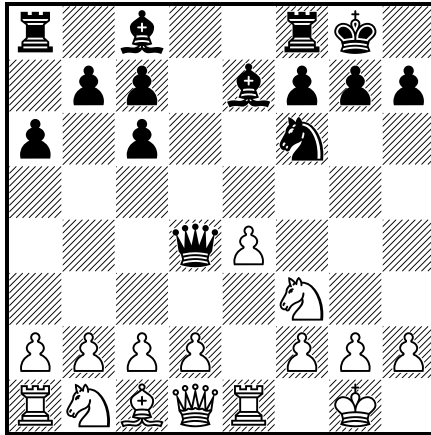
Openings

**2-34: 1.e4 e5 2.♘f3 ♘c6 3.♙b5 a6 4.♙a4 ♘f6 5.0-0 ♙e7  
6.♞e1 0-0? 7.♙xc6 dxc6 8.♘xe5 ♞d4 9.♘f3 (ECO C92)**

**Black to play:**

Which of the following are safe?

- a) 9...♘xe4    b) 9...♞b6    c) 9...♙g4

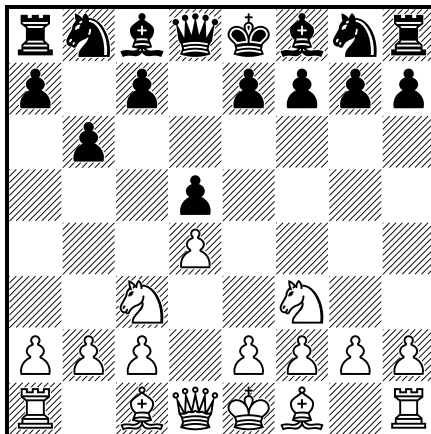


**2-35: 1.d4 d5 2.♘f3 b6 3.♘c3 (ECO D02)**

**Black to play:**

Which of the following are safe?

- a) 3...c5    b) 3...e5

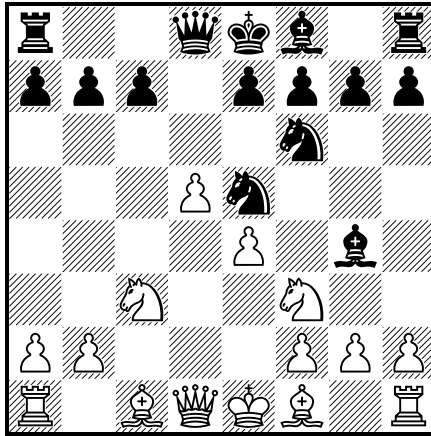


**2-36: 1.d4 d5 2.c4 ♘f6 3.cxd5 ♘xd5 4.♗f3 ♘c6 5.e4 ♗f6  
6.♗c3 ♙g4 7.d5 ♗e5 (ECO D07)**

**White to play:**

Which of the following are safe?

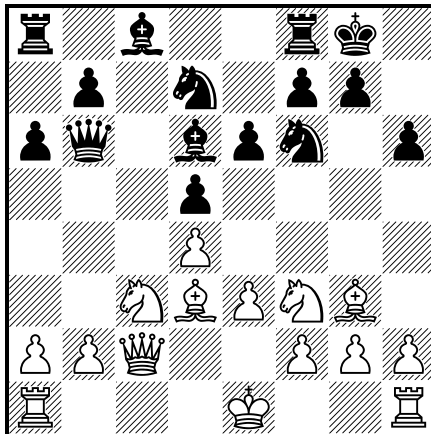
- a) 8.♙e2 b) 8.♙e3 c) 8.♗xe5



**2-37: 1.d4 d5 2.c4 c6 3.cxd5 cxd5 4.♗c3 ♗f6 5.♙g5 ♗bd7  
6.♗f3 h6 7.♙h4 ♖b6 8.♗c2 e6 9.e3 ♙d6 10.♙g3 0-0  
11.♙d3 a6 (ECO D10)**

**White to play:**

Is 12.♗e5 safe?



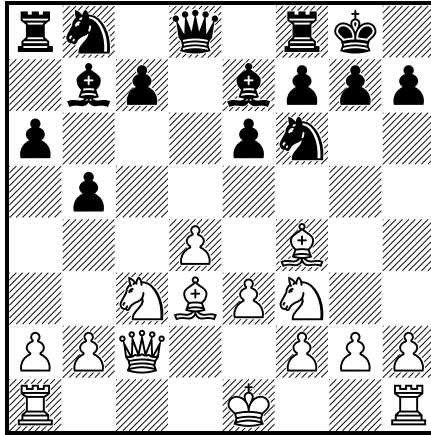
Openings

**2-38: 1.d4 d5 2.c4 e6 3.♘f3 ♘f6 4.♙c3 ♗e7 5.♚c2 0-0  
6.♗f4 dxc4 7.e3 a6 8.♗xc4 b5 9.♗d3 ♗b7 (ECO D37)**

**White to play:**

Which of the following are safe?

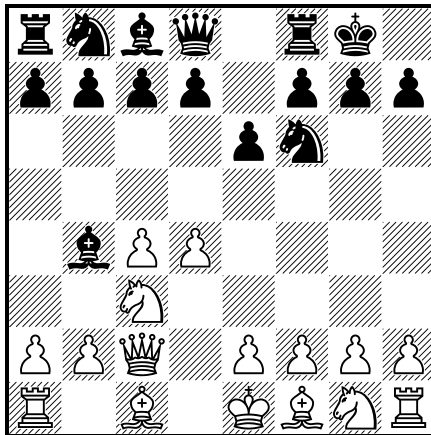
- a) 10.♘g5 b) 10.0-0 c) 10.♙e5



**2-39: 1.d4 ♘f6 2.c4 e6 3.♙c3 ♗b4 4.♚c2 0-0 (ECO E32)**

**White to play:**

Is 5.e4 safe?

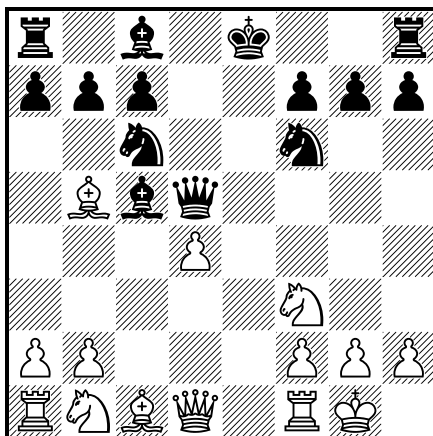


**2-40: 1.e4 e5 2.♘f3 ♘c6 3.♙b5 ♗f6 4.0-0 ♕c5 5.c3 d5  
6.exd5 ♚xd5 7.d4 exd4 8.cxd4 (ECO C65)**

**Black to play:**

Which of the following are safe?

- a) 8...♙b6 b) 8...♙d6 c) 8...♙e7 d) 8...♙xd4

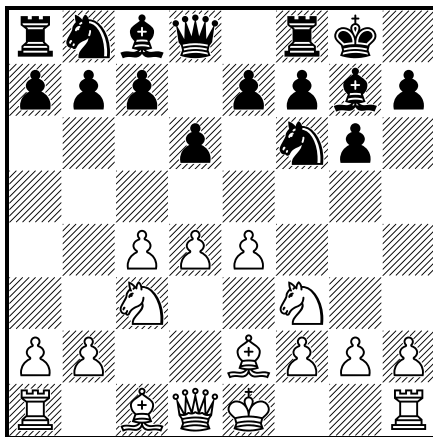


**2-41: 1.d4 ♗f6 2.c4 g6 3.♘c3 ♙g7 4.e4 d6 5.♙e2 0-0 6.♗f3  
(ECO E91)**

**Black to play:**

Which of the following are safe?

- a) 6...♗c6 b) 6...♗bd7 c) 6...e5

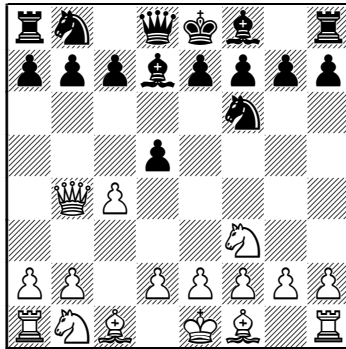




# Answers for Chapter 2

## Answer 2-1

**Black to play:** Which of the following are safe?  
 a) 4...e6 b) 4...e5 c) 4...♘c6 d) 4...c5 e) 4...b6



- a) 4...e6 is safe, or at least speculatively acceptable. White has nothing better than 5. ♖xb7 ♘c6 6. ♗b3 when Black has good compensation for the pawn with several moves such as 6... ♘a5, 6... ♙c5, or 6... ♗b8. It often takes at least two tempi for a queen to take the b-pawn in similar positions – one to capture and at least one to return to a safer, more active square.
- b) 4...e5 is even better than 4...e6. Now if 5. ♖xb7 (otherwise Black is clearly safe) 5... ♘c6 6. ♗b3 ♗b8 7. ♗d1 e4+ drives the white knight out of the center.
- c) 4...♘c6 is safe. Now 5. ♖xb7? loses to a pattern that's helpful to know because it can occur in so many openings where the pawn is similarly captured: 5... ♗b8 6. ♗a6 ♘b4+ when the bishop covers the a4 square (from which the queen could guard c2), so the double attack on the queen and c2 is fatal.
- d) Even 4...c5 is speculatively safe. If 5. ♖xb7 ♘c6 6. ♗b3 ♘a5 recovers the pawn with a small advantage to Black. If instead 5. ♗xc5 e6 6. ♗e3 (6. ♗d4 ♘c6 is good for Black), then 6...dxc4 regains the pawn with advantage.

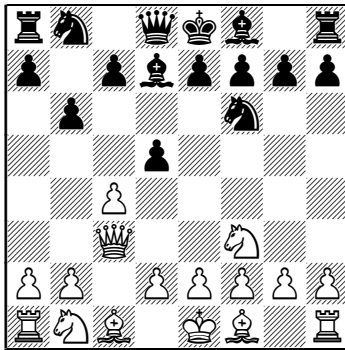
- e) 4...b6, as played in the game (see Answer 2-2) is safe but timid. Black unnecessarily makes a non-developing move which weakens the light squares. After 5.cxd5 e6 6.♔b3 exd5, Black is slightly better.

So all five moves are acceptable but the aggressive moves which ignore the attack on b7 and continue development are best.

### Answer 2-2

**Black to play:** Which of the following are safe?

- a) 5...e6   b) 5...g6   c) 5...dxc4



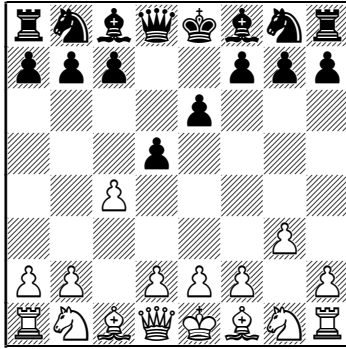
- a) 5...e6 is safe and best. After 6.e3 c5 Black already has a nice small advantage since White has moved the queen three times.
- b) 5...g6, as quickly played in the root game where this position was reached, is not safe. It pins the knight to the rook, so when White plays 6.cxd5, Black cannot recapture. This move “removes” its own guarding piece, the knight.
- c) 5...dxc4 is safe. It is often difficult (but not impossible!) to lose material when capturing first.

This problem shows how easy it is to move quickly in the opening (especially in non-book positions) and make unsafe moves. This game (featured in positions 2-1 and 2-2) included two tactics in the first five moves!

**Answer 2-3**

**White to play:** Which of the following are safe?

- a) 3.♔g2 b) 3.♞f3 c) 3.b3 d) 3.d3



- a) 3.♔g2 is safe. If Black tries 3...dxc4, White is in no hurry to regain the pawn as Black is not in a good position to guard it. If White is skittish, he can always play 4.♚a4+ and regain the pawn next move.
- b) 3.♞f3 is safe for the same type of reason that 3.♔g2 is (♚a4+ is always there, if necessary). White is not losing the c-pawn, so most innocuous moves are safe.
- c) 3.b3 is considered not safe. Black just plays 3...dxc4 and if 4.bxc4 then 4...♚d4 double attacks the c-pawn and rook, winning a pawn. Ironically, the move that guards the hanging c-pawn (3.b3) is the one that's considered not as safe! However, the engine points out that after 5.♞c3 ♚xc4 6.e3 ♚c5 7.♔g2 White gets full compensation for the pawn, so 3.b3 is more speculative than outright bad.
- d) 3.d3 is safe but nonsensical. Black should play 3...dxc4 4.♚a4+ (4.dxc4 ♚xd1+ is not good for White) 4...♚d7!? 5.♚xc4 b5 6.♚c2 ♔b7 7.e4 ♞f6 with good play.

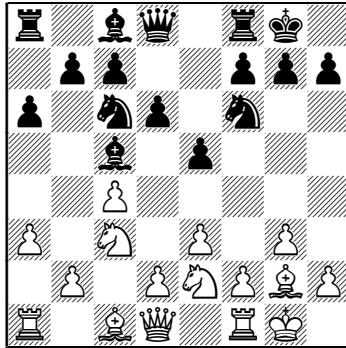
**Answer 2-4**

**Black to play:** Which of the following are safe?

- a) 8...♞e8 b) 8...♔f5 c) 8...♔a7 d) 8...♔e6

*(see diagram next page)*

## Answers for Chapter 2

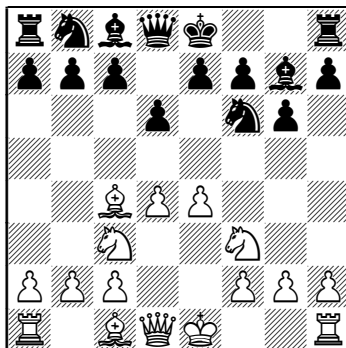


- 8...Re8 is safe and as good as any other move. After this, the position is about equal.
- 8...Rf5 is also logical and safe.
- 8...Ra7 is a precaution against d2-d4. A little over-cautious, but safe.
- 8...Re6 looks aggressive but falls for the common tactic 9.d4, winning a piece. Whether Black trades pawns or not, when he moves the bishop on c5, White plays the fork d4-d5, e.g. 9.d4 exd4 10.exd4 Ra7 11.d5+- . There are not many traps in the main lines of the English, but this is one of them!

### Answer 2-5

**Black to play:** Which of the following are safe?

- a) 5...Nxe4    b) 5...0-0    c) 5...Nbd7

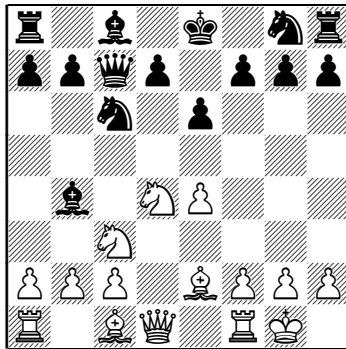


- a) A good guideline for these types of positions is, “*Don’t play the center fork trick until after you have castled.*” However, here the engine, at 29 ply, thinks 5...♖xe4 is only 0.03 pawns less good than the best move 5...0-0. After 5...♖xe4 6.♗xe4 d5 7.♙d3 dxe4 8.♙xe4 c5 Black is OK, and if 6.♙xf7+ ♖xf7 7.♗xe4 ♗f8 Black is also OK, although White can try the tricky 8.h4!?.
- b) See (a) – 5...0-0 is safe and best.
- c) A well-known trap. After 5...♗bd7?? 6.♙xf7+ (6.♗g5 is also very good) 6...♖xf7 7.♗g5+ ♖g8 8.♗e6 ♗e8 9.♗xc7 ♗d8 10.♗xa8, White is winning but caution will be required for a while.

### Answer 2-6

**Black to play:** Which of the following are safe?

- a) 7...d6    b) 7...♗f6    c) 7...♗xd4    d) 7...♙xc3



Black has messed up the move order in a Taimanov Sicilian (5...a6, 6...a6, or 6...♗f6 would have been better) and is already in trouble:

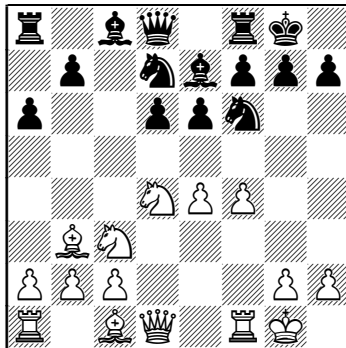
- a) 7...d6 gets a lost game after 8.♗db5 when Black has problems no matter where he places the queen, e.g. 8...♗b8 and now both 9.a3 and 9.♙f4 give White an overwhelming position: 9.a3 ♙xc3 10.bxc3! ♗f6 11.a4! (aren’t computer moves interesting?) 11...♗xe4 12.♙a3 0-0 13.♙f3 ♗c5 14.♗xd6 ♗xa4 15.♗xf7!+-.

- b) 7...♘f6 is safe (7...a6 and 7...♙e7 are also candidates) but White is still much better, e.g. 8.♘db5 ♖b8 9.f4!.
- c) 7...♘xd4 loses to 8.♗xd4 ♙xc3 9.bxc3 e5 (9...♘f6 10.♙a3+-) 10.♗e3 when Black is fatally weak on the dark squares: White has a dark-squared bishop and Black does not, plus White has a strong bishop pair.
- d) 7...♙xc3 8.♘b5 and again Black has no great queen moves, e.g. 8...♗a5 9.bxc3 ♘f6 10.♘d6+ ♔f8 11.♖b1!+- as Black has great difficulties finishing his development.

### Answer 2-7

**White to play:** Which of the following are safe?

- a) 10.♘xe6   b) 10.♙xe6   c) 10.g4   d) 10.♙e3



While 9...♘bd7 was playable, safer was 9...b5, keeping the bishop on c8 eyeing e6 for one more move.

- a) 10.♘xe6 does not promise much. After 10...fxe6 11.♙xe6+ ♔h8, White has no real attack. Not safe.
- b) 10.♙xe6 is often tried in similar positions, but is not much better than 10.♘xe6, if at all. 10...fxe6 11.♘xe6 ♗b6+ (this check makes the defense rather easy) 12.♔h1 ♖e8, and again White has not nearly enough to show for his piece. *Sacrifices*

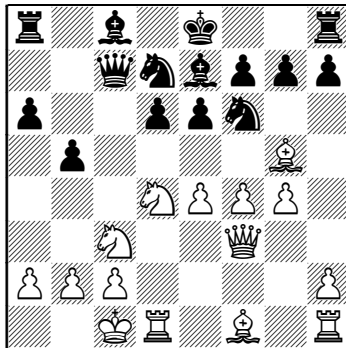
like in (a) and (b) are much more effective if Black has not yet castled and they can prevent Black from castling.

- c) 10.g4 is safe, but is not as thematic as in the 6.♘g5 variations. Black can play 10...♞c5 and, after 11.♟f3, break in the middle with 11...d5 when Black is to be preferred.
- d) 10.♙e3 is relatively safe. Still, Black has no problems, which is why variations similar to this have fallen out of favor at the grandmaster level.

### Answer 2-8

**White to play:** Which of the following are safe?

- a) 11.♙xb5   b) 11.e5   c) 11.♙xf6

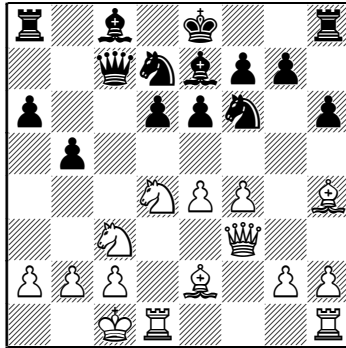


- a) 11.♙xb5 axb5 12.♞dxb5 ♖b8 is inadequate for White. Not safe.
- b) 11.e5, double attacking a8 and f6, loses to the simple 11...♙b7. Then best is 12.♟e3 dxe5! 13.fxe5 ♞xg4 and Black's threats to the queen and rook on h1 are decisive.
- c) 11.♙xf6 is both book and best. Black usually responds 11...♞xf6 with a well known, sharp position. Dubious would be 11...♙xf6?! when 12.♙xb5! now works. If you are Black and fall into that trap, then by far best would be 12...♞b8! with chances. Accepting the piece with 12...axb5 13.♞dxb5 ♖b6 14.♞xd6+ ♔f8 15.e5 ♞b8 16.b3 is winning for White.

**Answer 2-9**

**White to play:** Which of the following are safe?

- a) 12.♙xb5   b) 12.e5   c) 12.♙xf6   d) 12.g4



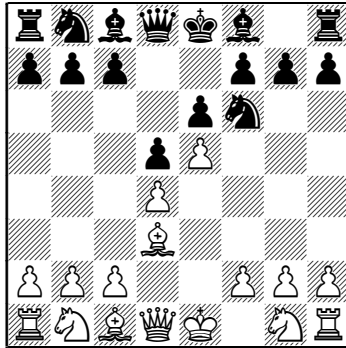
- a) Moving the bishop again to sacrifice it would rarely be correct, and here it is not: 12.♙xb5? axb5 13.♞dxb5 ♚b8 and White has no good follow-up. Not safe.
- b) 12.e5 is safe but speculative, but only if you are willing to sacrifice your queen! 12...♙b7 13.exf6! (this is the point of 11.♙e2 in this variation) 13...♙xf3 14.♙xf3. Now Black has a choice of 14...♙xf6 or 14...d5, but either way White gets sufficient compensation for the queen, though nothing more than that.
- c) 12.♙xf6 is best. After 12...♞xf6 13.e5 ♙b7 14.♚g3, White gets good pressure.
- d) 12.g4 is dubious because of 12...b4 13.♞b1 (to answer 13...♙b7 with 14.♞d2) 13...♙b7 14.♞d2 ♞c5 and now the hanging bishop at h4 makes 15...♞fxe4 possible and Black wins a pawn, at least. Not safe.



**Answer 2-10**

**Black to play:** Which of the following are safe?

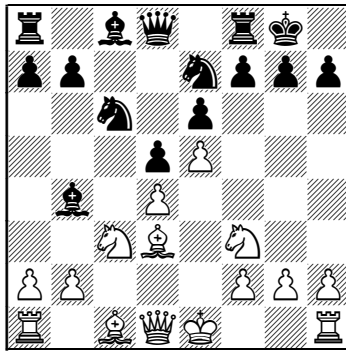
- a) 4...♖g8   b) 4...♘e4   c) 4...♙b4+   d) 4...♘fd7



- a) Yes, 4...♖g8 is safe, but passive.
- b) While 4...♘e4 is temporarily safe, in the not-so-long run there's danger because the knight has no safe retreat squares. After 5. ♖e2 c5 6.f3 the knight is already in trouble.
- c) 4...♙b4+? is a common beginner's mistake: *"You can't bully me and make my knight move! I will counterattack!"* But after the simple 5.c3 Black has not only postponed his decision about how to save the knight, he has made complete safety impossible because both the knight and bishop are attacked by pawns. *In most cases, if a piece is attacked by a piece of lesser value, the best thing to do is to move it!*
- d) Yes, 4...♘fd7 is clearly the safest and best move.

**Answer 2-11**

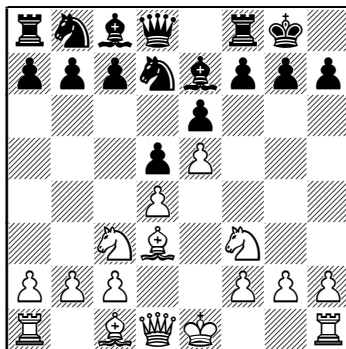
**White to play:** Is 9. ♖xh7+ safe?



Yes, the sacrifice is “safe and sound”: 9. ♖xh7+ ♔xh7 (as almost always, if Black does not accept the sacrifice, the capture must have been sound) 10. ♘g5+ ♔g6 (a good pattern to know is 10... ♔g8 11. ♗h5 ♖e8 12. ♗xf7+ ♔h8 13. ♗h5+ ♔g8 and now White has time for 14. 0-0+-) 11. h4! and White wins, e.g. 11... ♗a5 12. ♗d3+ f5 13. h5+ ♔h6 14. ♘xe6+ ♔h7 15. ♘xf8+ +-.

**Answer 2-12**

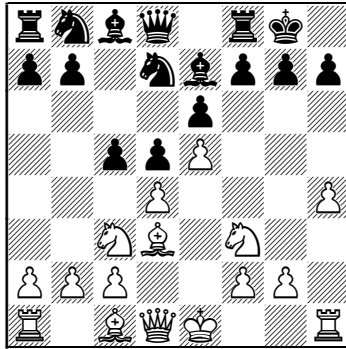
**White to play:** Is 7. ♖xh7+ safe?



No, this is a well-known case where White lacks sufficient fire-power as the ♘g5+ follow-up is covered by the bishop and queen: 7. ♖xh7+ ♔xh7 8. ♗d3+ (what else?) 8...g6 9. h4 ♖h8, and Black survives with an extra piece.

**Answer 2-13**

**White to play:** Is 8.♔xh7+ safe?

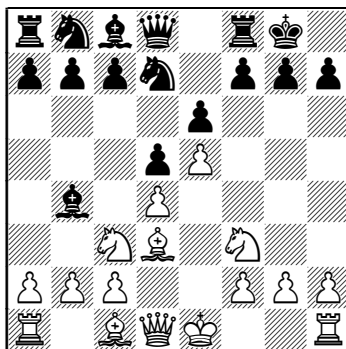


Yes, the pawn on h4 makes all the difference, as the generic sequence ♖g5+ ♗xg5 hxg5+ opens the h-file with check, e.g. 8.♔xh7+ ♖xh7 (Black is losing so badly on acceptance that the engine suggests 8...♖h8 is better!) 9.♖g5+ ♔g6 (9...♖h6 loses the queen to a knight discovery and 9...♗xg5 10.hxg5+ is mate in 5 after 10...♔g8 11.♗h5 f5 12.g6 ♗h4 13.♗xh4 cxd4 14.♗h7#), and White mates in 7 with 10.♗d3+ f5 11.exf6+ ♖xf6 12.h5! ♖e5 13.dxe5+ ♖xe5 14.♗g3+ ♖d4 15.♗h4+ ♗f4 16.♗xf4#.

You don't need to see all this to make the sacrifice; you just need to analyze far enough to decide that you have sufficient firepower to carry out the attack. At some point in your analysis you should say, "Yes, this will work!"

**Answer 2-14**

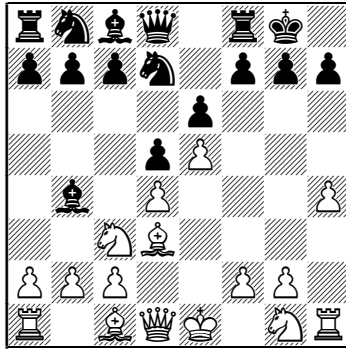
**White to play:** Is 7.♔xh7+ safe?



Yes, here it all clicks sufficiently: 7. ♖xh7+ ♔xh7 (7... ♖h8 8. ♗g5+-) 8. ♗g5+ ♕g6 (as usual 8... ♖g8 9. ♖h5+-) 9. h4! f5 10. h5+ ♖h6 11. ♗e6+ winning the queen.

**Answer 2-15**

**White to play:** Is 7. ♖xh7+ safe?



For the only time in our 5-position set, 7. ♖xh7+ is safe, but it does not win – an unusual “neutral” attempt. Instead, White’s best move is 7. ♗f3 when Black should prevent the sacrifice with 7...h6.

If White does sacrifice, it’s not as good: 7. ♖xh7+ ♔xh7 (7... ♖h8?? allows mate in 8 with 8. ♖h5) 8. ♖h5+ ♕g8 9. ♗f3, and now Black should counter-sacrifice with 9... ♗f6! when after 10. exf6 ♖xf6 White’s attack is broken and he only has a tiny advantage, less than if he had just played 7. ♗f3.

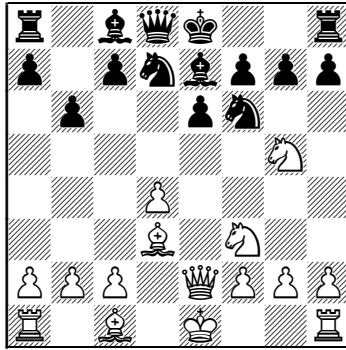
**Answer 2-16**

**Black to play:** Which of the following are safe?

- a) 8...h6
- b) 8... ♖b7
- c) 8...0-0
- d) 8... ♖b4+
- e) 8... ♗f8

*(see diagram next page)*

## Openings



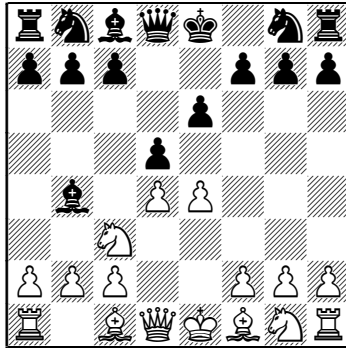
This is a tough question. The answer is Black has no safe moves; White is winning.

- a) Surprisingly, the very dangerous-looking 8...h6 is as good as any move for Black (equal with the sour 8...♖b8 and line (d), 8...♙b4+), as none of his moves are safe! After 8...h6 9.♗xe6 fxe6 10.♙g6+ ♔f8 11.♚xe6 White has a winning attack, but Black at least can avoid resignation with 11...♙b4+ 12.♙d2 ♚e7 13.♙xb4 ♚xb4+ 14.♔d1 ♚e7 15.♚c6 ♖b8 16.♗e1.
- b) The plausible 8...♙b7, like many other moves, loses to the stock sacrifice 9.♗xf7!:
  - 9...♔xf7 10.♗g5+ ♔e8 11.♗xe6 and White gets a winning attack, e.g. 11...♚b8 12.♙f4 ♔f7 13.0-0 and Black's king will never escape the crossfire.
  - If instead 9...♙xf3 10.♚xe6 ♚c8, then the simple 11.gxf3 leaves White with a winning attack.
- c) 8...0-0 loses to 9.♗xh7, and if 9...♗xh7 then either 10.♚e4 or 10.♙xh7+ ♔xh7 11.♚e4+ wins material as the rook hangs on a8.
- d) 8...♙b4+ doesn't help much. After 9.c3 ♙d6 (what else?) 10.♗xf7 ♔xf7 11.♗g5+ ♔e8 12.♗xe6 ♚e7 13.0-0, White again has a great game, or White can even try 10.♗xh7, though that's likely not quite as good.
- e) After 8...♗f8 9.♗e5 White gets an unstoppable threat against f7, similar to a well-known trap in the Caro-Kann.

**Answer 2-17**

**White to play:** Which of the following are safe?

- a) 4.♔d2   b) 4.a3   c) 4.♖ge2   d) 4.♗g4   e) 4.♗f3



The most common move in grandmaster play is the obviously safe 4.e5, meeting the “threat” of ...dxe4. But some of the alternatives are interesting:

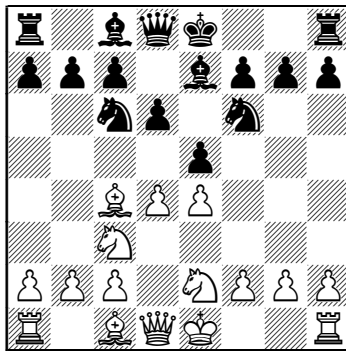
- a) 4.♔d2 is speculative – this common beginner’s move leads to some complications where White has to give up a pawn: 4...dxe4! (Black can pull a removal-of-the-guard tactic with 4...♔xc3 5.♔xc3 dxe4 but then 6.♗g4, a good pattern to know, attacks both e4 and g7 and wins back the pawn) 5.♗g4! (better than the mundane 5.♗xe4?! ♗xd4 and White doesn’t have nearly enough for his pawn) 5...♗f6 6.♗xg7 ♖g8 7.♗h6 and now, even though Black can play 7...♗xd4, which may not be best, White would have enough compensation for his pawn.
- b) Yes, it is safe. Again, as in answer (a) (first parenthetical remark in that answer), removing the guard with 4.a3 ♔xc3+ 5.bxc3 dxe4 allows White to win back the pawn with 6.♗g4.
- c) Speculative – 4.♗ge2 dxe4 5.a3 ♔xc3 (other moves will soon allow ♗xe4, e.g. 5...♔a5?! 6.b4 ♔b6 7.♗xe4 is comfortable for White, but 5...♔e7 is perfectly good) 6.♗xc3 ♗c6 (6...f5?! 7.♔f4 or 7.f3 and White has plenty of compensation for the pawn) and White has enough compensation for his pawn, but no more, whether he tries 7.d5 or 7.♔e3?!

- d) Yes, it is safe. After the now familiar pattern 4. ♖g4 ♘f6 5. ♗xg7 ♜g8 6. ♗h6, Black will be fine with 6... ♜g6 and then ...c7-c5 or the immediate 6...c5.
- e) No, not safe; this is going too far. After 4. ♘f3?, following the simple 4...dxe4 5. ♘g5 ♘f6 White does not have nearly enough compensation for the pawn deficit.

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When Black has a queen at d8, a bishop at e7, and a knight at f6, sometimes ♗f1-g5 for White is satisfactory, but sometimes it is a tactical mistake allowing a discovered attack: Black can move the knight at f6 to advantage. These tactics sometimes result in a pair of desperado pieces – the black knight and the white bishop – and difficult Counting problems arise. Let's examine the answers for the four positions (2-18 through 2-21) asking about ♗f1-g5:

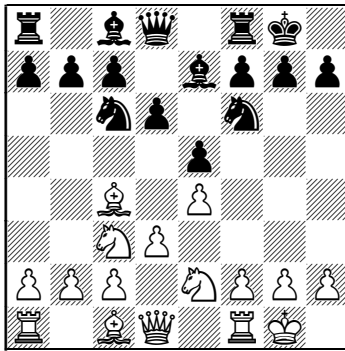
**Answer 2-18**  
**White to play: Is 6. ♗g5 safe?**



6. ♗g5 allows 6... ♘xe4 7. ♗xe7 (as often is the case, 7. ♘xe4 is simply met by 7... ♗xg5 with the queen and bishop in a battery winning back the piece on g5 while retaining the extra pawn) 7... ♘xc3 8. ♗xd8 ♘xd1 9. ♜xd1 ♘xd8 and White has insufficient compensation for the pawn. Instead White should play 6. 0-0 although the engine also suggests the anti-positional 6. d5, blocking the bishop on c4 just to attack the knight – that's usually not a good long-term idea.

**Answer 2-19**

**White to play:** Is 7.♔g5 safe?

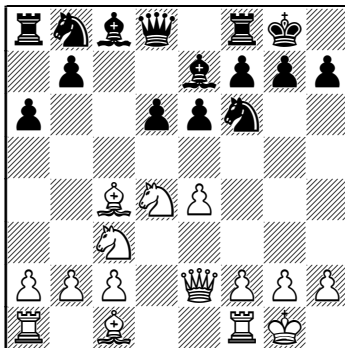


Now 7.♔g5 is safe (although not the best move). Black's attempt to take advantage with 7...♖xe4? fails to 8.♗xe7 ♖xc3 9.♗xd8 ♖xd1 10.♗xc7 ♖xb2 11.♗b3 trapping the knight with a big advantage to White. If you compare this problem to 2-18, you can see there is often a fine line between a position where ♔g5 is safe and one where it is not, so you always must be careful when making that move in a similar but not identical position. The engine suggests 7.a3 to preserve the bishop pair against ...♖c6-a5.

The final two are from a conventional ♗c4 Najdorf Sicilian:

**Answer 2-20**

**White to play:** Is 9.♔g5 safe?





## Openings

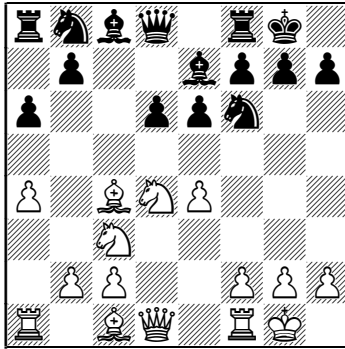
No, 9.♔g5 is not safe. Black should reply 9...♖xe4 and if:

- 10.♖xe4 ♕xg5 11.♗xg5 ♔xg5 keeps the pawn; while
- 10.♕xe7 ♖xc3 11.♕xd8 ♗xe2+ 12.♕xe2 ♖xd8 is also good for Black.

Instead White has several safe moves such as 9.♕b3, 9.♖d1, 9.a3, 9.a4, or 9.♕e3.

### Answer 2-21

**White to play:** Is 9.♔g5 safe?



Yes, this time 9.♔g5 is safe. If 9...♖xe4? 10.♕xe7 and then

- 10...♔xe7 (best) 11.♖xe4 d5 12.♕xd5 exd5 13.♗c3±;
- 10...♖xc3 11.♕xd8 ♗xd1 12.♕e7 ♖xb2 13.♕b3 when saving the exchange and trying to simultaneously extricate the knight will cost Black, e.g. 13...♖e8 14.♕xd6 e5 15.♖fe1!+-.

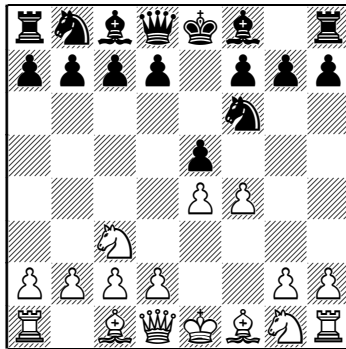
Although 9.♔g5 is safe, it is not necessarily best. White doesn't have a lot better, but perhaps 9.♕e3 or 9.♖e2 are slight improvements. Of course, if you think there is a strong chance that your opponent will be tempted by 9.♔g5 ♖xe4?, then it is perfectly playable. *Never make a bad move and hope that your opponent will*

*play a worse one. However, if you have several equally playable moves and some of them set traps or problems for your opponent, then from a practical standpoint it makes sense to give these candidates priority.*

### Answer 2-22

**Black to play:** Which of the following are safe?

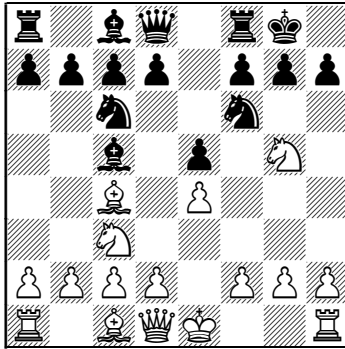
- a) 3...exf4    b) 3...♙c5    c) 3...d5    d) 3...d6



- a) 3...exf4 is a well-known inaccuracy. After 4.e5 ♘g8! (making the best of an awkward situation; the engine taught me something: Black's interpolating the commonly played 4...♙e7? 5.♙e2 ♘g8 gives White almost a winning position after 6.d4 or 6.♘f3) 5.♘f3 d6 (or 5...d5) keeps the damage to a minimum.
- b) 3...♙c5 is not safe. After the obvious 4.fxe5 Black has no reasonable continuation as 4...♘g8 5.d4+- is disastrous for Black.
- c) 3...d5! is the book and best move. Very safe and aggressive.
- d) 3...d6 is safe but passive. White has a small advantage, but certainly nothing special, after 4.♘f3.

**Answer 2-23**

**White to play:** Is 6.♘d5 safe?

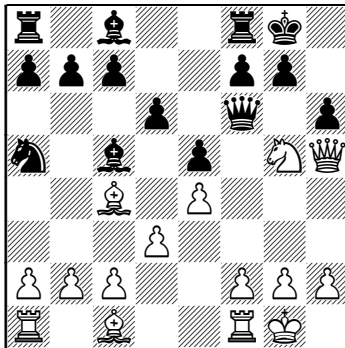


Not safe. After 6.♘d5?, Black wins with 6...♗xd5 7.exd5 ♕xg5 8.dxc6 ♕xg2 9.♖f1 dxc6–+. Instead Black played 6...♗a5?, eventually leading to Problem 2-24.

Never make a bad move and hope that your opponent will play a worse one. However, if you have several equally playable moves and some of them set traps or problems for your opponent, then from a practical standpoint it makes sense to give these candidates priority.

**Answer 2-24**

**Black to play:** Is 10...hxg5 safe?

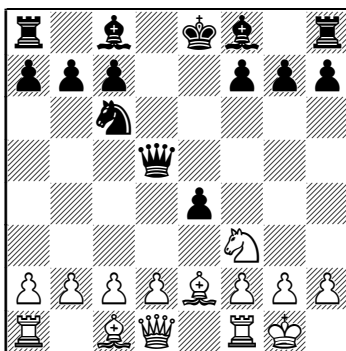


10...hxg5 11.♙xg5 g6! (but not 11...♖g6?? 12.♗xg6+- is a Charles Hertan “sneaky pin”) 12.♗h4 ♖g7 and Black is safe, e.g. 13.♙h6 ♗h7 pinning the bishop. So 10...hxg5! is safe and correct.

### Answer 2-25

**White to play:** Which of the following are safe?

- a) 8.c4 b) 8.♘h4 c) 8.♞e1 d) 8.♘e1



- a) 8.c4 is safe. Although it weakens d3 and d4, this temporary *Zwischenzug* attacking the queen is rated as good as any other move.
- b) No, 8.♘h4 is not safe due to the thrust 8...g5, trapping the knight. I call this idea “AWL” – meaning, first look to see if you can Attack it with something Worth Less. Utilizing AWL is more forcing than attacking with something of greater or equal value, plus it removes the possibility of guarding. For example, if instead 8.♘h4 ♙e7?!, White can simply save the knight with 9.g3. The position after 9...♙xh4 10.gxh4 may be bad for White, but it’s much better than losing a piece. Even if Black were castled kingside, ...g7-g5 trapping the knight would still be correct. If you were playing Black and lost later due to an exposed king, it would be because your later play was poor, not because 8...g5 was bad – it’s not.
- c) No, the tricky 8.♞e1 is not safe. Just because Black cannot play the immediate 8...exf3? 9.♙xf3+ winning the queen, doesn’t mean 8.♞e1 is a good move. All Black has to do is meet 8.♞e1?

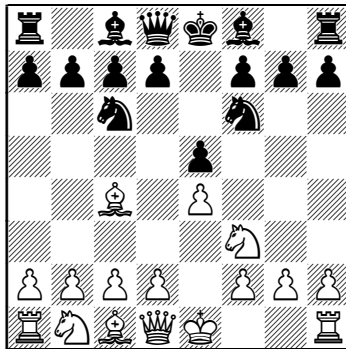
with 8...♙e7 and Black has taken the knight's only safe square! This is what happened in the root amateur game where this position occurred.

- d) 8.♘e1 is safe, and likely the move most masters would play (the ones that assumed that 8.c4 first would not gain anything). As I have written elsewhere, it's a retreat only in direction: White will later attack the center with d2-d3 and Black's advantage will not be all that great.

### Answer 2-26

**White to play:** Which of the following are safe?

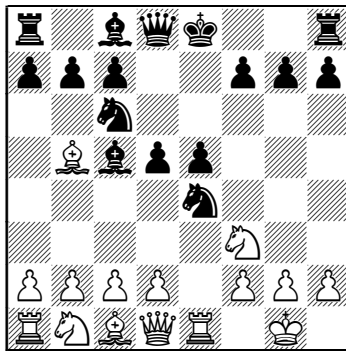
- a) 4.d4   b) 4.0-0   c) 4.♘c3   d) 4.♘g5



- a) Yes, 4.d4 is the Max Lange Attack. For example, if 4...exd4 then 5.e5 and White will eventually recover his pawn.
- b) No, 4.0-0 just leaves the e-pawn hanging and, after 4.0-0 ♜xe4 5.♞e1 d5 6.♙b5 ♙c5, we reach Problem 2-27. White gets decent but not complete compensation for the pawn after moves like 5.d4, 5.♞e2, or 5.♙b5, but at best it's speculative.
- c) Yes, 4.♘c3 is safe, but it's a well-known inaccuracy. Black can play 4...♘xe4!, the center fork trick, and after 5.♘xe4 d5, Black has easy equality.
- d) Yes, 4.♘g5 is the main "classical" line and computers think White has a fairly nice advantage already as it is awkward for

Black to save f7. The main line is 4...d5 5.exd5 ♖a5 (5...♘xd5? 6.♘xf7! is the well-known Fried Liver Attack). Therefore, GM Larry Kaufman now recommends that Black play the Giuoco Piano 3...♙c5 instead of the Two Knights' Defense 3...♘f6.

**Answer 2-27**  
**White to play: Is 7.d4 safe?**



This problem is murkier. Keep in mind that White is down a pawn to begin with; he lost it by playing 4.0-0 in Problem 2-26. Superficially 7.d4 is safe, as the only move that might make it immediately unsafe is 7...exd4 8.♘xd4 and if 8...♙xd4 then 9.♙xd4 is safe as the black knight on c6 is pinned.

However, Black has some not-so-obvious alternatives. The logical 7.d4 exd4 8.♘xd4 ♜f6, attacking f2 and d4, is a good try. Then White has nothing better than 9.♙e3, and he is safe, comparative to the beginning of the problem.

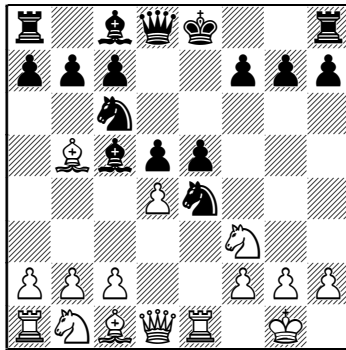
Even better for Black is 7.d4 exd4 8.♘xd4 0-0! activating the c6 knight. Then if 9.♙e3 (9.♘xc6? ♙xf2+ 10.♔h1 bxc6 11.♙xc6 ♙g4! wins for Black) 9...♘xd4 10.♙xd4 ♘xf2!—+ when all the complications favor Black.

What does all this complexity mean? First, White should settle for 7.d4 exd4 8.♘bd2 with the idea of 9.♘b3, when he will get his second pawn back (thus ultimately making the answer “7.d4 is safe!”) and remain a pawn behind.

Second, we can see that if one or both sides make tactically questionable moves, the game can quickly get very complicated. In turn, these complications might possibly even decide the game in the first few moves of the opening.

Finally, sometimes determining whether a move is safe is not easy from two perspectives: the analysis may be difficult, and evaluating the position as safe may be problematic! That's chess.

**Answer 2-28**  
**Black to play: Is 7...a6 safe?**



No, 7...a6 is not safe due to the Counting sequence 8.♙xc6+ bxc6 9.dxc5 winning a piece.

Strangely enough, 7...a6 was played by a former student, an intermediate player. He was so embarrassed by this mistake that he wanted to send it to me “...so you can show it to future students and make sure they don't make the same mistake I did!”

Although he was not a beginner, he said his faulty reasoning was that because the knight was pinned, he could not win the pawn on d4. Therefore, he erroneously thought he should meet the threat of 8.dxc5 by the counter-threat of 8...axb5, with the idea that resolving the pin at worst should put pressure on d4.

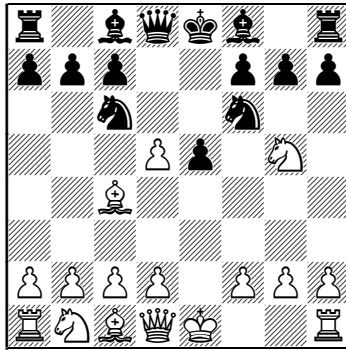
By my view, I would say he was Counting on c5 (lose a piece) and b5 (gain a piece) instead of checking all the possible capturing squares. If

he had also counted on c6 (even trade) and c5 (lose a piece), then he would have seen that after 8.♙xc6+ (getting a piece equal in value to the one attacked, with check yet) 8...bxc6 (there's nothing better – too late) 9.dxc5 he only gets an equal trade on c6 before losing the piece on c5.

### Answer 2-29

**Black to play:** Which of the following are safe?

- a) 5...♗xd5   b) 5...♗a5   c) 5...b5   d) 5...♗d4



This is one of the most famous opening positions from the Two Knights' Defense. Consult your local Two Knights' book for additional information.

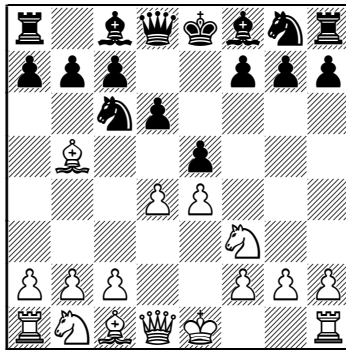
- a) The most obvious “safe” move, the recapture 5...♗xd5, is considered the most unsafe for Black! White should (and usually will) play the well-known Fried Liver Attack with 6.♗xf7 ♕xf7 7.♚f3+ ♔e6 8.♗c3 ♗b4 and now computers have found that both 9.♙b3 and 9.0-0 give White good winning chances. (Note: Several years ago, I helped prove, with computer help, that the formerly recommended alternative to the Fried Liver, the Lolli 6.d4!?, may not be as good – see the Forum in the *New in Chess Yearbook* #94.)
- b) Safest is the main book move 5...♗a5 when after 6.♙b5+ both the main line 6...c6 and the engine move 6...♙d7!? are OK for Black. Pinski also recommends 6...♙d7 as “underestimated” in his 2003 book, *The Two Knights Defense*.



- c) The ostensibly unsafe 5...b5 (the Ulvestad Variation) is actually a complex gambit. White is best advised to play the non-intuitive 6.♔f1.
- d) The final main line is 5...♘d4 (the Fritz Variation – no, not named after the chess engine *Fritz*), when 6.c3 b5 7.♔f1 may follow.

### Answer 2-30

**Black to play:** Is 4...♘f6 safe?



Black's two best moves in this position are 4...exd4 and 4...♙d7. But how about 4...♘f6 ?

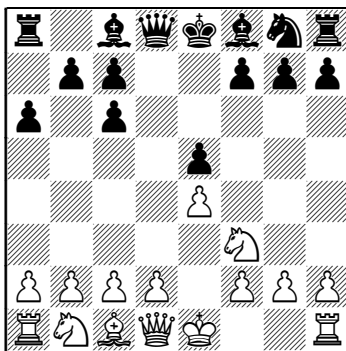
First, it is important to know that 5.d5 does *not* win a piece due to the well-known defense 5...a6. In fact, the engine does not rate 5.d5 higher than the second- or third-best move.

Best is 5.dxe5, when both sides need to play accurately: White to retain a big advantage and Black to not lose too much: 5.dxe5 ♗xe4 6.♙d5! ♘c5 7.♘g5! (7.♙xc6+ bxc6 8.♙xc6+ ♙d7 9.♙d5 is only slightly better for White) 7...♗e6! 8.♙xc6+ bxc6 9.♙xc6+ ♙d7 10.♙f3 ♗xg5 11.♙xg5 ♙c8 12.♙f4, and White is better as Black's bishop pair is not enough compensation for his lost pawn. So in this sense only we could say that 4...♘f6 is not safe.

### Answer 2-31

**White to play:** Which of the following are safe?

- a) 5.0-0   b) 5.d4   c) 5.♘xe5



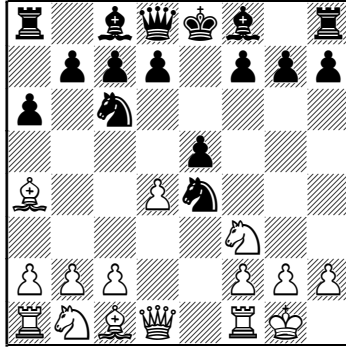
- a) Yes, 5.0-0 is safe. It is also the most popular move, and has been so since Bobby Fischer resurrected it in 1966.
- b) Yes, 5.d4 is safe. It was formerly the most popular move and was featured in a key Em. Lasker–Capablanca game at St. Petersburg, 1914.
- c) Yes, 5.♘xe5 is safe, but it isn't all that good. Black has three possible double attacks/skewers to get his pawn back: 5... ♖e7, 5... ♗g5, and 5... ♗d4. It turns out that 5... ♗g5 is at best equal, 5... ♖e7 might give Black a very tiny advantage, but 5... ♗d4 gives Black a definite small advantage after 6.♘f3 ♗xe4+ 7.♖e2 ♗xe2+ 8.♙xe2, not because White can't castle (the most common guess by my students) but because of the bishop pair. Similarly, after 6.♘g4 ♗xe4+ 7.♘e3 ♙e6 (7... h5!?) Black's bishop pair more than easily compensates for his small pawn structure disadvantage.

A safe move may not be best, or even close to best. For example, if a move takes you from a position where you have a slight advantage to one with a slight disadvantage, that may be safe from a definition standpoint, but it's still usually not good, wise, or suggested. In this problem, 5.♘xe5 is technically safe (unless we count the bishop pair as losing material) but it's clearly not as good as the alternatives.

**Answer 2-32**

**Black to play:** Which of the following are safe?

- a) 6...exd4 b) 6...b5 c) 6...d5



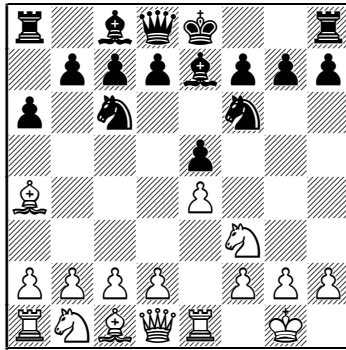
- a) 6...exd4 is the interesting Riga Variation, recommended by GM Soltis in his book *Grandmaster Secrets: Openings*. It is unpopular at grandmaster level due to the forcing line first played by Capablanca: 7.♖e1 d5 8.♘xd4 ♙d6 9.♘xc6 ♙xh2+ 10.♔h1 ♚h4 11.♗xe4+ dxe4 12.♗d8+ ♚xd8 13.♘xd8 ♔xd8 14.♔xh2 ♙e6, with a slight endgame advantage to White (15. ♙e3±; Capablanca–Ed. Lasker, New York 1915) and very few winning chances for Black. As Soltis points out, even if your opponent knows this line, you are still likely OK. I suggested this variation to radio personality Howard Stern, who played the Riga about 100 times in slow and fast games on the Internet Chess Club and *not once* did his opponent, human or computer, play White's best line! So in all of these games Howard was either equal or better, with Black! Not bad...
- b) 6...b5 is the Main Line of the Open Variation of the Ruy López. Very safe.
- c) 6...d5 can be viewed as a speculative sacrifice based on the interesting line 7.♘xe5 ♙d7 (Black has nothing better) 8.♘xf7! ♔xf7 9.♗h5+ g6 (other moves are losing) 10.♗xd5+ ♔g7 11.♗xe4 ♙d6. Black is down two pawns but White has to be careful about possible threats to the kingside. Still, White is much better after 12.♙e3!.

I suggested the Riga Variation to radio personality Howard Stern and, in about 100 games, not once did any of his opponents play White's best line!

### Answer 2-33

**Black to play:** Which of the following are safe?

- a) 6...0-0   b) 6...b5   c) 6...d6   d) 6...♘d4



The key to this problem is that *in the Ruy López, once White guards the e-pawn (via ♖e1, d2-d3, ♕e2, or even ♞c3), then he is threatening the removal-of-the-guard tactic ♙xc6 dxc6 ♞xe5*. Unlike the previous problem, Black cannot regain the pawn.

- a) No, 6...0-0 is a common amateur mistake and not safe. White can just play 7.♙xc6 dxc6 8.♞xe5 and win a pawn at the cost of the bishop pair. Black cannot play 8...♗d4 due to 9.♞f3 (see Answer 2-34). I have seen the mistake 6...0-0 played several times in amateur games. Amazingly, White (usually rated about the same level) often does not realize that anything is amiss and plays a move like 7.c3, letting Black off the hook and making it a double-blunder. Then usually Black plays 7...b5 or 7...d6 and the game proceeds “normally” as if nothing unusual has ever happened!
- b) Yes, one of the reasons Black plays 3...a6 when it is safe is so that here it is possible to play 6...b5, preventing the possibility of a removal-of-the-guard capture. After 7.♙b3 we are in

the main line of the Closed Ruy Lopez, when Black can choose either 7...d6 or 7...0-0.

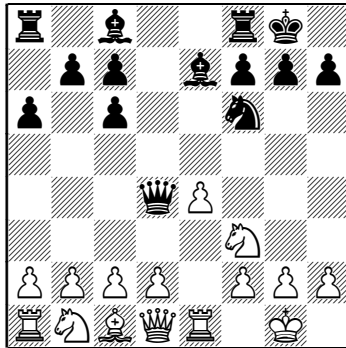
- c) Yes, 6...d6 is safe and is the rarer, but sound Steinitz Doubly Deferred Variation. Without a database, *Stockfish 6* at 25 ply rates 6...d6 as about equally good as the much more common 6...b5. Those two moves were clearly better than all other alternatives.
- d) No, 6...♞d4 is not safe. Black has inadequate compensation after 6...♞d4 7.♞xe5 b5 8.♙b3 ♞xb3 9.axb3.

In the Ruy López, once White guards the e-pawn (via ♜e1, d2-d3, ♙e2, or even ♞c3), then he is threatening the removal-of-the-guard tactic ♙xc6 dxc6 ♞xe5.

### Answer 2-34

**Black to play:** Which of the following are safe?

- a) 9...♞xe4    b) 9...♙b6    c) 9...♙g4



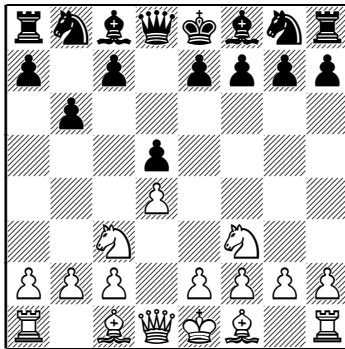
- a) No, 9...♞xe4?? is not safe. White can save the f2-pawn by capturing the queen 10.♞xd4.
- b) Yes, Black's move 9...♙b6 is safe, but he remains down a pawn after his move 6 mistake.

- c) No,  $9... \text{♙g4??}$  is not safe. This is a Counting problem several of my students have gotten wrong, as the “pin” is a phantom pin and the Counting sequence  $9... \text{♙g4??}$   $10. \text{♜xd4}$   $\text{♙xd1}$   $11. \text{♞xd1}$  wins a piece.

### Answer 2-35

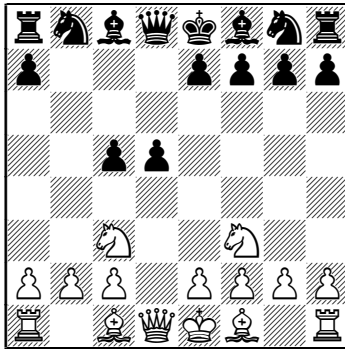
**Black to play:** Which of the following are safe?

- a)  $3... \text{c5}$    b)  $3... \text{e5}$



- a) No,  $3... \text{c5?}$  loses a pawn to the discovered attack  $4. \text{dxc5}$   $\text{bxc5}$  and then the black d-pawn falls. This is interesting and important for two reasons:
- I have seen dozens of amateur players drop pawns in the opening to very similar discovered attacks. It is a very common problem among lower-rated players, who have a tendency to concentrate too much on the square of the moving piece (c5) and not enough on the other squares affected – in this case d5. If you can quickly see that  $3... \text{c5}$  is not safe, then count yourself lucky. There are many who either learn to recognize this type of common discovered attack the hard way or never seem to learn it at all.
  - What is also interesting is how White should capture on d5:

## White to play



Everything I know about this type of position tells me that White should play 5. ♔xd5, threatening the rook and virtually forcing Black to trade queens. White will be ahead material after the capture, and “everybody knows” that you should trade pieces (especially queens) when ahead. Moreover, you want to capture with the piece that has not yet moved (the queen) rather than the one that already has (the knight).

However, when I show this position to players rated below about 1600, the great majority want to capture with the knight! It comes as a revelation to them that this is an excellent time to practice “*trade queens when you are winning*” even though they almost all claim to already be familiar with that principle. For the record, *Stockfish 6* rates 5. ♔xd5 as about +2.82 and 5. ♘xd5 as about +0.98 although, to be fair, there are deeper reasons for such an enormous difference.

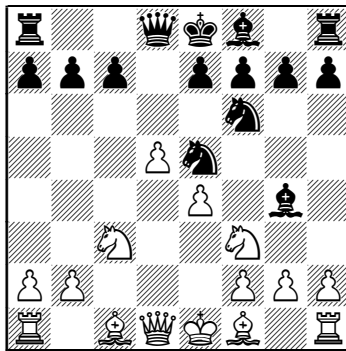
- b) No, 3...e5 is not safe. Just trying to keep you on your toes. What is interesting is that the engine’s two top candidate moves to refute 3...e5 are not 4. ♘xe5 and 4. dxe5, but 4. ♘e5 and 4.e4, which evaluate very closely – both have White ahead by about 1.4 pawns.

Sometimes you can learn quite a bit about openings and safety from studying positions that cannot arise from “normal” opening play.

**Answer 2-36**

**White to play:** Which of the following are safe?

- a) 8.♙e2   b) 8.♙e3   c) 8.♘xe5



The Marshall Defense (1.d4 d5 2.c4 ♘f6?! or 1.d4 ♘f6 2.c4 d5?!) is dubious. Following 3.cxd5 ♘xd5, White gets a much larger than normal opening advantage after the solid 4.♘f3 (threatening 5.e4) or the more aggressive and complicated 4.e4!?. The position in the problem is one I have seen occur in actual play.

- a) 8.♙e2 is solid and was played in the game. Not losing material, but tame.
- b) 8.♙e3 is similar to 8.♙e2. White is not worried about doubled f-pawns. If Black plays 8...♘xf3+?! 9.gxf3 ♙d7, then White has a dominating center after 10.e5.
- c) 8.♘xe5! is the refutation, a move I considered immediately. This type of queen sacrifice is hard to forget, once you see it. To reject 8.♘xe5 because you “lose your queen” after 8...♙xd1 is a quiescence error. White is winning after the further 9.♙b5+ c6 10.dxc6 when Black has no defense against the

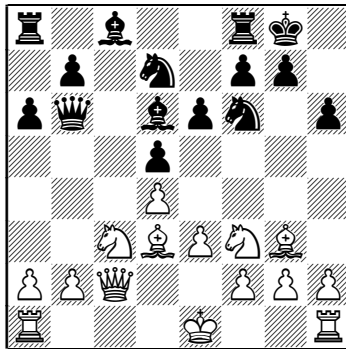


double threats of 11.c7+ and 11.cxb7+. At best Black will end up a piece behind, e.g. 10...a6 (relatively best) 11.c7+ axb5 12.cxd8 ♖+ ♜xd8 13. ♗xd1+.

Since White is winning with 8. ♗xe5 and other moves don't win, we can consider 8. ♗xe5 the only safe move (the only one that preserves the win) and the other moves not safe. If you want to look at it that moves like 8. ♕e2 are "just safe" and 8. ♗xe5! wins, that's just a matter of semantics and definition. However, I prefer my way of viewing it: if you have a winning continuation and you make a move that throws away the win (or misses it, which amounts to the same thing), that's not safe.

### Answer 2-37

**White to play:** Is 12. ♗e5 safe?



This is a game I played as Black against a class player, and I messed up the opening – White is much better *before* 12. ♗e5. But as soon as White played it, I asked the question, “Is it safe?” and almost immediately suspected it was not. Analysis (always a necessity) proved me correct:

Obviously Black cannot play 12... ♗xe5?? 13.dxe5, forking the bishop and knight and winning a piece for White. So the main try is 12... ♕xe5 and now White has two ways to capture, both insufficient:

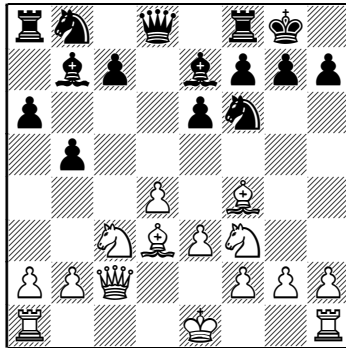
- 13.♙xe5 ♖xe5 14.dxe5 ♗g4 was played in the game. The e-pawn cannot be saved as 15.f4 hangs the e3-pawn to both the queen and knight.
- 13.dxe5 when Black has two ways to try to gain the advantage. The better move is 13...♗h5! to remove the guard on e5. Then if 14.♙f4 (else 14...♗xg3 and 15...♗xe5) Black has 14...d4! undermining White's center. 14...♗c5 and 14...g5 are also possible. On move 13 Black's other try 13...♗g4?! is not as good, as White can sacrifice the e-pawn with compensation with 14.0-0 ♗gx5 15.♙e2!, with approximately equal chances.

So 12.♗e5 is not safe.

### Answer 2-38

**White to play:** Which of the following are safe?

- a) 10.♗g5   b) 10.0-0   c) 10.♗e5



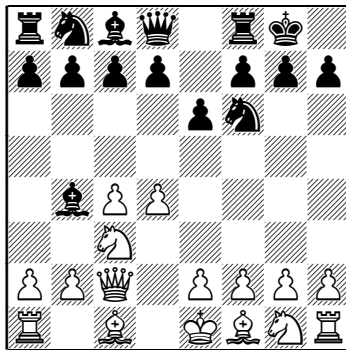
- a) 10.♗g5 was played in the root game and is safe. Although this exposes the g-pawn, Black can't safely take it, e.g. 10...♙xg2? 11.♙xh7+ (11.♖g1 is also winning) 11...♔h8 12.♖g1 ♙h3 (12...♙b7 13.♖g3+-) 13.♖g3 ♙g4 14.♖xg4! ♗xg4 15.♙g8 f5 16.♗xe6+-.
- However, Black can just play 10...g6 with equality, so 10.♗g5 is not best.
- b) 10.0-0 was the engine's top-rated move. This is key for inclusion of the problem in the book: many of my students rated

under 1800 would be deathly afraid of exposing their king after 10...♙xf3?! 11.gxf3. However, 10...♙xf3 may not even be Black's best move! After that, White gets a semi-open g-file (much easier for him to get a rook onto that file than Black!), the bishop pair, and an extra pawn in the center. If White eventually loses to a kingside attack, it would not be because 10.0-0 was bad, but because of poor play later. You might consider 10.0-0 more dangerous with regards to king safety and requiring extra care to play. Maybe, but that does not make it unsafe. In fact, it's quite good.

- c) 10.♘e5 is safe. Again 10...♙xg2? 11.♖g1 ♙b7 12.♙h6 ♘e8 13.♙xh7+ ♔h8 14.♘xf7+ ♖xf7 15.♚g6 ♙f6 16.♚h5! (more computer magic) is winning for White.

### Answer 2-39

**White to play:** Is 5.e4 safe?

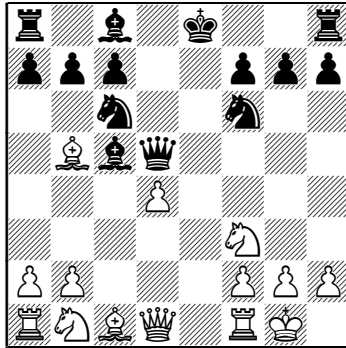


5.e4 is absolutely safe. If you review many master games, you know that 5.e4 is not the main move – 5.a3 is, and 5.♘f3 is also sound. 5.e4 is rare at the master level, but that doesn't mean it is not safe. The engine suggests the reply 5...d5 is best, and this has been played several times at the grandmaster level when Black is at least equal (hence the lack of popularity for 5.e4). If instead 5...♙xc3+?! (to “punish” White with doubled pawns) 6.bxc3, White is doing fine. For more on this line, see Chapter 9 of Bogdan Lalić's book *The Classical Nimzo-Indian*.

**Answer 2-40**

**Black to play:** Which of the following are safe?

- a) 8...♖b6   b) 8...♗d6   c) 8...♕e7   d) 8...♗xd4



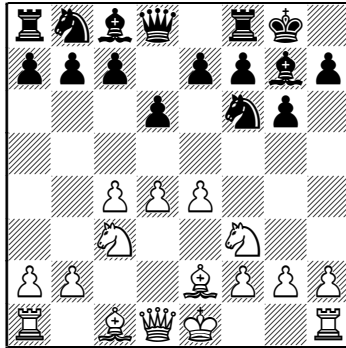
Black is already in big trouble due to some opening inaccuracies (5...d5?) and needs to minimize the damage. But without a little foresight it is easy to go completely over the edge.

- a) The move 8...♖b6 best illustrates the problem. After 9.♘c3 and the queen moves, say 9...♚h5, when White plays 10.d5 Black cannot answer with the traditional 10...a6 11.♗a4 b5 since 11...b5 is not legal. Black loses a piece.
- b) After 8...♗d6 9.♘c3 ♚h5 10.d5 a6 11.♞e1+! ♔f8 12.dxc6 axb5 13.♗f4!+- the bishop is pinned to a mate threat and Black's position crumbles. Not safe.
- c) 8...♕e7 is the best chance. After 9.♘c3 ♚d6 10.d5 a6 11.♗a4 b5 12.dxc6 bxa4 13.♚xa4, White has a huge advantage, but at least the game is not over. This is Black's safest move, even if his position is still precarious.
- d) 8...♗xd4 loses to 9.♘xd4 or 9.♗xc6+ bxc6 10.♞e1+ (or 10.♚xd4) winning the bishop on d4, but not 9.♚xd4?? ♚xb5 and Black is actually better. Not safe.

**Answer 2-41**

**Black to play:** Which of the following are safe?

- a)  $6... \text{♟c6}$    b)  $6... \text{♞bd7}$    c)  $6... \text{e5}$



- a) Yes,  $6... \text{♟c6}$  is safe. However, because White can attack the knight with  $7.d5$  and all of Black's choices have drawbacks,  $6... \text{♟c6}$  is not very popular. If this sequence does happen, White has a much larger than normal opening advantage.
- b) Yes,  $6... \text{♞bd7}$  is safe, but although it is very popular at amateur level (especially among players who want to play the King's Indian Defense but don't study the book *tabiyas*), it is not popular at the international level. First, not only does Black have to deal with the speculative sacrifice  $7.e5 \text{ dxe5 } 8.\text{dxe5 } \text{♞g4 } 9.\text{e6?!}$ , but also White can simply maintain the center with  $7.0-0 \text{ e5 } 8.\text{♙e3}$  when Black is a little cramped. And, as we shall see in the answer to (c),  $6... \text{♞bd7}$  is not necessary to make  $...e7-e5$  safe anyway.
- c) Yes,  $6... \text{e5}$  is safe, and understanding why is not only important to the theory of the King's Indian Defense, but also shows the important concept that *simply counting attackers and defenders on a square is not sufficient to determine safety*.

Although Black is only defending the pawn with another pawn, and it is attacked by a pawn and a knight, attempting

to win the pawn allows a discovered attack that equalizes: 6... e5 7.dxe5 dxe5 8.♖xd8 (8.♗xe5 first does not help) 8...♗xd8 9.♗xe5 (the most common move in this “Exchange Variation” is 9.♗g5) 9...♗xe4, when Black regains the pawn, e.g. 10.♗xf7?? ♗xc3+ (removing the attacker of the e4-knight) 11.bxc3 ♗xf7 wins a piece for Black. No other 10<sup>th</sup> moves for White retain the extra pawn, either, so 6...e5 is safe.

## Chapter 3

# Middlegame

The middlegame is the phase most closely associated with complications, tactics, and danger. Determining which moves are safe can often be a challenging task.

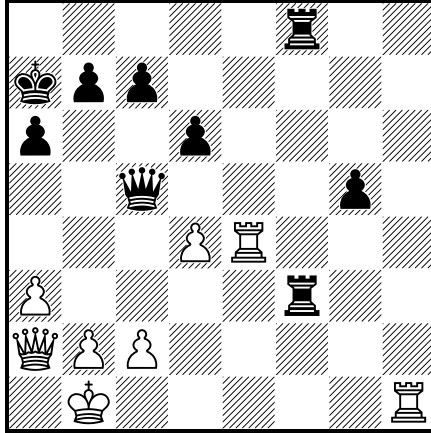
Some players like to play the middlegame by “feel” and, up to a point, this might be feasible. But sometimes you just have to roll up your sleeves, take a bunch of time, and carefully analyze whether your candidate moves are safe. This chapter contains quite a few of this type of position!

When doing middlegame problems, make sure to consider the entire board. As shown in Chapter 1, it is entirely possible that while the piece moving may look safe, the resulting position may include a problem somewhere else among the 64 squares. Keep in mind that a move can be safe yet not very good, so there could be much more desirable safe moves to play.

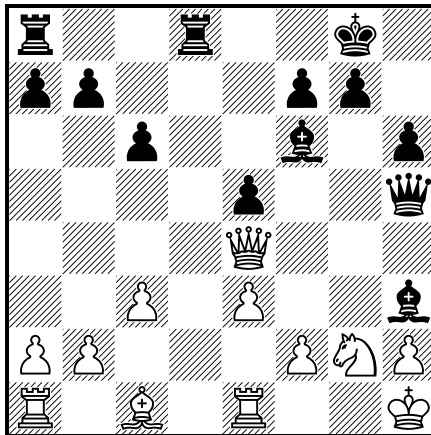
This Middlegame chapter concludes with a twelve-position set derived from a very tactical amateur game.

Other than that set, the positions are very roughly in order of difficulty (easiest first). The reason this order is difficult to determine is not just because difficulty is subjective, but because most of the positions involve multiple possible moves/puzzles, each with their own answer. So it is likely a problem might have one or two moves where it is easy to determine safety and another one or two that are very difficult. Therefore, the overall difficulty of these positions is quite variable. As a result, expect some “easy” positions to possibly have some difficult-to-determine moves, and some “difficult” positions near the end of the chapter to possibly have some easy ones!

**3-1**  
**White to play:**  
Is 1.dxc5 safe?



**3-2**  
**Black to play:**  
Is 1...♞e2 safe?





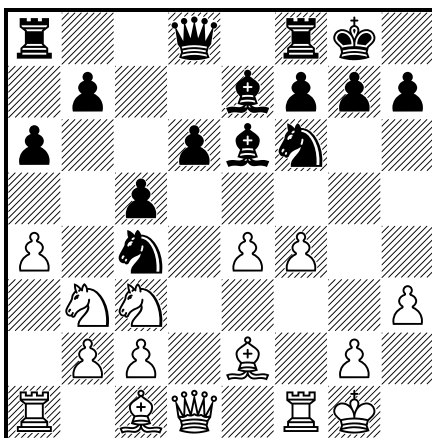
## Middlegame

### 3-3

#### Black to play:

Which of the following are safe?

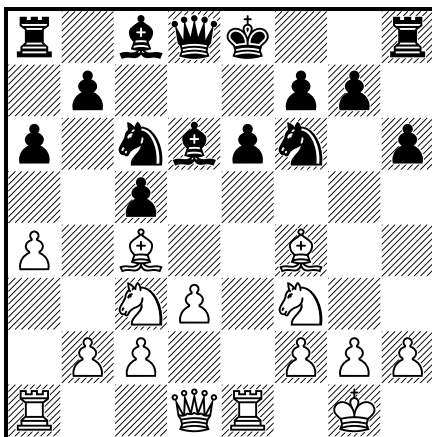
a) 1...♚c7 b) 1...♘a5 c) 1...d5



### 3-4

#### White to play:

Is 1.♘d5 safe?

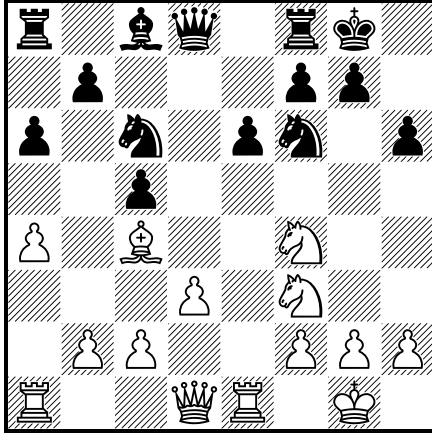


Chapter 3

3-5

White to play:

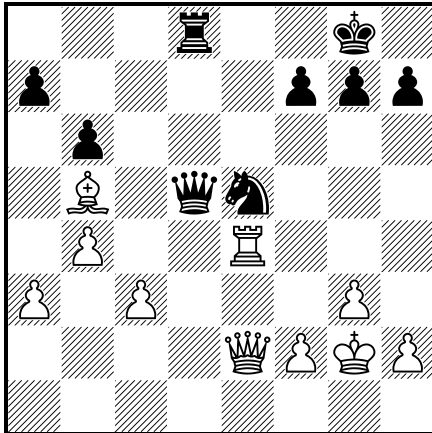
Is 1. ♖e5 safe?



3-6

Black to play:

Is 1...f5 safe?

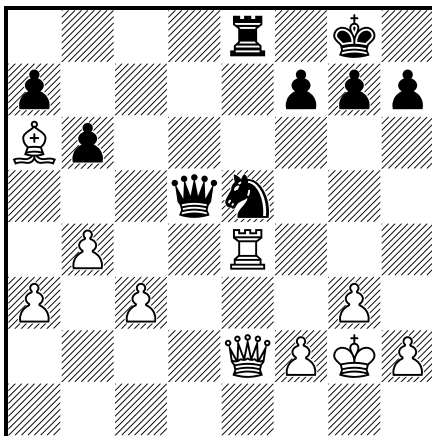


Middlegame

3-7

**Black to play:**

Is 1...f5 safe?

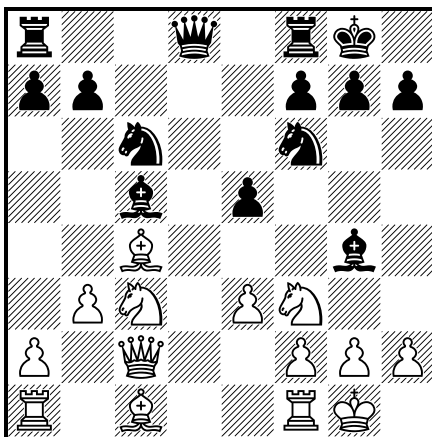


3-8

**White to play:**

Which of the following are safe?

- a) 1.♖d1   b) 1.♙e2   c) 1.♙b2

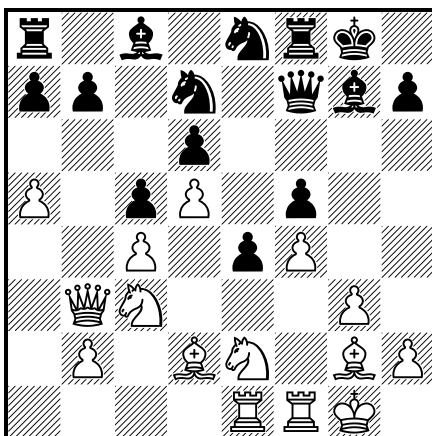


**3-9**

**White to play:**

Which of the following are safe?

- a) 1. ♖d1    b) 1.g4

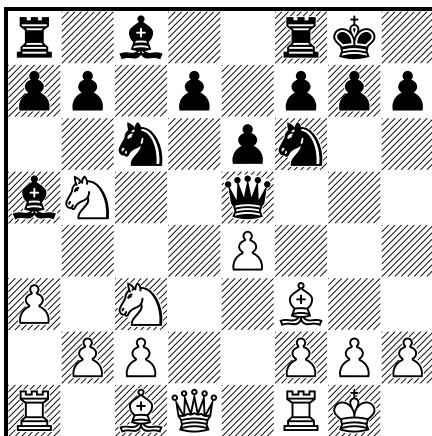


**3-10**

**White to play:**

Which of the following are safe?

- a) 1. ♖d6    b) 1.g3    c) 1. ♚d6



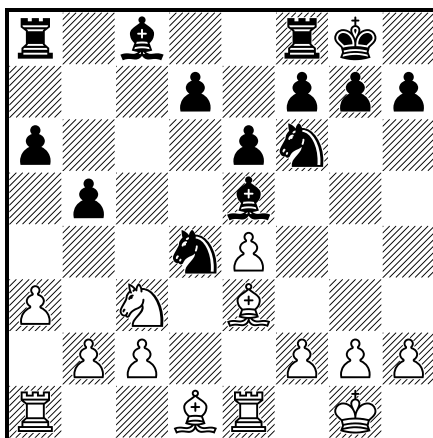
Middlegame

**3-11**

**Black to play:**

Which of the following are safe?

- a) 1...d5   b) 1...♖b7   c) 1...♘c6

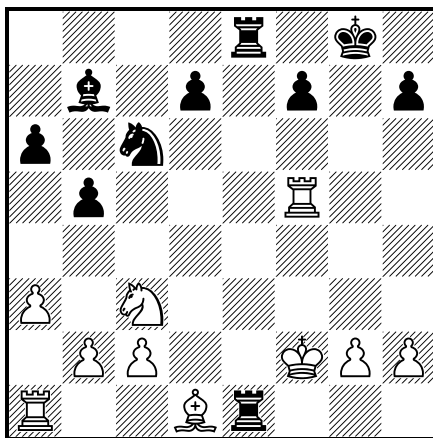


**3-12**

**White to play:**

Which of the following are safe?

- a) 1. ♘d5   b) 1. ♖b1   c) 1. ♗e2

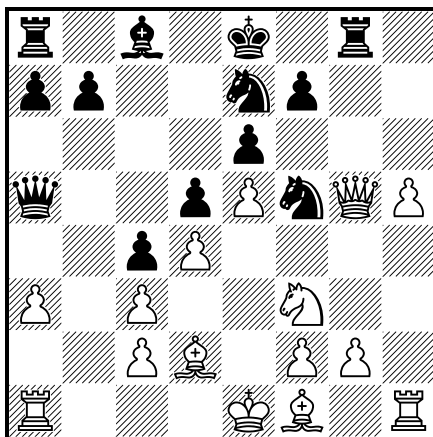


**3-13**

**White to play:**

Which of the following are safe?

- a) 1. ♖f6    b) 1. ♖f4

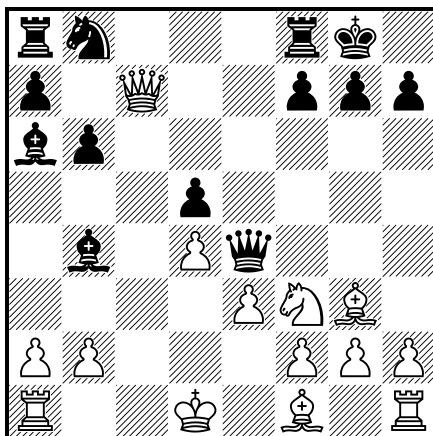


**3-14**

**White to play:**

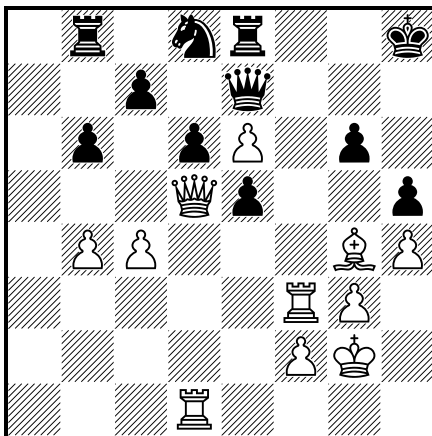
Which of the following are safe?

- a) 1. ♖c2    b) 1. ♖e5    c) 1. ♙xa6

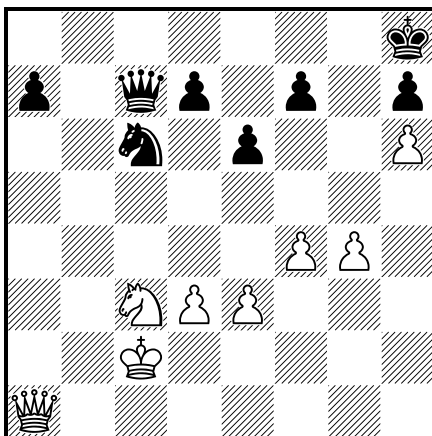


Middlegame

**3-15**  
**Black to play:**  
Is 1...♖xe6 safe?



**3-16**  
**White to play:**  
Is 1.♘d5+ safe?

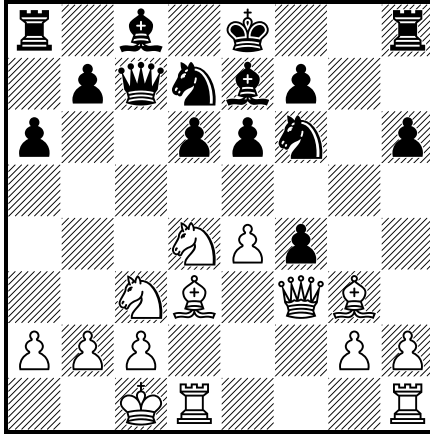


3-17

White to play:

Which of the following are safe?

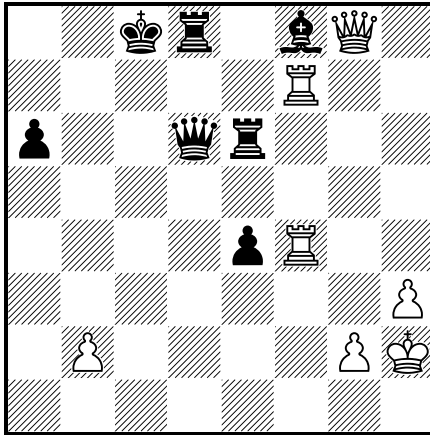
- a) 1. ♖xf4   b) 1. ♖h4   c) 1. ♚xf4



3-18

White to play:

Is 1. ♖xf8 safe?





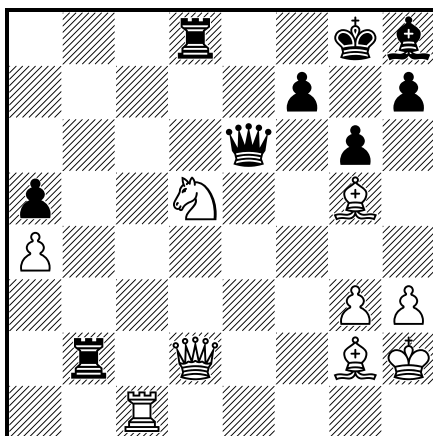
Middlegame

**3-19**

**White to play:**

Which of the following are safe?

- a) 1. ♖e7+   b) 1. ♖f6+   c) 1. ♖c2

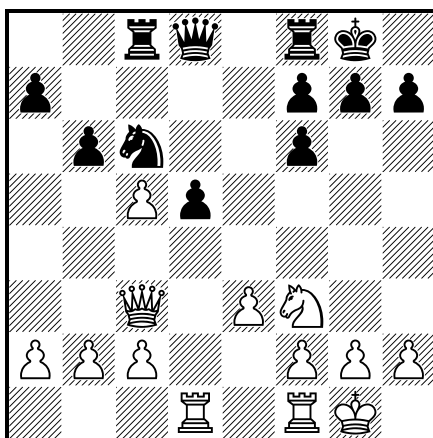


**3-20**

**White to play:**

Which of the following are safe?

- a) 1. cxb6   b) 1. ♖d4

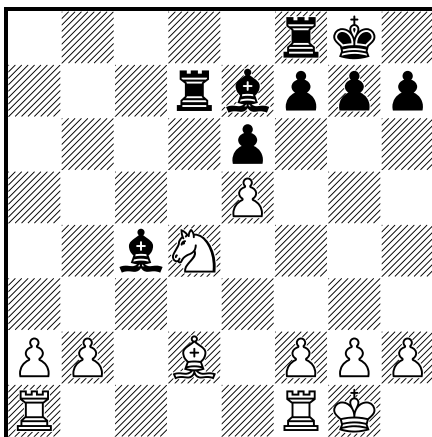


**3-21**

**White to play:**

Which of the following are safe?

- a) 1.♔c3   b) 1.♖fc1   c) 1.♘c6

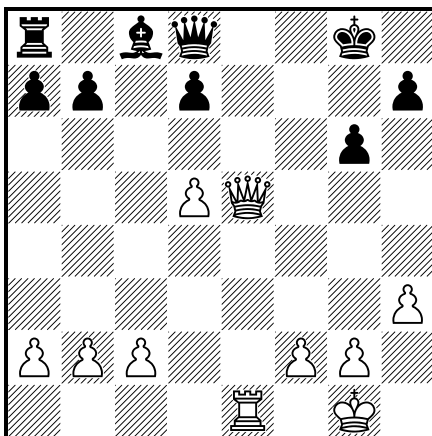


**3-22**

**Black to play:**

Which of the following are safe?

- a) 1...b6   b) 1...♔f7   c) 1...♖f8   d) 1...d6



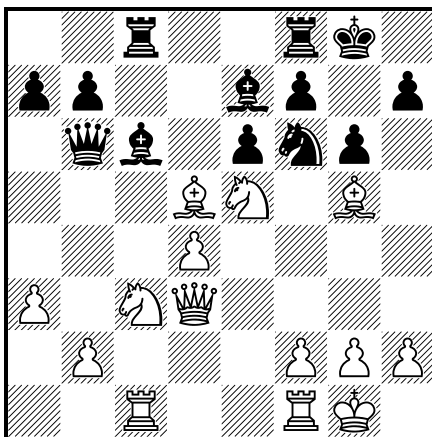
Middlegame

**3-23**

**Black to play:**

Which of the following are safe?

- a) 1...♙xd5   b) 1...exd5   c) 1...♞xd5

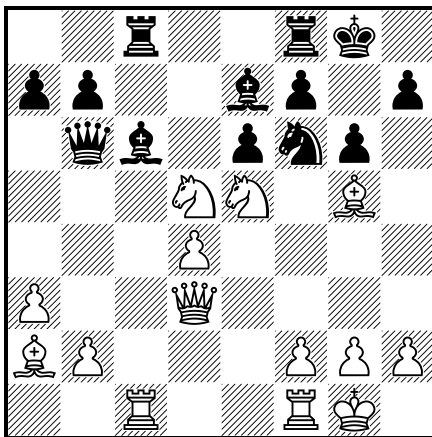


**3-24**

**Black to play:**

Which of the following are safe?

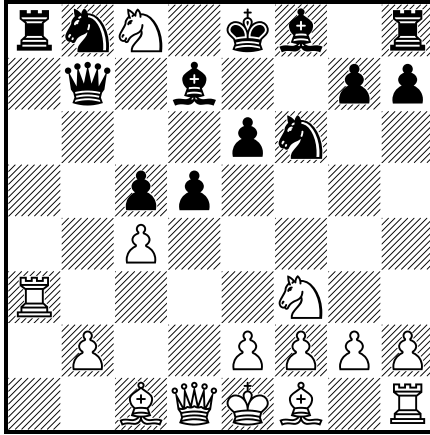
- a) 1...♙xd5   b) 1...exd5   c) 1...♞xd5



**3-25**

**White to play:**

The following problem is slightly different. The question is, “Which move is the safest?”

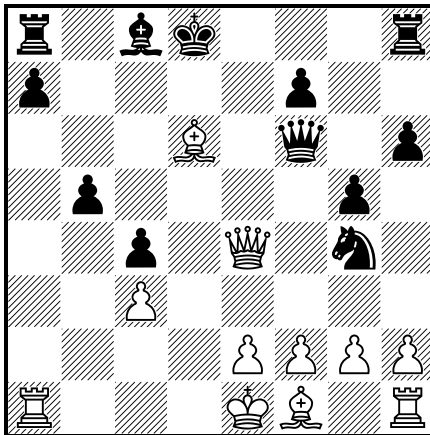


**3-26**

**White to play:**

Which of the following are safe?

- a) 1. ♖d4    b) 1. ♔e7+    c) 1. ♚xa8    d) 1. ♔b4    e) 1. ♚f3



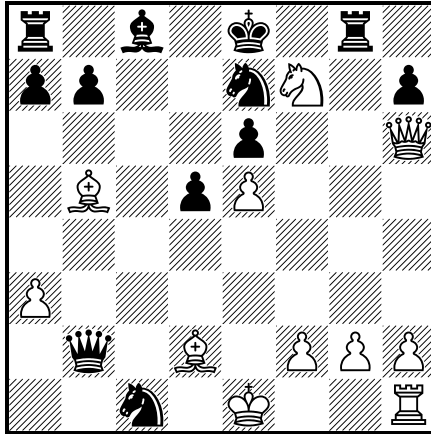
Middlegame

3-27

**Black to play:**

Which of the following are safe?

- a) 1...♘c6   b) 1...♚xb5   c) 1...♙xf7   d) 1...♙d7

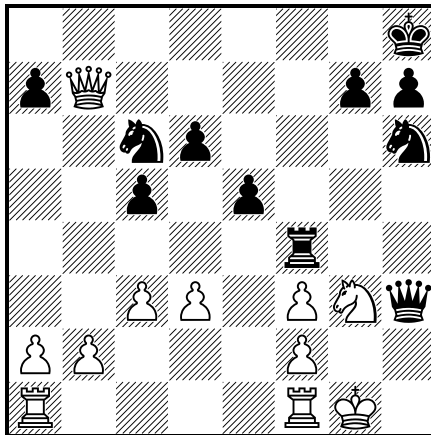


3-28

**Black to play:**

Which of the following are safe?

- a) 1...♘d8   b) 1...e4   c) 1...♙h4

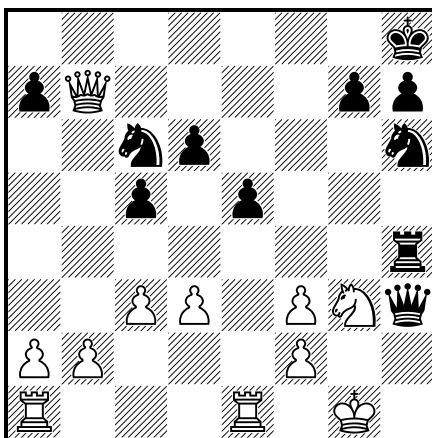


**3-29**

**Black to play:**

Which of the following are safe?

- a) 1...♖d8   b) 1...e4   c) 1...♚h2+

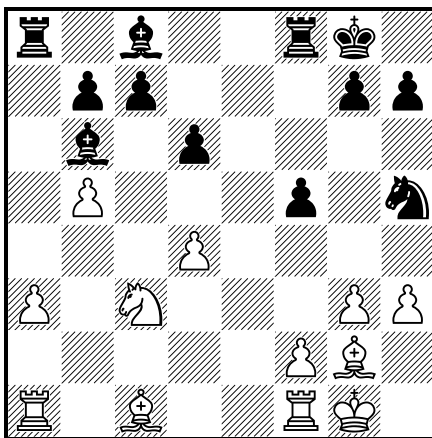


**3-30**

**White to play:**

Which of the following are safe?

- a) 1.♖e1   b) 1.♖d1   c) 1.d5   d) 1.♔e3



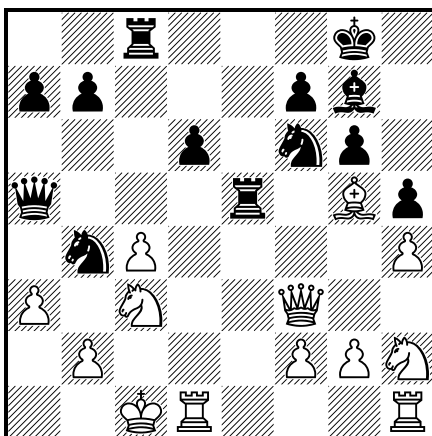
Middlegame

**3-31**

**Black to play:**

Which of the following are safe?

- a) 1...♖bd5   b) 1...♖fd5   c) 1...♞xc4   d) 1...♗e4   e) 1...♗a2+

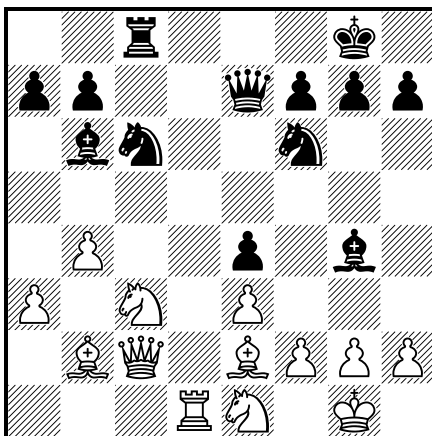


**3-32**

**Black to play:**

Which of the following are safe?

- a) 1...♗e5   b) 1...♗f5   c) 1...h5

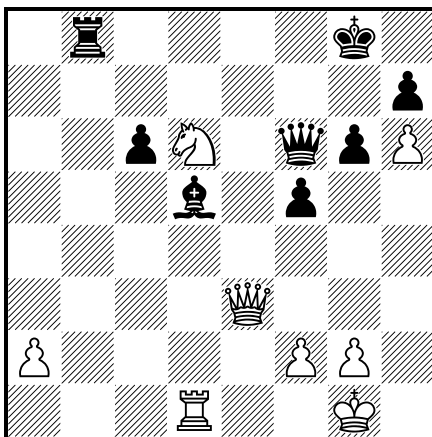


**3-33**

**White to play:**

Which of the following are safe?

- a) 1. ♖a7   b) 1. ♘e8   c) 1. ♚c5

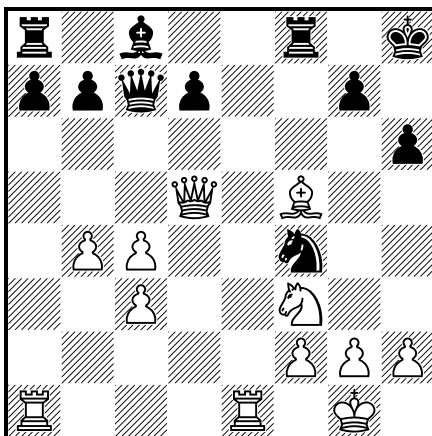


**3-34**

**White to play:**

Which of the following are safe?

- a) 1. ♖e4   b) 1. ♚d4   c) 1. ♚f7   d) 1. ♖e5



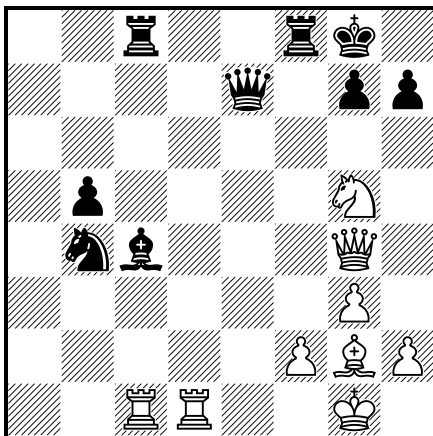


Middlegame

**3-35**

**Black to play:**

Is 1...♗e2 safe?

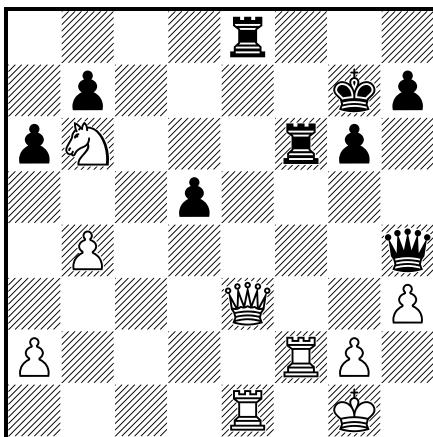


**3-36**

**White to play:**

Which of the following are safe?

- a) 1.♖d2   b) 1.♖xe8   c) 1.g3

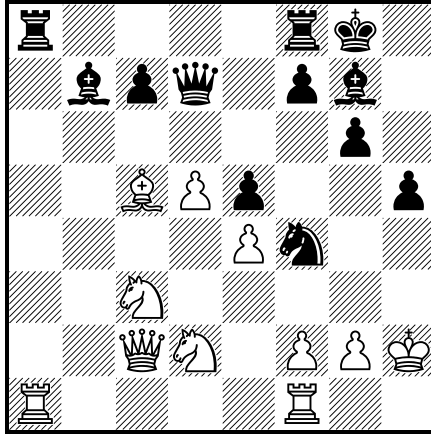


**3-37**

**White to play:**

Which of the following are safe?

- a) 1. ♖xf8    b) 1.f3    c) 1. ♘c4

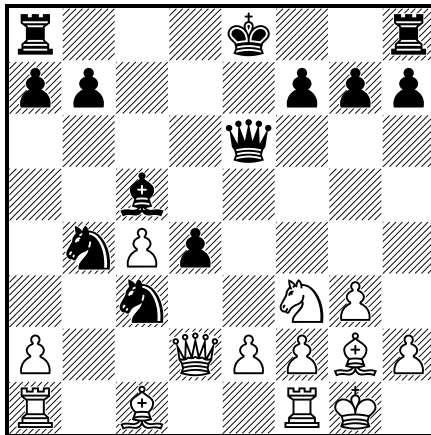


**3-38**

**White to play:**

Which of the following are safe? (not easy!)

- a) 1. ♖b2    b) 1.e3    c) 1. ♖g5



## Middlegame

Sometimes a game gets tactical and stays tactical for a long time, leading to many difficult decisions. The following amateur game, played on the Internet Chess Club at a 45 45 rate (45 minutes for the game with a 45-second increment), was one such game, where the fireworks started on move 17 and did not subside fully until move 36. First I will give the raw score, including helpful time-stamping to show how much time the players had remaining after each move. Following are twelve “Is it safe?” decisions the players had to make in the form of puzzles:

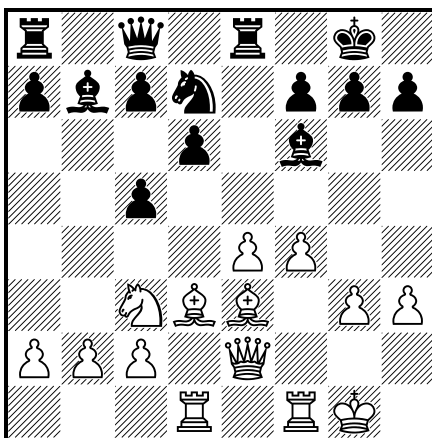
**1.e4 0:45:39 1...e5 0:45:30 2.♘f3 0:46:19 2...♘c6 0:46:03**  
**3.♘c3 0:46:59 3...♘f6 0:46:26 4.d4 0:47:38 4...exd4 0:46:38**  
**5.♘xd4 0:48:19 5...d6 0:46:25 6.♘xc6 0:47:53 6...bxc6 0:47:01**  
**7.♙d3 0:48:36 7...♙e7 0:46:20 8.0-0 0:49:16 8...0-0 0:46:52**  
**9.h3 0:48:36 9...♞e8 0:45:45 10.♙g5 0:47:58 10...♘d7 0:45:25**  
**11.♙e3 0:47:19 11...♙b7 0:44:37 12.f4 0:47:03 12...c5 0:41:48**  
**13.♞e1 0:44:25 13...♙h4 0:40:29 14.g3 0:44:40 14...♙e7**  
**0:40:50 15.♞d1 0:45:14 15...♞c8 0:38:01 16.♞e2 0:39:21 16...**  
**♙f6 0:36:57 17.e5 0:26:55 17...dxe5 0:35:36 18.♙f5 0:27:30**  
**18...♙a6 0:31:04 19.♘b5 0:24:10 19...♞d8 0:31:22 20.fxe5**  
**0:22:52 20...♙xe5 0:31:07 21.♙f4 0:19:30 21...♙d4+ 0:29:22**  
**22.♞xd4 0:18:43 22...cxd4 0:29:32 23.♞h5 0:16:56 23...g6**  
**0:17:08 24.♞h6 0:16:21 24...gxf5 0:16:54 25.♙xc7 0:16:09 25...**  
**♞e8 0:14:14 26.♞g5+ 0:12:58 26...♙h8 0:13:33 27.♘d6 0:11:21**  
**27...♙c4 0:09:10 28.♘xc8 0:07:58 28...♞axc8 0:09:43 29.♞xf5**  
**0:05:57 29...♙xc7 0:09:28 30.♞d2 0:04:43 30...♘e5 0:06:37**  
**31.♞xd4 0:02:36 31...♞ce7 0:06:16 32.♞xe5 0:03:15 32...♞xe5**  
**0:06:58 33.♞xc4 0:03:56 33...♞e1+ 0:07:31 34.♙f2 0:04:37**  
**34...♙g8 0:07:43 35.♞g4+ 0:05:12 35...♙f8 0:08:24 36.♞b4+**  
**0:05:51 36...♙g8 0:09:07 37.♞xe1 0:06:34 37...♞xe1 0:09:49**  
**38.♙xe1 0:07:16 38...♙g7 0:10:31 39.♙f2 0:07:58 39...♙f6**  
**0:11:15 40.♙e3 0:08:41 40...♙e5 0:11:59 41.c4 0:09:21 41...f5**  
**0:12:42 42.b4 0:10:01 42...h5 0:13:23 43.h4 0:10:43 43...♙d6**  
**0:14:00 44.♙d4 0:11:23 Black resigns 1-0**

**3-39**

**White to play:**

Which of the following are safe?

- a) 17.e5 [played in the game]   b) 17.♔d2   c) 17.♚g4

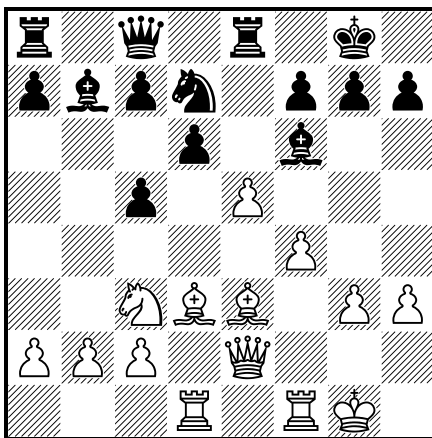


**3-40**

**Black to play:**

Which of the following are safe?

- a) 17...dxe5 [played in the game]   b) 17...♖b6   c) 17...♗xe5



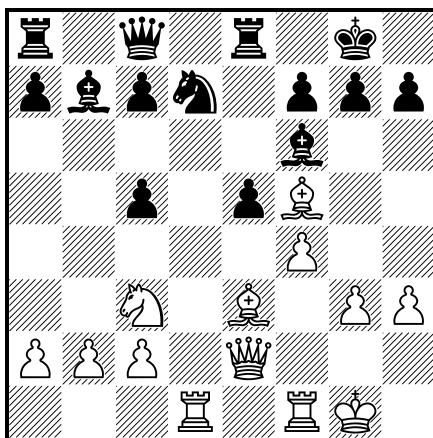
Middlegame

**3-41**

**Black to play:**

Which of the following are safe?

- a) 18...♔a6 [played in the game]    b) 18...♔c6    c) 18...♖d8

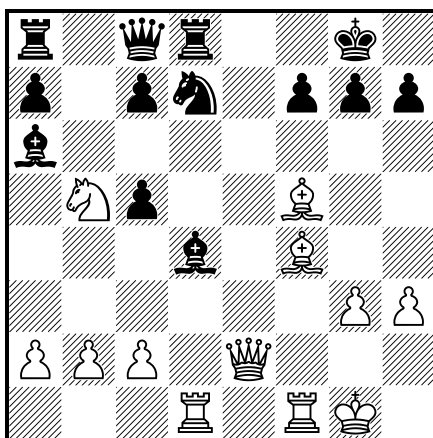


**3-42**

**White to play:**

Which of the following are safe?

- a) 22.♖xd4 [played in the game]    b) 22.♗xd4    c) 22.♕h2    d) 22.♕h1

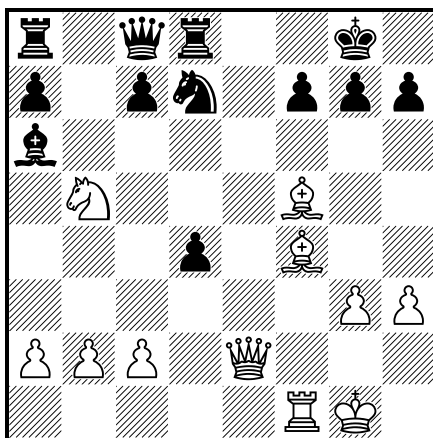


**3-43**

**White to play:**

Which of the following are safe?

- a) 23. ♖h5 [played in the game]   b) 23. ♙g5   c) 23. ♖g4

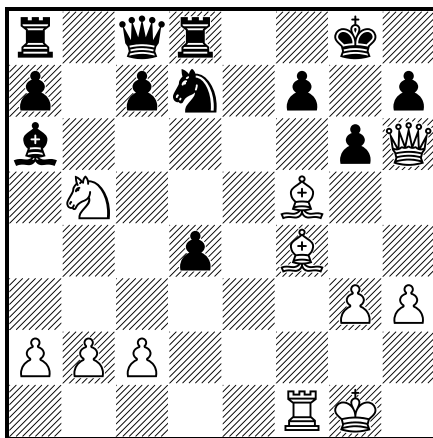


**3-44**

**Black to play:**

Which of the following are safe?

- a) 24... gxf5 [played in the game]   b) 24... ♖b7   c) 24... ♙xb5



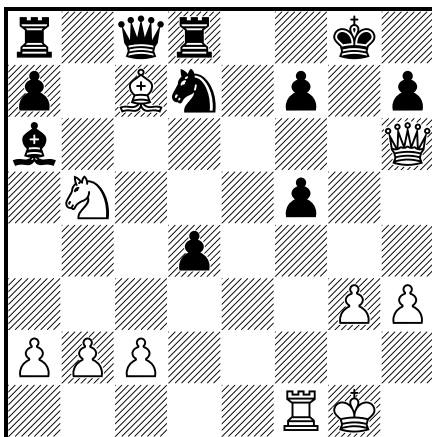
Middlegame

**3-45**

**Black to play:**

Which of the following are safe?

- a) 25...♖e8 [played in the game]    b) 25...♖f8    c) 25...♙xb5

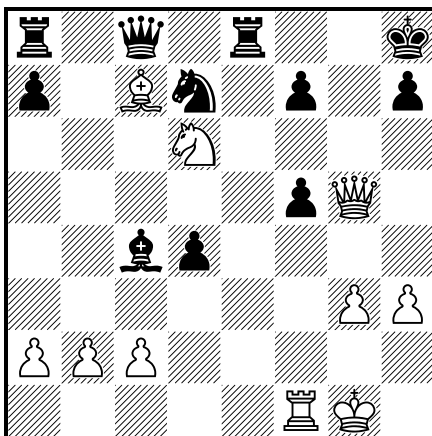


**3-46**

**White to play:**

Which of the following are safe?

- a) 28.♘xc8 [played in the game]    b) 28.♘xf5

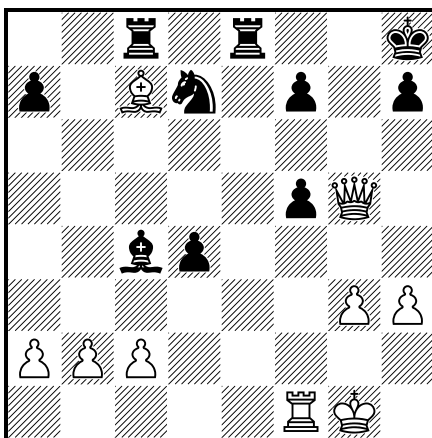


**3-47**

**White to play:**

Which of the following are safe?

- a) 29. ♖xf5 [played in the game]    b) 29. ♚f4    c) 29. ♗f4

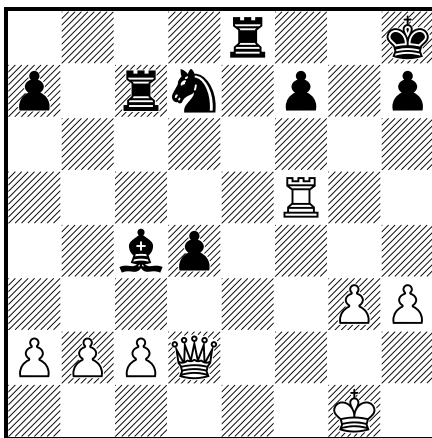


**3-48**

**Black to play:**

Which of the following are safe?

- a) 30... ♘e5 [played in the game]    b) 30... ♗e6    c) 30... f6





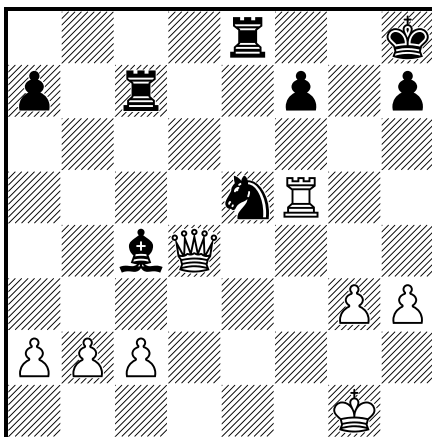
Middlegame

**3-49**

**Black to play:**

Which of the following are safe?

- a) 31...♖ce7 [played in the game]    b) 31...f6    c) 31...♖d7

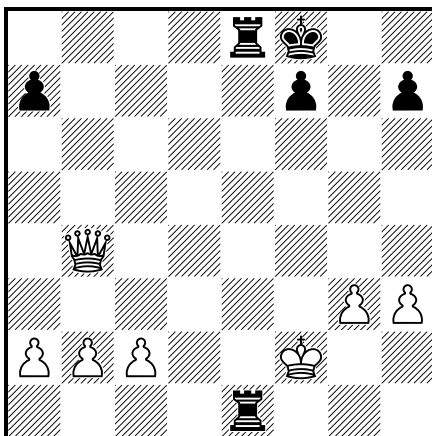


**3-50**

**Black to play:**

Which of the following are safe?

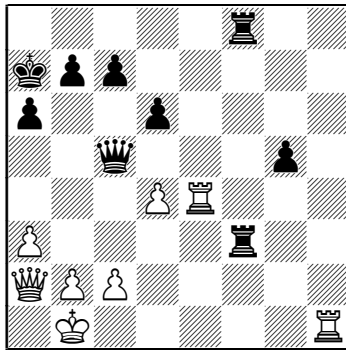
- a) 36...♔g8 [played in the game]    b) 36...♖8e7    c) 36...♖1e7



# Answers for Chapter 3

## Answer 3-1

White to play: Is 1.dxc5 safe?



In giving this problem to my students, the break-even point was about 1300-1400: at that rating level, about half thought it was safe, and half did not.

The further a student's rating was above that break-even range, the more quickly he/she recognized that 1.dxc5 was safe. After 1... ♖f1+ White has the simple 2.♗e1 retaining the queen advantage. Below that level, most assumed that the terrible 2.♗xf1?? was forced and Black would mate after 2...♗xf1+ 3.♗e1 ♗xe1#.

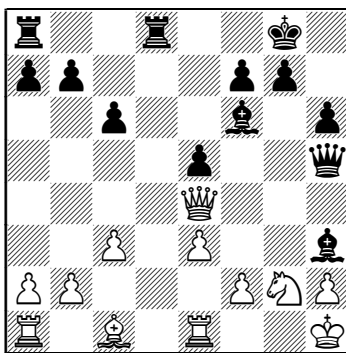
This problem, representative of many others involving basic tactics, shows the power of pattern recognition. This helpful capability is usually gained through repetitious study of easy tactics. It's great if you can figure out a position correctly, but if you have already seen that pattern and know it, that's much better (faster and more accurate). It's like knowing that  $6 \times 7 = 42$  without having to add up six 7's or seven 6's.

Of course, if you know a pattern and run across something very similar in a game, you can't just assume it's the same! You still have to use careful analysis to corroborate what you think you already know. Many of my students have lost games by seeing similar patterns to something studied (either tactics or openings

sequences), assuming they were similar enough, and quickly playing the “learned” response. Result: disaster. A little analysis may have revealed the pattern in the game was not the same, or not even similar enough. It pays to be careful...

### Answer 3-2

**Black to play:** Is 1...♔e2 safe?



Black’s move in the game, 1...♔e2, was an unnecessarily spectacular attempt to win in an otherwise winning position. *Usually when you are winning easily, you don’t need to resort to spectacular play; if simple play will win, that’s almost always less risk.* Here 1...♖d1 is natural and good. But is 1...♔e2 bad?

Turns out, yes. For some reason, Black assumed that, when White captured 2.♖xe2, both pieces would disappear (explosion chess). If it were explosion chess and the rook were gone too, then 2...♖d1+ 3.♗e1 ♖xe1#. But, unfortunately, this was regular chess and the rook would not disappear after capturing on e2.

Therefore, White has both 3.♖e1 and 3.♗e1 to defend. While 3.♖e1 is a little risky since 3...♗xg2+ removes the guard, after 4.♗xg2 (4.♔xg2?? ♖xe1+ gets back in the driver’s seat) 4...♖xe1 Black wins a rook back but remains behind in material. Therefore, 3.♖e1 is sufficient.

But even better is the simple 3.♗e1. Then the removal of the guard attempt 3...♗f1 is met by 4.♔c2 when White can finally consolidate with his extra queen. Bottom line: 1...♔e2?? is disastrous.

In the root game, Black realized his error too late, but White also bought the “explosion” idea and returned the favor by playing 2.♔d2??, when Black replied 2...♙xd2 with a big sigh of relief!

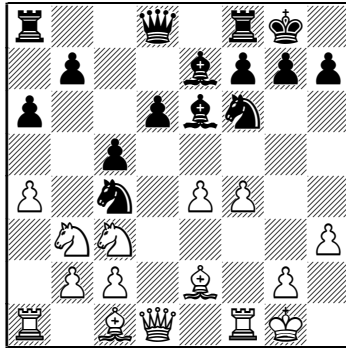
Moral of the story: *The more you are winning, the more you should be careful. And the more you are winning, the more playing simple is likely best.*

Usually when you are winning easily, you don't need to resort to spectacular play; if simple play will win, that's almost always less risk.

### Answer 3-3

**Black to play:** Which of the following are safe?

- a) 1...♙c7   b) 1...♘a5   c) 1...d5

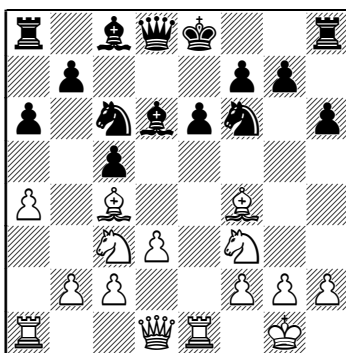


- a) 1...♙c7? allows the simple removal-of-the-guard tactic 2.f5 and either the bishop or the knight it is guarding is lost.
- b) 1...♘a5 is best, taking the knight out of danger and leaving White with only a small advantage.
- c) 1...d5 is also not safe because White can play first 2.e5, removing the knight as a defender of d5, and then 3.f5, hitting the bishop, e.g. 2.e5 ♘e8 3.f5 and the best Black has is 3...♘xe5, getting two pawns for the piece after 4.fxe6 as retreating the bishop with 3...♔c8 is even worse after 4.♙xd5!+-.

## Middlegame

### Answer 3-4

**White to play:** Is 1.♘d5 safe?

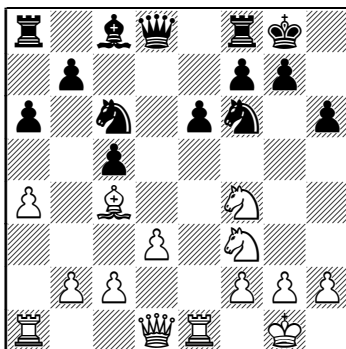


No, 1.♘d5 is not safe. Black has the removal-of-the-guard tactic 1...♗xd5. Then on either 2.♙xd5 ♘xf4 or 2.♙xd6 ♙xd6 3.♙xd5 ♙xd5 Black ends up a piece ahead. In the root game, my student played 1.♘d5? but his lower-rated opponent missed it, returning the favor with 1...♙xf4?.

White should not be overly anxious to move the knight twice in the opening, especially since it is for dubious (at best) positional reasons and potentially disastrous tactical consequences. Instead, he should just develop a piece while guarding the bishop on f4 with 1.♙d2.

### Answer 3-5

**White to play:** Is 1.♘e5 safe?

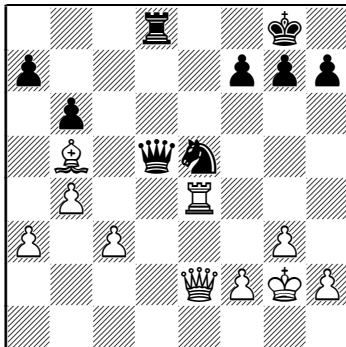


No, 1.♘e5 is not safe. Black has 1...♗xe5 2.♙xe5 ♖d4! with a winning double attack against the rook at e5 and the knight. In the root game White did play 1.♘e5? and Black exchanged knights, but then Black played the easier-to-defend 2...♖c7 when White has 3.♗e2 to minimize the damage. This illustrates the point that when you see a good idea (attack the rook with the queen), you should look at *all* the ways to do it (2...♖c7, 2...♖d6, and 2...♖d4) and try to figure out which is hardest to defend/best. Possibly 1.♘d2 is best.

Notice that, in the two previous problems, both times White prematurely wanted to move the knight “aggressively” to the fifth rank very early, and both times it was positionally premature and tactically not safe.

### Answer 3-6

**Black to play:** Is 1...f5 safe?



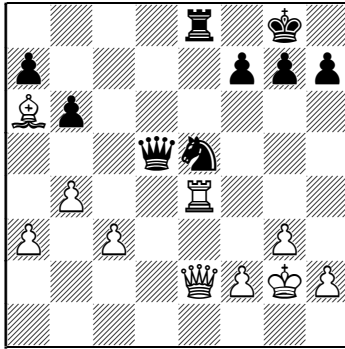
Yes, 1...f5 is safe – and best – since the main defense to the attack on the pinned rook 2.♗c4 ♗xc4 3.♖xc4 fails to simply 3...fxe4+.

I have given this problem to many students and this sequence, especially seeing the final moves, is very difficult for most players below 1600 to visualize correctly.

## Middlegame

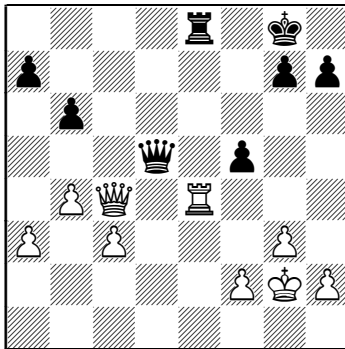
### Answer 3-7

**Black to play:** Is 1...f5 safe?



This time 1...f5 is also safe, but it doesn't win anything! After 2.♙c4 ♘xc4 3.♚xc4 we reach the following instructive position:

**Black to play**

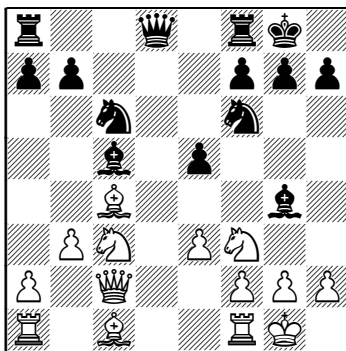


Despite the fact that the rook is pinned, seemingly attacked three times, and it is Black to move, White does not lose anything. On the contrary, due to the cross-pin, Black is forced to go into an endgame a pawn down after 3...♚xc4 4.♖xc4. This tactical interaction, and others that involve pieces being used to their maximum value, is good to study to help realize/recognize the potential power of the pieces.

### Answer 3-8

**White to play:** Which of the following are safe?

- a) 1.♖d1   b) 1.♙e2   c) 1.♘b2



While all three moves are “safe” (White doesn’t lose material), they vary in how good a game White gets.

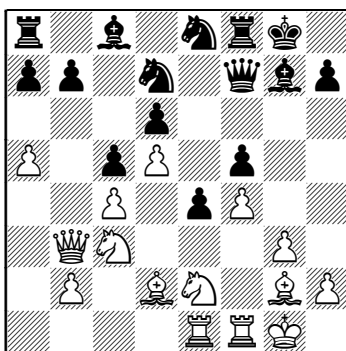
- a) 1.♖d1 is the typical tempo-winning move. After 1...♔e7 White has a microscopic edge.
- b) 1.♙e2 is a typical amateur move to prevent 1...♙xf3 2.gxf3, which would open up the kingside. After this timid move Black can simply play 1...♔e7 anyway and Black is better.
- c) 1.♘b2 is the engine’s top move by more than a bit. White allows 1...♙xf3 (Black has nothing better) when, after 2.gxf3, White has the bishop pair and good central pressure, and his king should be safe with careful play. Only this move guarantees White any further pressure. Knowing when 1...♙xf3 is dangerous and when it is not is important pattern-recognition knowledge. Assuming that moves that allow the opponent to open up a castled king position are always dangerous can lead to unnecessarily insipid play. Of course, exposing the king – especially with queens on the board – is often very dangerous, so assuming either extreme is incorrect.



**Answer 3-9**

**White to play:** Which of the following are safe?

- a) 1.♘d1 b) 1.g4



- a) 1.♘d1, aiming for the blockading 2.♘e3, is the traditional way of dealing with this type of passed pawn. Safe.
- b) I was Black in this game and 1.g4! was the move I feared. Later the engine confirmed it is indeed best by a wide margin and, of course, safe. Black's f-pawn is overworked, so if Black captures 1...fxg4 then White gets an overwhelming position with the simple 2.♘xe4 with multiple threats. The counter 1...♙d4+ is relatively best, but after 2.♕h1 White is in command, e.g. 2...e3 3.♙c1 and Black is springing leaks all over the kingside. 1.g4! is the only move which exploits White's advantage in development.

Once again the superficially unsafe move (because g4 is attacked once and not guarded) is the safest, or at least best.

Problems 3-10 through 3-12 occurred in the same amateur game played recently at the Main Line Chess Club:

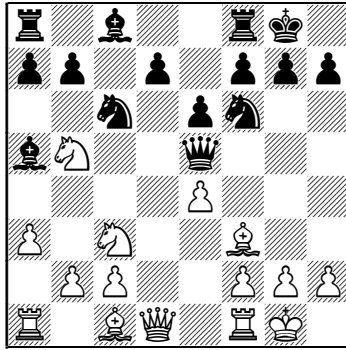
**Answer 3-10**

**White to play:** Which of the following are safe?

- a) 1.♘d6 b) 1.g3 c) 1.♙d6

*(see diagram next page)*

## Answers for Chapter 3

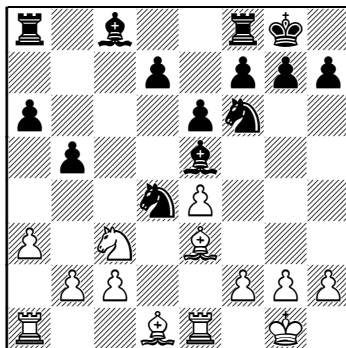


- a) 1.♘d6 is plausible and safe, but doesn't get White much. After 1...♙xc3 2.bxc3 ♞e8, Black ejects the annoying knight and retains the better pawn structure in return for the bishop pair.
- b) 1.g3! threatening 2.♙f4 makes the queen's position on e5 precarious. White has a nice advantage.
- c) 1.♙d6?? looks plausible but, after 1...♙xc3!, how does White get his piece back? 2.bxc3 loses to 2...♙xb5; 2.♙xe5 loses to 2...♙xe5; and 2.♘xc3 loses the queen after 2...♙xd6. Careful calculation of capturing sequences is always required. In the game, White chose 1.♙d6?? and Black correctly found 1...♙xc3! but later lost a piece back to another basic tactic, eventually leading to Problem 3-11.

### Answer 3-11

**Black to play:** Which of the following are safe?

- a) 1...d5    b) 1...♙b7    c) 1...♞c6



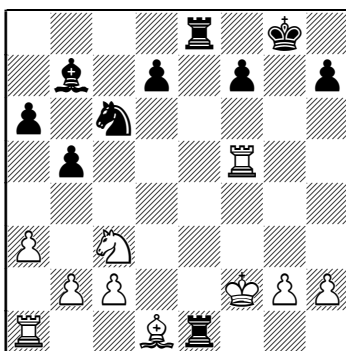
## Middlegame

- a) 1...d5 loses a piece to the removal-of-the guard 2.f4 and either the bishop on e5 or the knight on d4 falls.
- b) The same applies to 1...♙b7 2.f4 winning a piece (as played in the game; Black was ahead a piece and lost it back!).
- c) 1...♘c6 is the only safe move. Black has to admit his mistake of prematurely playing the knight to d4 and put it back where it came from. Taking back a move right after it's been played is often difficult for humans (or at least lower-rated players) to do. It's the chess form of admitting you made a mistake!

### Answer 3-12

**White to play:** Which of the following are safe?

- a) 1. ♘d5   b) 1. ♖b1   c) 1. ♘e2

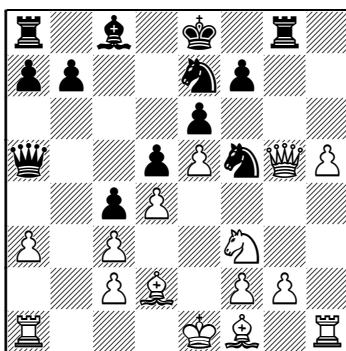


- a) 1. ♘d5 is plausible and strong, but Black can defend after 1... ♜8e6 2. ♘f6+ ♚g7 3. ♘xd7 ♘d4! when White retains only a slight advantage with best play.
- b) The simple 1. ♖b1, removing the pin on the bishop, is logical and likely best.
- c) White blundered a piece (again – see the previous two problems) with 1. ♘e2, which looks superficially safe, since it is guarded twice and attacked twice. However, stopping there is a quiescence error because if Black captures correctly he can take advantage of the pin on the bishop along the first rank. The game continued 1... ♜8xe2+! 2. ♙xe2 ♜xa1 and Black won.

**Answer 3-13**

**White to play:** Which of the following are safe?

- a) 1. ♖f6    b) 1. ♖f4



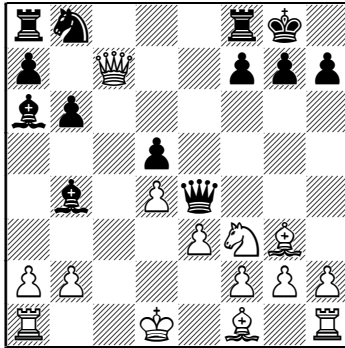
White would be hard-pressed not to find a good move, assuming he doesn't put his queen *en prise*:

- a) Although after 1. ♖f6 ♜g7 there is the unstoppable threat to trap White's queen, White comes out far ahead in that line due to his advanced passed pawn: 2. h6 ♘g8 3. hxg7 ♘xf6 4. exf6 is a pretty picture, with Black helpless to stop the g-pawn from promoting, as 4... ♘xg7 5. fxg7 just loses an additional piece. Safe!
- b) 1. ♖f4 is a little chicken, but still easily safe. White now threatens 2. g4 ♘g7 3. h6 trapping the knight, and Black is hard-pressed to stop all the threats. The game continued 1... ♘c6 2. g4 ♘fe7 3. ♘g5 ♘d8 4. ♘h7 ♜h8 and White prettily mates in three: 5. ♘f6+ ♔f8 6. ♖h6+! ♜xh6 7. ♙xh6#. My first published game.

**Answer 3-14**

**White to play:** Which of the following are safe?

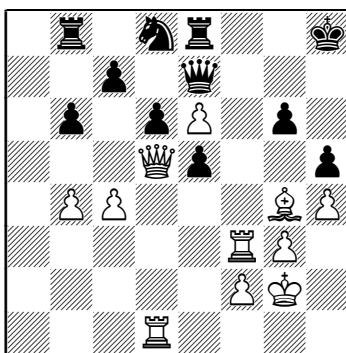
- a) 1. ♖c2    b) 1. ♕e5    c) 1. ♗xa6



- a) 1. ♖c2 is safe. White is ahead a pawn and his king is under some pressure, so he would love to trade queens, even at the cost of castling rights. After 1. ♖c2 Black has nothing better than 1... ♕xc2+ 2. ♗xc2 ♖c8+ 3. ♔d1 and White is much better.
- b) I saw immediately that 1. ♕e5?, as played in the root game, is not safe. Black simply plays the removal-of-the-guard tactic 1... ♗xf1!, allowing the queen to get to the d3-square, and White is lost. If 2. ♕xe4 then 2... dxe4 hits the knight and White loses a piece since he can't both save the knight and recapture on f1 on the same move. But if 2. ♖xf1, then d3 is free, so 2... ♕d3+ 3. ♔c1 (3. ♖d2 ♕xd2#) 3... ♖c8+ and mate next move.
- c) 1. ♗xa6 helps Black develop his knight with an attack on the queen. However, this is a small consideration compared to White's being ahead a pawn and needing some relief for his exposed king. The exchange of the inactive white bishop for its threatening black counterpart helps White. After 1... ♗xa6 2. ♖c2 White has again consolidated his extra pawn, although of course Black still has some play. Safe.

### Answer 3-15

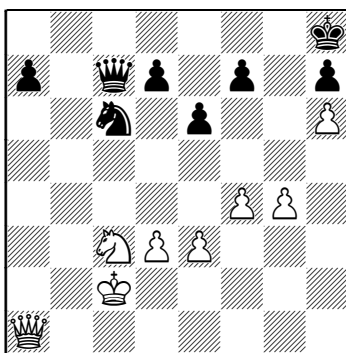
**Black to play:** Is  $1... \text{♞xe6}$  safe?



No,  $1... \text{♞xe6}$  is not safe. White has the forcing sequence  $1... \text{♞xe6? } 2. \text{♙xe6 } \text{♚xe6 } 3. \text{♜f8+ } \text{♔g7} (3... \text{♜xf8 } 4. \text{♚xe6+-}) 4. \text{♚xe6 } \text{♞xe6} (4... \text{♞xf8}$  just loses the queen for a rook)  $5. \text{♞xb8+-}$ . This sequence should not be super-difficult to see because it is all checks and captures, and you should always be looking for relevant *checks, captures, and threats* (usually in that order, except that threats of checkmate are sometimes even more forcing than checks).

### Answer 3-16

**White to play:** Is  $1. \text{♞d5+}$  safe?



This cute, made-up-by-someone problem (apologies, since I could not locate the source) illustrates the dangers of jumping too fast on terrific-looking moves.  $1. \text{♞d5+}$  not only is a discovered check hitting the black queen, but also eyes a quick mate on g7.

## Middlegame

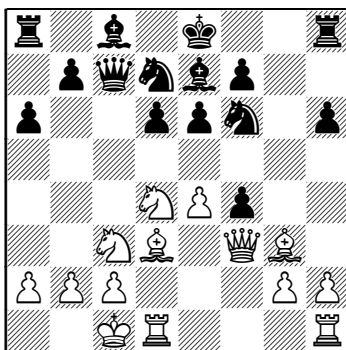
Unfortunately, even this dazzling array of goodies does not always guarantee that a move will work. Black answers 1...♘d4+, simultaneously blocking the check and mating White! The white king must move due to the double check: 2.♔d1 (2.♔d2 is the same) 2...♚c2+ 3.♕e1 ♚e2# or 2.♔b1 ♚c2#, or 2.♔b2 ♚c2+ 3.♕a3 ♚b3#. *Sic transit gloria mundi.*

The author of this problem had a clear point: No matter how good a move looks and how many great things it does, it always pays to see what the opponent can do – be careful! As a very strong principle, remember: *If you see a move that you think wins, don't play it immediately! Check your analysis multiple times.*

### Answer 3-17

**White to play:** Which of the following are safe?

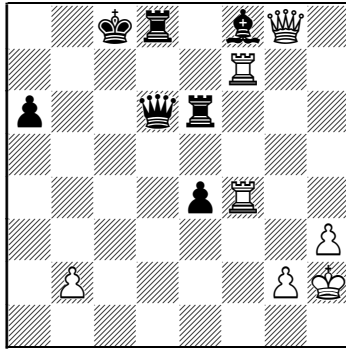
- a) 1.♔xf4    b) 1.♔h4    c) 1.♚xf4



- a) 1.♔xf4 was the purposely *speculative sacrifice* that the master played. After 1...e5 2.♖f5 exf4 3.♖xe7 ♔xe7 Black's king was exposed, but White did not get quite enough for the material sacrificed.
- b) 1.♔h4 is the comparatively safest and best move, but it does permanently abandon the pawn captured on the previous move. After 1...♚c5 White does not have quite enough for his pawn.
- c) 1.♚xf4? e5 merely loses a piece for very little compensation. Not safe.

**Answer 3-18**

**White to play:** Is 1.♖xf8 safe?



This position, from a Popovych–Ivanov game in Tim Krabbé’s book *Chess Curiosities*, was featured by Tim because Black has just castled queenside!

At first 1.♖xf8 may look safe, e.g. 1...♖xf8 2.♙xf8+ ♗xf8 3.♖xf8+ ♘d7 4.g4 e3 5.♖f1.

However, 1.♖xf8 instead loses to 1...♗xf4+!. If then 2.♖xf4 ♖xg8–+, and if 2.♔h1 ♗xf8 3.♗xe6+ ♔c7 and Black is ahead a rook. So not only is 1.♖xf8 not safe, but White has no way to regain his piece. Black won.

If you see a move that you think wins, don’t play it immediately! Check your analysis multiple times.

**Answer 3-19**

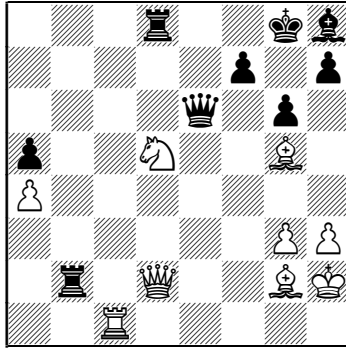
**White to play:** Which of the following are safe?

- a) 1.♘e7+ b) 1.♘f6+ c) 1.♖c2

(see diagram next page)



## Middlegame



This position is a critical one that occurred in one of my club games about a decade ago. I was White.

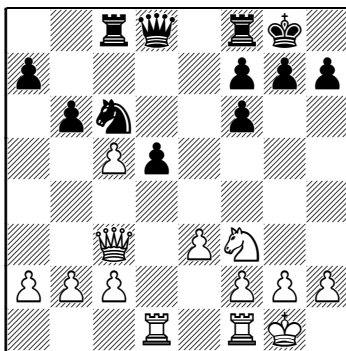
- a) With time running short, I incorrectly evaluated the first move I saw and the one I was counting upon, 1.♘e7+. I think I at first correctly calculated the forced line 1...♙xe7 2.♙xd8+ ♚xd8 3.♙xd8 but, during my re-checking, miscounted the number of bishops I had left! So I first saw that it won, but on the re-check thought I might just end up behind a pawn. Unfortunately with the clock running I then had to spend time on other moves to salvage the position, so I did not catch my error until I got home. At that point I did what I always do and immediately gave the position to the computer engine, which instantly pointed out that my first impression was correct. Needless to say, I was not very happy with my omission, missing the intended win.
- b) 1.♘f6+? just loses the piece to 1...♙xf6 when both rooks that attack the white queen are guarded by the bishop on f6.
- c) 1.♙c2, the move I ultimately chose, loses back two pieces for a rook after 1...♙xc2 2.♙xc2 ♖xd5 3.♙xd5 ♙xd5 4.♙c8+ ♔g7. I was able to hold the draw, but – aaagh!

Only 1.♘e7+ preserves and reveals the advantage.

**Answer 3-20**

**White to play:** Which of the following are safe?

- a) 1.cxb6    b) 1.♘d4



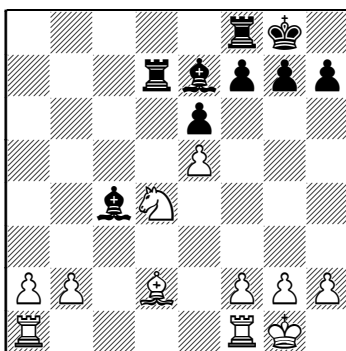
- a) Yes, 1. cxb6 is safe. Although 1.cxb6 allows a discovered attack on White’s queen by Black’s c8-rook, there is no good knight move at Black’s disposal and White easily holds on to his material advantage, e.g. 1...♘e5?! 2.♙b3 ♘xf3+ 3.gxf3 axb6 (3...♙xb6 4.♙xb6 holds no danger for White) 4.♖xd5 and the slight exposure of White’s king by no means compensates Black for his material deficit.
- b) No, 1.♘d4 is not safe: 1...bxc5 and if 2.♙xc5 ♘xd4 3.♙xd4 ♖xc2 wins back the extra pawn that White had, although White does retain an edge after 4.♖d2.

This example shows that sometimes seemingly “dangerous” moves like 1.cxb6 can be safer than ostensibly safer moves like 1.♘d4. When facing potentially dangerous situations, superficial analysis is not enough, nor is simply relying upon pattern recognition. While these “quick” skills must suffice in speed games, to calculate the safety of complex moves correctly usually requires more than that – namely, careful, patient analysis.

### Answer 3-21

**White to play:** Which of the following are safe?

- a) 1.♙c3   b) 1.♖fc1   c) 1.♘c6



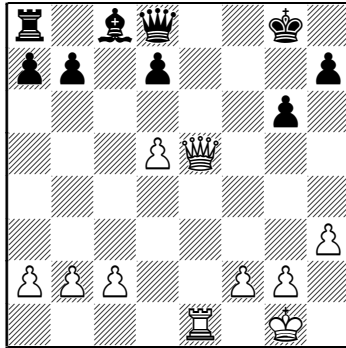
Whenever you are thrown cold into a position, most notably a problem/puzzle, the first thing you should do, with the possible exception of mate puzzles, is count the material. White begins this problem ahead two pawns, but cannot retain his full material advantage in any line since his knight is attacked and Black also threatens to win the exchange with ...♙xf1. So which moves keep White afloat?

- a) 1.♙c3 (similar to its possibly microscopically better cousin 1.♙e3) is safe and sound. After 1...♙xf1 2.♘xf1 White retains a piece and two connected passed pawns for the rook with good winning chances. Although the engine thinks Black can still hold, it's not easy and I lost in Dubeck–Heisman, Keystone State Open 1968. Congrats to NM Leroy Dubeck on a fine win!
- b) 1.♖fc1 is tricky but does not work: 1...♗xd4 2.♙e3 ♖e4, and now the removal-of-the-guard 3.f3, to get the rook off the bishop on c4, fails to the simple 3...♗xe3.
- c) 1.♘c6! is also tricky but it works. Apparently best is now 1...♙h4! 2.♖fc1 ♗xd2 3.g3 ♙b5 4.gxh4 with a slight advantage to White. The engine likes this move slightly better than 1.♙c3 or 1.♙e3, but those “human” moves at least look safer and easier to calculate.

**Answer 3-22**

**Black to play:** Which of the following are safe?

- a) 1...b6   b) 1...♔f7   c) 1...♚f8   d) 1...d6

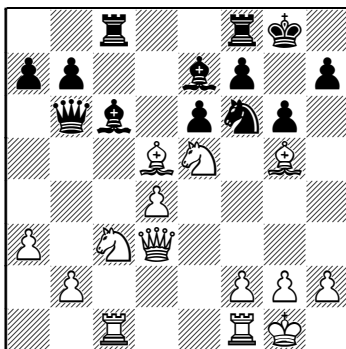


- a) 1...b6 is safe because it allows Black to answer the two threats of 2.♚e8+ (pinning the bishop after 2...♚xe8 3.♞xe8+) and 2.d6 (in which case 2...b6 now would allow 3.♚d5+). So after 1...b6 2.♚d6 ♔a6 3.♞e7 ♚f8 4.♚xd7 ♚f6 Black can hold (5.♞xh7 ♔b5! =).
- b) 1...♔f7 allows 2.d6 and Black has no defense to an invasion by White's major pieces, e.g. 2...a5 3.♚f4+ ♔g8 4.♞e7+- . Not safe.
- c) 1...♚f8 was played in the game but was also not safe. After 2.d6! White cannot extricate himself with 2...b6?? due to 3.♚d5+ winning the rook, so the bind allows White to penetrate, e.g. 2...♞b8 3.♚d5+ ♔g7 4.♞e7+ +-.
- d) 1...d6, forcing White's hand, is best. After 2.♚e8+ ♚xe8 3.♞xe8+ ♔f7 4.♞h8 ♔g7 5.♞d8, Black can play 5...♔f6 and slowly extricate himself by moving the b-pawn and playing ...♔b7. Trying to extricate the bishop immediately does not work as 5...b6 6.f4 ♔b7?? 7.♞d7+ picks up the bishop. After 5...♔f6, White might be able to hold, but it's Black who has the winning chances.

### Answer 3-23

**Black to play:** Which of the following are safe?

- a) 1...♙xd5   b) 1...exd5   c) 1...♘xd5



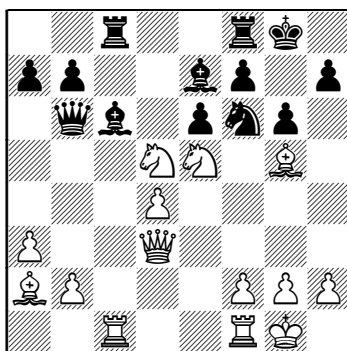
This position comes from the well-known De Groot “A” position from *Thought and Choice in Chess*. It arises after the candidate move 1.♙xd5.

- a) No, after 1...♙xd5 2.♙xf6 ♙xf6 3.♘d7 ♚xd4 4.♚xd4 ♙xd4 5.♘xf8 White wins the exchange for a pawn with a winning position.
- b) 1...exd5 is superficially safe, at least for a while. But Black has a very static game and an almost impossible defense due to his poor minor pieces. White can play either 2.♖fe1 or 2.♗f3 and Black will have difficulty defending his weaknesses, such as his pinned knight at f6 and his hanging bishop at e7. This explains why 1.♙xd5 was the best move for White.
- c) No, 1...♘xd5 simply drops a piece after 2.♘xd5. At that point White is threatening Black’s queen with the capturing knight, but any recapture on d5 loses to 3.♙xe7. And, of course, if Black doesn’t recapture on d5 and moves the queen, White is ahead a piece and then likely more with 3.♘xe7+.

### Answer 3-24

**Black to play:** Which of the following are safe?

- a) 1...♙xd5   b) 1...exd5   c) 1...♞xd5



The problem occurs in De Groot “A” after the candidate move 1.♞(c3)xd5. Black has three ways to recapture:

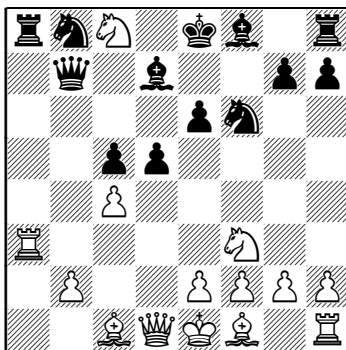
- 1...♙xd5 is only marginally safe. The bishop abandons d7, allowing the removal-of-the-guard tactic 2.♙xd5, and Black has to be very careful when recapturing on d5: 2...exd5! (2...♞xc1 first is also possible, but not 2...♞xd5? 3.♙xe7 [3.♞d7 is OK, too] 3...♙xe7 4.♞d7 wins the exchange) and if 3.♙xf6 ♖xf6! (3...♙xf6? 4.♞d7) 4.♞d7 ♗f4!, when after 5.♞ce1 White is better but Black holds on. Although I read De Groot’s book over 45 years ago, I don’t believe I have ever seen this “4... ♗f4” defensive line shown or discussed anywhere until I gave it to *Stockfish* in checking this book.
- 1...exd5 is superficially safe but static and positionally undesirable. After 2.♗f3 White is likely winning due to the poor placement of Black’s minor pieces.
- 1...♞xd5! is safe and the reason grandmasters properly rejected 1.♞xd5. I have had many students tell me that 1...♞xd5 is not safe because the knight is pinned to the bishop on e7, but of course when the knight recaptures on d5, it guards that bishop. If White then tries the removal-of-the-guard 2.♙xd5,

then 2...♙xg5 is forced (2...♙xd5?? 3.♙xe7). But although the position remains complex, White has no clear good continuation at this point and Black is doing fine.

1.♖xd5 ♖xd5 is a key line in De Groot A. Almost all grandmasters were able to see that recapturing with the knight in this line is fine for Black, and that therefore 1.♖xd5 turned out not to be best (see Answer 3-23 for White's best move).

### Answer 3-25

**White to play:** The following problem is slightly different. The question is, "*Which move is the safest?*"



The obvious 1.♖xa8 ♔xa8 2.♖b6 unfortunately fails to 2...♔a5+ winning the knight anyway.

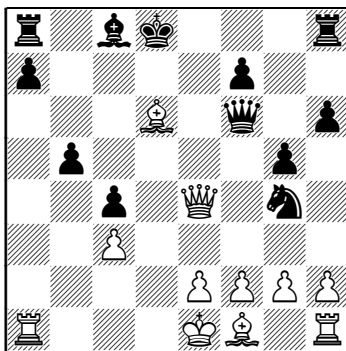
So the only way to minimize losses is to reverse this move order: 1.♖b6 ♖xa3 (1...♔xb6?? 2.♖xa8) 2.♖xd7. Then 2...♖a1 3.♖xf6+ gxf6 4.e3 and White is worse, but at least there's still a game. In this problem none of the moves are safe, so the safest move is the one that loses the least material, and that's 1.♖b6.

When I first saw this position, I asked, "*How did this position occur if Black has all his pieces?*" It took me a while to realize the position came about from the following sequence: the white knight first captured a pawn on a7, and when Black responded ...♔b6, White played ♖c8 and Black replied with...♔b7.

### Answer 3-26

**White to play:** Which of the following are safe?

- a) 1. ♖d4   b) 1. ♙e7+   c) 1. ♗xa8   d) 1. ♙b4   e) 1. ♗f3



This is a key De Groot exercise position I give some of my students. It's complex, but everything starts with counting the material and seeing that Black begins ahead a pawn for the bishop pair (which, on the average, is worth about half a pawn).

- a) 1. ♖d4 is superficially safe, but Black, already ahead a pawn, can go into the endgame with that advantage after 1... ♗xd4 2. cxd4 and have three connected passed pawns to smooth the way.
- b) 1. ♙e7+ seems superficially unsafe, but ultimately is the move most strong players choose since it deflects the black queen away from the threats on c3 and f2, and leaves White ahead after 1... ♗xe7 2. ♖d1+ ♙e8 3. ♗xa8. Therefore, clearly safe – and more.
- c) 1. ♗xa8?? gets mated after 1... ♗xc3+ 2. ♙d1 ♗xf2#. Many miss the mate and only see 2... ♗xa1+ but even that continuation is enough to conclude that 1. ♗xa8 is not safe.
- d) 1. ♙b4, believe it or not, is the computer's top move. After 1... ♗xf2+ 2. ♙d1 White threatens both 3. ♗e7# and 3. ♗xa8 and Black is in trouble, e.g. 2... ♙c7 3. ♗e7+ ♙d7 4. ♗d6+ ♙c8 5. ♗a6+ ♙d8 6. ♗b7 with a winning attack. But answer (b), 1. ♙e7+, is almost as good and much easier ☺.



## Middlegame

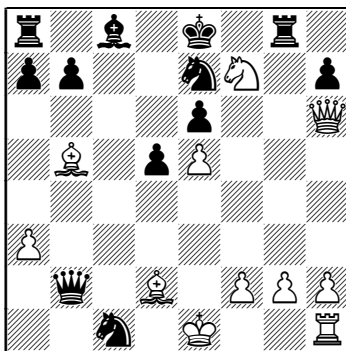
- e) 1.♚f3 is purely defensive, but much better than 1.♚d4. White gets good play after 1...♜xf3 2.gxf3 ♘f6 3.h4! (this is even better for White than 3.♙e5 ♚e7). Therefore, Black's best is instead 1...♙b7 2.♜g3 h5 3.♞d1 ♚e8 4.h4 when Black gets a perpetual check draw after 4...♘xf2 5.♜xf2 ♜xc3+ 6.♞d2 ♜c1+ 7.♞d1 ♜c3+.

The only safe moves – in this problem, those are the ones which win for White – are 1.♙e7+ and 1.♙b4.

### Answer 3-27

**Black to play:** Which of the following are safe?

- a) 1...♘c6   b) 1...♜xb5   c) 1...♚xf7   d) 1...♙d7



- a) Not safe. 1...♘c6 loses to 2.♙xc6+ (2.♘d6+ ♚d8! is good for Black) 2...bxc6 3.♘d6+ ♚d8 4.♙a5+, when Black is mated if he doesn't give up his queen with 4...♜b6 (4...♚d7 5.♜xh7+ ♞g7 6.♜xg7#).
- b) Not safe. Black loses his queen after 1...♜xb5? 2.♘d6+.
- c) Not safe. Black is mated on the spot with 1...♚xf7?? 2.♜f6#.
- d) Yes, 1...♙d7 is the only safe move. White has nothing better than 2.♘d6+ ♚d8 3.0-0, when 3...♜xb5 4.♜xe6 ♞g7 5.♙xc1 ♜e2! should be winning for Black.

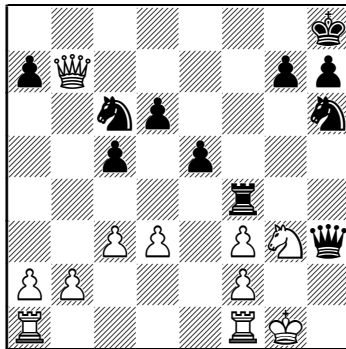
In this game I played Black (at the time I was rated 1700) and saw that all the moves were bad except for 1...♙d7. But instead of quickly

double-checking that and then just playing it, I was curious to see if I was actually winning after  $1... \text{♙d7}$  – an interesting but irrelevant question since I saw it was clearly the best move. However, after 20 minutes of checking the lines, I grew so tired and confused that I forgot why  $1... \text{♕xf7}$  was clearly worse and ended up playing that instead! So I learned my lesson: *if you discover the best move and can clearly show that it is so, then using more effort to determine exactly how good that best move is can be anything from a waste of time to a disaster.*

### Answer 3-28

**Black to play:** Which of the following are safe?

- a)  $1... \text{♞d8}$    b)  $1... \text{e4}$    c)  $1... \text{♞h4}$



- a)  $1... \text{♞d8}$  is solid but passive. After  $2. \text{♕a8}$  ( $2. \text{♕b8} \text{ ♞hf7}$  – a defensive move with an offensive threat! –  $3. \text{♕xa7?}$  snatching a pawn loses, but Black is safe in any event)  $3... \text{♞g5!-+}$   $2... \text{♞f8}$  Black retains a strong advantage.
- b)  $1... \text{e4!}$  is the move that puts White away. Despite being attacked by three pieces, the move is safe because if the pawn is captured, the line clearance wins:  $2. \text{fxe4}$  ( $2. \text{♕xc6} \text{ exf3-+}$ )  $2... \text{♞e5-+}$  as the threat of  $... \text{♞f3+}$  is deadly.
- c)  $1... \text{♞h4}$   $2. \text{♞fe1}$  (to stop  $2... \text{♕h2\#}$ ) leads to Answer 3-29.

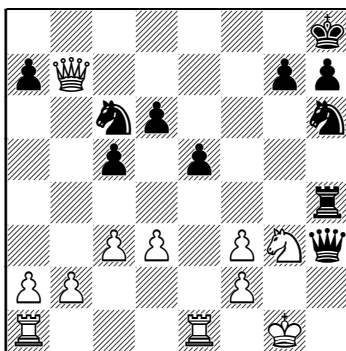
Since 1...e4 is the only move which clearly demonstrates (and thus retains) Black's winning advantage, it is the only "safe" move.

If you discover the best move and can clearly show that it is so, then using more effort to determine exactly how good that best move is can be anything from a waste of time to a disaster.

### Answer 3-29

**Black to play:** Which of the following are safe?

- a) 1...♘d8   b) 1...e4   c) 1...♚h2+



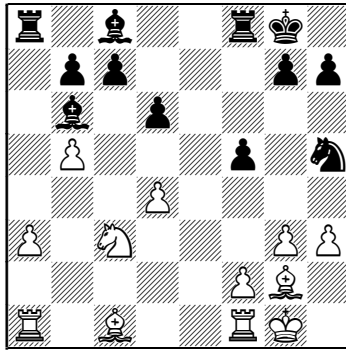
- a) 1...♘d8! is now the only try. White is much better after 2.♚a8 (2.♚e7? ♘e6!-+) 2...♘hf7 3.♖e4, but at least it's still a game. Safe.
- b) 1...e4 now fails miserably to 2.♚xc6, when 2...exd3 (threatening perpetual check with 3...♚h2+ and 4...♚h3+; there is no other try to justify the knight sacrifice) leads to mate after 3.♖e8+ ♘g8 4.♖xg8+ ♔xg8 5.♚e8#.
- c) 1...♚h2+ would seem to be as safe as (a), but it's not: 2.♔f1 and if now 2...♘d8 3.♚e7!+- as 3...♘e6 is no longer guarded by the black queen. This is an important lesson: *sometimes*

*a seemingly innocent check just to save time or get an extra move in toward the time control can be a blessing – but not always!* This is an excellent example of where such a check ruins Black's best defensive chances.

### Answer 3-30

**White to play:** Which of the following are safe?

- a) 1.♖e1   b) 1.♖d1   c) 1.d5   d) 1.♗e3

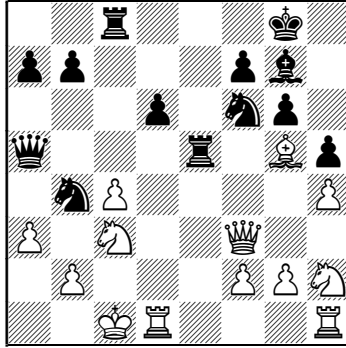


- a) How to answer the threat to the d-pawn? Counterattack by 1.♖e1 is very questionable since the knight at c3 is also threatened after 1...♗xd4. If then 2.♗b2, Black answers with 2...f4 and White has basically nothing for his pawn. Not safe.
- b) 1.♖d1 is simple and strong. White retains a slight advantage after 1...♗f6 2.♗d5±.
- c) 1.d5, as played in the root game, allows the “sneaky-pin” 1...♗xg3 and White's game falls apart. Not safe.
- d) 1.♗e3 is a little passive, but solid. After 1...f4 2.gxf4 ♗xf4 3.♗xf4 ♖xf4 4.♗d5 ♖xd4 5.♗e7+ ♔f7 6.♗xc8 ♖xc8 7.♗xb7 ♖b8 8.♗c6, White should hold.

**Answer 3-31**

**Black to play:** Which of the following are safe?

- a) 1...♖bd5 b) 1...♗fd5 c) 1...♞xc4 d) 1...♘e4 e) 1...♘a2+



Sometimes, when there are many tactics in a position, moves that on first glance don't look safe (see Chapter 1 for examples of quiescence errors) may actually be so; further tactics can save the day. We call the variations that show how the apparently unsafe move can be played with good consequences its *"tactical justification."*

This position is an excellent example of tactical justification. On the surface, all of the moves presented don't look safe due to White's "threats" of 2.axb4 and 2.♙xf6. Moreover, d5 is guarded by no less than four white pieces (♗c3, ♖c4, ♕f3, ♞d1), so putting black pieces there looks dangerous. However, White's rook on h1 and especially the poorly placed knight on h2 are not in good defensive positions, while all of Black's pieces fully participate in the attack.

The lines shown are only some of the more crucial variations; if you were playing this game and made one of these moves, you may not be able to work out all of the lines exactly, but you should at least get far enough to say, *"I have enough attack for my sacrificed material!"*

- a) 1...♖bd5 is safe. If White tries 2.cxd5, then 2...♗xd5 and the pressure on c3 causes White's position to collapse, e.g. 3.♞d3 ♗xc3 4.♞xc3 ♞xc3+ 5.♕xc3 ♞c5-+.

## Answers for Chapter 3

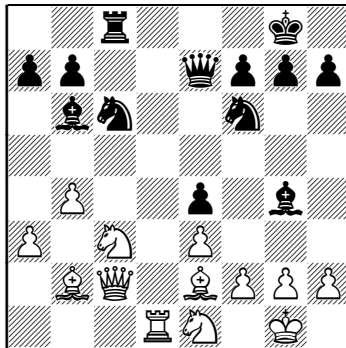
- b) 1...♗fd5 is safe. 2.cxd5 ♖xd5 transposes to (a); 2.axb4 ♗xb4 3.♕b1 (White has many tries here but they all fail miserably) 3...♞xc4 4.♞c1 ♚a6! and Black mates (not easy, but too many variations to show) with a variety of unstoppable threats.
- c) 1...♞xc4 is safe. If 2.♙xf6 ♞xc3+ (a common idea in many lines) 3.bxc3 (3.♚xc3 ♗a2+) 3...♚xa3+ 4.♕b1 ♚a2+ 5.♕c1 ♚c2#. If instead 2.axb4 (the only other move that might make 1...♞xc4 unsafe), then 2...♞xb4 3.♕b1 ♗e4. This move demonstrates another common tactical theme in similar positions, such as Yugoslav Dragon Sicilians. Other moves win as well; Black's position is just overwhelming: 4.♙c1 ♗xc3+ 5.♚xc3 ♞e2-+.
- d) 1...♗e4 is safe. If 2.♗xe4 ♞xc4+ 3.♕b1 ♞exe4, and if then 4.axb4 ♞xb4 5.♙f6 ♞f4-+. Instead, if 2.axb4 then 2...♚xb4 is winning, e.g. 3.♞d4 ♗xg5 4.hxg5 ♞f5 5.♞f4 ♞xf4 6.♚xf4 ♙xc3+ 7.bxc3 ♚xc3+ 8.♕d1 ♞xc4-+.
- e) 1...♗a2+ is safe: 2.♗xa2 ♞xc4+ 3.♕b1 ♗e4 4.♞he1 ♗xg5 5.♞xe5 ♚xe5 6.♚xb7 ♞xh4-+.

Since all five moves are safe (though some are better than others), you get an idea how strong Black's position is!

### Answer 3-32

Black to play: Which of the following are safe?

- a) 1...♗e5   b) 1...♙f5   c) 1...h5



## Middlegame

White actually has a sneaky threat that Black must meet:

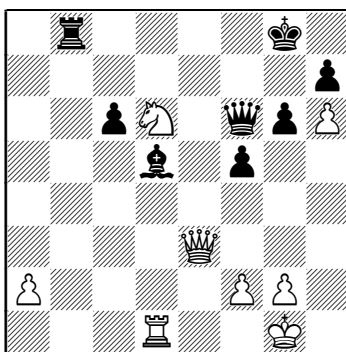
- a) 1...♘e5? loses to 2.♙xg4 and the removal of the guard on the c8-rook is fatal, e.g. 2...♘exg4 (taking with the other knight loses the same way) 3.♘d5! ♚f8 (better but also losing is 3...♙xc2 4.♘xe7+ ♚f8 5.♘xc2+-) 4.♚xc8!, and if 4...♚xc8 then 5.♘e7+ wins a rook.
- b) 1...♙f5!, keeping an eye on c8 and e4, is perfectly safe.
- c) 1...h5 also loses after 2.♙xg4:
- 2...hxg4 3.b5 ♘a5 4.♘d5! and White wins as in (a), or
  - 2...♘xg4 3.♘d5 ♚h4 4.h3 ♘h6 5.b5 when White threatens 6.bxc6 and, if the knight moves, then 6.♘e7+ wins.

This problem shows how easy it is to make an unsafe move if you are not very careful! I am a master and I can see missing this in a fast game or if I was not as careful as I normally am on each move.

### Answer 3-33

**White to play:** Which of the following are safe?

- a) 1.♚a7 b) 1.♚c5 c) 1.♘e8



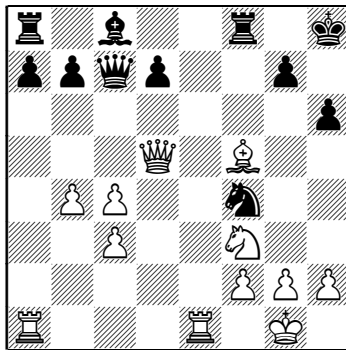
This position occurred in the game So–Maghsoodloo in the 2015 World Cup in Baku. White has a winning advantage, but how to preserve it?

- a) 1.♔a7, with a counterattack on the rook, is temporarily safe. After 1...♖d8 White needs to find 2.♗e1!, the only move to retain a winning advantage and justify 1.♔a7. Note that the black queen is tied down to the mate threat on g7.
- b) 1.♔c5? allows the very surprising counter 1...♔g5!!, when suddenly Black threatens an almost impossible-to-defend mate on g2. White has nothing better than 2.♘e4 sacrificing a piece, and is dead lost. Even worse is 2.f3 ♖b2 and White at the very least loses his queen. Not safe!
- c) 1.♘e8 is even slightly more accurate than 1.♔a7. After 1...♔f8, 2.♗e1! is again the right idea and White is in command, e.g. 2...♙xa2? 3.♔a7! when White's multiple threats to the rook, bishop, and g7 win on the spot. 1.♘e8 is the move GM So chose, and Black resigned 12 moves later.

### Answer 3-34

**White to play:** Which of the following are safe?

- a) 1.♔e4   b) 1.♔d4   c) 1.♔f7   d) 1.♔e5



- a) 1.♔e4 is clearly not safe. Black simply replies 1...d5 and the queen is attacked and the bishop is attacked twice. White loses material. This is the kind of refuting tactic that you should quickly find every time, assuming you are careful and ask consistently if your candidate moves are safe.

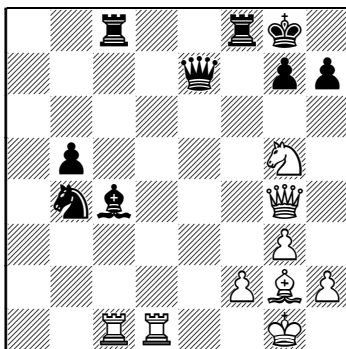


## Middlegame

- b) 1.♔d4! is a correct speculative sacrifice and White's best move. 1...♖xf5 2.♗e8+ ♔h7 3.♗e7 gives White a very strong attack, more than enough for his temporary piece sacrifice. Congratulations to IM Greg Shahade for finding this move when he was presented this position as a De Groot exercise for the second edition of *The Improving Chess Thinker*.
- c) 1.♔f7 is one of those moves that looks unsafe at first glance, but then you realize it is safe. Except that if you look even deeper it turns out to be unsafe after all! It should be easily seen that 1.♔f7 ♖xf7?? 2.♗e8+ will be mate next move. But after 1.♔f7 ♔d8! it turns out the white queen is trapped! However, your analysis should not stop here as White can try the tricky 2.♘e5!?. Then if Black finds the proper defense 2...d6!, White is losing material in every line.
- d) 1.♔e5 is safe and the second-best idea behind the trickier 1.♔d4. After 1...♔xe5 (1...d6 2.♔xf4) 2.♖xe5 d6 3.♙xc8! dxe5 4.♙xb7, White will net more than enough material for the exchange.

### Answer 3-35

**Black to play:** Is 1...♙e2 safe?



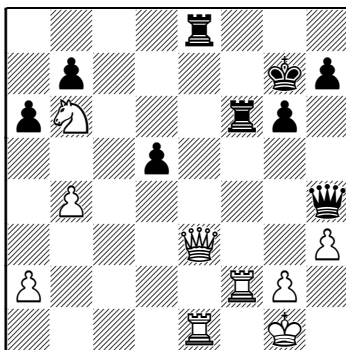
No, 1...♙e2 is not safe. Black has several safe moves such as 1...♖c5 and 1...h6, but the tempting fork 1...♙e2 does not work: 1...♙e2?

2. ♖xc8 (2. ♖h3 is also good) 2... ♙xd1 (2... ♖xc8 3. ♖xc8+ losing the queen is even worse) 3. ♖e6+ ♖xe6 4. ♗xe6 ♖e8 (4... ♖f6 is similar) 5. ♖xd1 ♖xe6 6. ♖b1 and Black cannot defend his knight and the threat of 7. ♙d5 (Heisman–Pariseau, Main Line Chess Club 2001). I was proud to be able to find these moves, determine that they were more or less forced (following 1... ♙e2), and be able to visualize the entire sequence correctly in this 75-minute game. ☺

### Answer 3-36

**White to play:** Which of the following are safe?

- a) 1. ♖d2    b) 1. ♖xe8    c) 1.g3



This position occurred in Svidler–Karjakin, World Cup 2015, Game 3. White only needed one draw in the final two games to win the Cup. When this position arose, GM Svidler had just thrown away a winning advantage; moreover, he was not in severe time trouble.

- a) Svidler played 1. ♖d2?? and immediately lost to 1... ♖xf2. Now 2. ♖xe8 loses to 2... ♖xd2 and 2. ♖xf2 loses to 2... ♖xe1+ 3. ♖xe1 ♖xe1+, so he tried 2. ♖c3+. However, after 2... d4 his queen was attacked and 3. ♖c7+ loses to 3... ♖f7. Therefore, after 2... d4, Svidler resigned.
- b) The only move to save the game was 1. ♖xe8. Then after 1... ♖xf2+ 2. ♗h2 ♖xb6 Black regains the piece and is ahead a pawn, but White can play 3. ♖e7+ ♗h6 4. ♖d7 with equal chances.
- c) 1.g3? also loses to the simple 1... ♖xe3 2.gxh4 ♖xe1+.

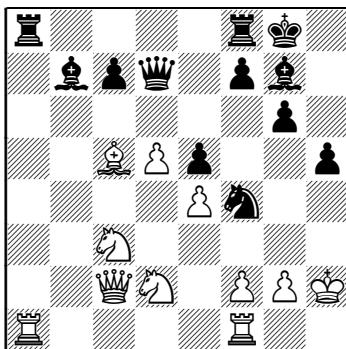
This problem illustrates two points:

- Under pressure (not just time pressure, but tournament pressure), even top GMs can make enormous mistakes; and
- Even in relatively simple positions with a reasonable amount of time, good players can make big mistakes. So *each time your opponent* – who is very likely not a Svidler – *makes a move, always take time to ask if his move is safe!* (The other question you want to ask is, “*What are all the things that move does?*”)

### Answer 3-37

**White to play:** Which of the following are safe?

- a) 1.♙xf8    b) 1.f3    c) 1.♘c4



- a) 1.♙xf8?? is easily answered by 1...♔g4!, and White has no defense against mate on g2, e.g. 2.♖g1 ♔h4# or 2.g3 ♔h3+ 3.♙g1 ♔g2#. This is an instructive example of needing to ask, “*If I make this move, in response does my opponent have a check, capture, or threat that I can’t meet next move?*” Here the answer is yes, 1.♙xf8 is met by the unstoppable threat of mate with 1...♔g4, so 1.♙xf8 has to be crossed off the candidate list. If you just play a move like 1.♙xf8 because a rook is worth more than a bishop and then wait to see what happens (and get mated), I call that “Hope Chess.” Here “Hope” means that you are not taking time on your move to ensure you can meet upcoming threats – you are just waiting for your opponent to possibly reply with one (or more) threats and then hoping to meet them.

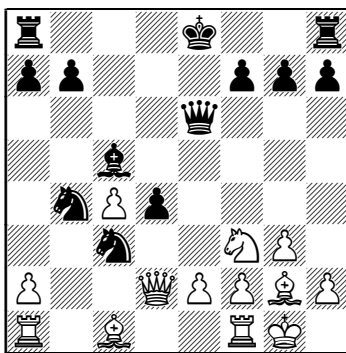
- b) 1.f3 – to stop 1...♔g4 – is plausible, but after 1...♕a6 White has nothing better than 2.♖xa6 ♖xa6 3.♗xf8 ♗xf8 when Black is ahead a clear pawn and has a good game. So White starts behind a pawn and ends behind a pawn – I guess you can call that safe, if not best.
- c) Best is 1.♘c4! to answer 1...♔g4? with 2.♘e3. Black has nothing better than 1...♖xa1 2.♖xa1 ♖a8, when White has some compensation for the pawn after 3.♖xa8+ ♗xa8 4.♔b1 due to the awkward position of the bishop on a8.

If I make this move, in response does my opponent have a check, capture, or threat that I can't meet next move?

### Answer 3-38

**White to play:** Which of the following are safe? (not easy!)

- a) 1.♗b2 b) 1.e3 c) 1.♔g5



This is a complicated position from a club game with a long time control where I was White.

- a) 1.♗b2 is safe. Whether Black tries to win the c-pawn or the e-pawn, White can retaliate:
- 1...♔xc4 2.♘e5 and if 2...♘xe2+ (better is 2...♔b5±) 3.♗h1 ♔c2 4.♔xc2 ♘xc2 5.♖ad1 ♘c3 6.♗xc3 dxc3 7.♗xb7 ♖b8 8.♘c6! (8...♖xb7?? 9.♖d8#) and White should win.

## Middlegame

- 1...♗xe2+ 2.♔h1 0-0-0 (2...d3 3.a3) 3.♖g5 ♕e7 4.♗e4 ♜he8 5.♝ae1 d3 6.♝b1!
- b) 1.e3 is safe and best. Obviously 1...dxe3 2.♝xc3 is bad for Black. I did not realize that 1...♗e4 was still good for me: 2.♗xd4! ♕g6 (2...♗xd2 3.♗xe6 ♗xf1 4.♗xc5 and the f1-knight is lost) 3.♝e2 and White has won a pawn.
- c) 1.♝g5 is the move I played, choosing to “sacrifice” the exchange for a pawn and the bishop pair (that’s usually about equal). White is indeed still better after 1...♙e7! 2.♝xg7 ♗xe2+ (in the game, Black played 2...♙f6 first and White was fine after 3.♝h6) 3.♔h1 and, no matter what Black plays, White is doing well, e.g. 3...0-0-0 4.♗g5±. It’s safe, but if you answered “speculative” that’s correct, too!

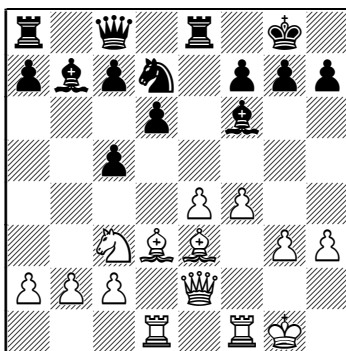
Therefore, all three moves are safe, but complicated! That sometimes happens when you have a good game but the opponent has unclear counterplay.

Answers to the “game” questions 39-50:

### Answer 3-39

**White to play:** Which of the following are safe?

- a) 17.e5 [played in the game]   b) 17.♙d2   c) 17.♝g4



- a) Black is better due to the removal-of-the-guard threat 17...♙xc3 18.bxc3 ♙xe4. White’s best chance is the move played

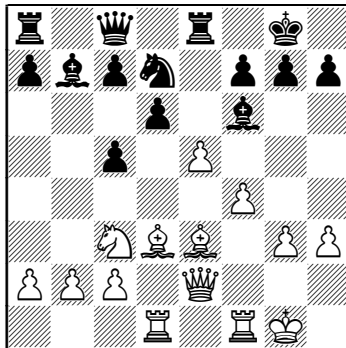
in the game, 17.e5! – see Answer 3-40 for what should happen next. Safe!

- b) 17.♙d2 guards e4, but exposes the queen on the e-file and allows Black the trick 17...c4! 18.♙xc4 ♖b6 19.♙d3 (if 19.f5 to safeguard the h-pawn, then 19...♗xc4 20.♚xc4 ♙a6 skewers the queen and rook and wins the exchange) 19...♚xh3, and White is in trouble.
- c) 17.♚g4 just allows the threat 17...♙xc3 18.bxc3 ♙xe4 when White has no good follow-up. Not safe.

### Answer 3-40

**Black to play:** Which of the following are safe?

- a) 17...dxe5 [played in the game]    b) 17...♗b6    c) 17...♗xe5



- a) 17...dxe5? is logical, but the tactics just don't work – that happens sometimes. After 18.♙f5!, as played in the game, we reach Problem 3-41.
- b) 17...♗b6 is tricky but sound. If 18.exf6 (18.♚h5 is best but Black is still OK after 18...g6), then 18...♚xh3 gives Black more than enough compensation.

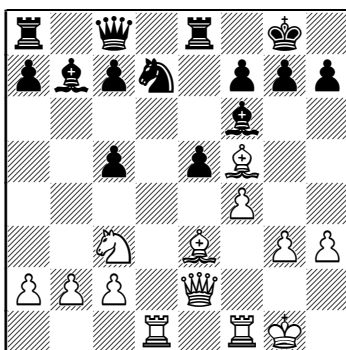
## Middlegame

- c) 17...♘xe5 is best and refutes White's play. Then if 18.fxe5 ♜xh3 19.♚h2, Black can play 19...♚xh2 ♜xe5 when White has nothing better than 21.♞xf6. If he tries to hold the piece with 21.♙f4, he gets mated after 21...♞h5+ 22.♔g1 ♙d4+ 23.♙e3 ♙xe3+ 24.♞f2 ♞h1#.

### Answer 3-41

**Black to play:** Which of the following are safe?

- a) 18...♙a6 [played in the game]    b) 18...♙c6    c) 18...♞d8

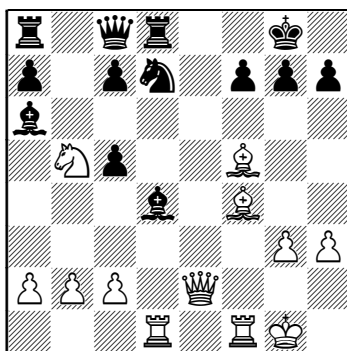


- a) 18...♙a6? is aggressive, but ultimately fails. Black's idea would work fine if White were forced to play 19.♙xd7? ♙xe2 20.♙xc8 ♙xd1 21.♙b7 ♞ab8–+, but White has many better 19<sup>th</sup> moves, e.g. 19.♚g4! and if 19...♙xf1 20.♙xd7+– or 19...♞d8 20.fxe5 ♙xe5 21.♞f2+–. Unfortunately White played 19.♘b5, which is inferior, but led to further interesting play.
- b) The meek 18...♙c6! is the only move to keep the game competitive. White still has a nice advantage after 19.♚g4! but the game remains complex, with chances for White to go wrong.
- c) Black's game collapses after 18...♞d8 19.fxe5 ♙xe5 20.♚g4 ♙c6 21.♘d5 ♞e8 22.♙xc5+–.

### Answer 3-42

**White to play:** Which of the following are safe?

- a) 22.♖xd4 [played in the game]   b) 22.♘xd4   c) 22.♔h2   d) 22.♔h1



- a) White correctly found 22.♖xd4! (in only 92 seconds!) to maintain equality. After 22...cxd4 we reach Problem 3-43. This would be a good example of the principle that *in complex positions, time and the initiative are often more important than material considerations* (especially smaller material). White gives up the exchange but gets to continue to press Black.
- b) 22.♘xd4 ♕xe2 23.♘xe2 is an interesting queen sacrifice, but Black is winning after 23...g6. Not safe.
- c) 22.♔h2 is a “normal” move, but Black is much better after 22...♖e8 23.♚d3 g6 so it’s not safe.
- d) 22.♔h1 is an even worse place to put the king, exposing it on the long diagonal: after 22...♖e8, 23.♚d3 (to continue to guard the knight) now fails to 23...♚b7+ with a double attack on the king and the b5-knight. Not safe.

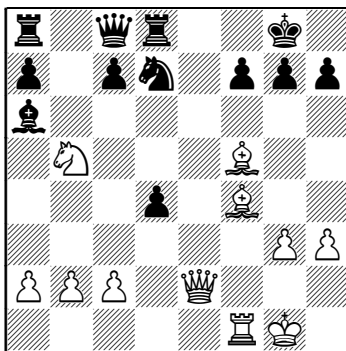
In complex positions, time and the initiative are often more important than material considerations.



### Answer 3-43

**White to play:** Which of the following are safe?

- a) 23. ♖h5 [played in the game]   b) 23. ♙g5   c) 23. ♖g4



- a) Apparently White played 22. ♖xd4! (in Problem 3-42) for the wrong reason because, after 22... cxd4, his follow-up move 23. ♖h5? is not safe after the obvious 23... g6. Then White has no good move, e.g. 24. ♖g5 ♙xb5-+.
- b) 23. ♙g5 is “safe” as after 23... ♖f8 24. ♖h5! g6 25. ♖h6 gxf5 26. ♙f6! ♗xf6 27. ♖g5+ White can force a perpetual, but it’s only safe in the “not losing” sense. It does lose the advantage (see (c)).
- c) 23. ♖g4! is not only safe, but maintains a big advantage for White after either 23... ♗f6 (best) 24. ♙xc8 ♖axc8 25. ♖g5 or 23... g6?! 24. ♙h6 c5 (24... ♙xb5? 25. ♖xd4 is mate in 5) 25. ♖f4 ♖c6 26. ♗d6+- . By the way, it took *Stockfish* 24 ply to find this move, so don’t feel bad if you didn’t realize why 23. ♖g4 is the best move.

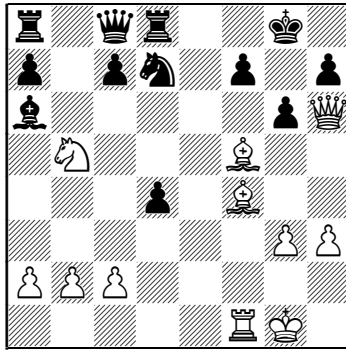
### Answer 3-44

**Black to play:** Which of the following are safe?

- a) 24... gxf5 [played in the game]   b) 24... ♖b7   c) 24... ♙xb5

(see diagram next page)

## Answers for Chapter 3



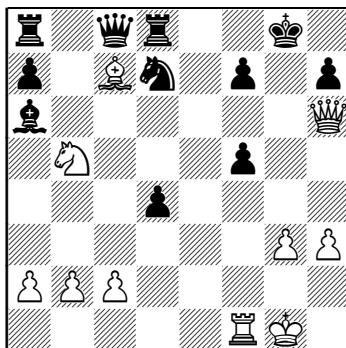
- a) 24...gxf5 is safe. White cannot get a perpetual check: 25.♔g5+ ♕h8! (25...♕f8?? 26.♖d6!+-) 26.♗e5+ (what else?) 26...♘xe5 27.♗f6+ ♕g8 28.♗g5+ ♖g6-+. If instead 25.♘xd4 (relatively best), then 25...♗b7 26.♘xf5 ♗b6+ trades queens and Black is winning.
- b) 24...♗b7 is safe and better than 24...gxf5. If 25.♗xd7 ♗xd7 26.♗e5, then either 26...f5 or 26...f6 wins for Black.
- c) 24...♗xb5 is best. Then 25.♗e5 ♘xe5! (forced but winning) 26.♗xc8 ♗xf1-+ as Black has a monstrous amount of material for the queen.

So all three moves are safe and should be winning for Black.

### Answer 3-45

**Black to play:** Which of the following are safe?

- a) 25...♗e8 [played in the game]    b) 25...♗f8    c) 25...♗xb5



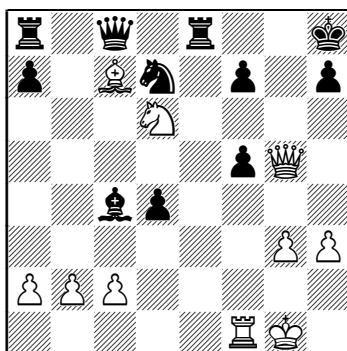
## Middlegame

- a) 25...♖e8?? allows White to seize the initiative with 26.♔g5+, as found in the game, which continued 26...♕h8 (forced) 27.♘d6 ♕c4?!, leading to Problem 3-46.
- b) 25...♖f8? is better than 25...♖e8, but White can equalize with 26.♖xf5! (26.♔g5+ leads nowhere with the rook on f8) 26...f6 (forced) 27.♖g5+! fxg5 28.♔xg5+ ♕h8 29.♕e5+ ♘xe5 30.♔xe5+ ♕g8 31.♔g5+ ♖f7 32.♘d6+, winning the queen, but Black has more than enough material and the game should be drawn with best play.
- c) 25...♕xb5! is the only move which retains the winning edge: 26.♖xf5 f6!–+. It's so easy to throw away the advantage in such complicated positions. No wonder computers are better than any human these days...

### Answer 3-46

**White to play:** Which of the following are safe?

- a) 28.♘xc8 [played in the game]    b) 28.♘xf5



- a) 28.♘xc8? throws away most of White's advantage after Black's reply 28...♖axc8, as played in the game. Black has a rook and a piece for the queen. White is better but it's a fight once again. Not safe; see Problem 3-47.
- b) The Donald Byrne rule, as taught to me by the Professor himself, is: *"If you see the win of a queen that wins easily, then just take the queen and don't look for a mate – you are*

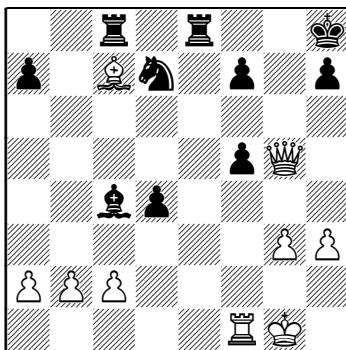
winning anyway and you will kick yourself for the rest of your life if you play for mate and it's not there."

This rule does *not* apply to this position because if White wins the queen, Black has so much material in return that White is not winning easily. But there is a checkmate, and it's not super-difficult: 28. ♖xf5! ♜g8 29. ♙e5+ f6 (29... ♗xe5 30. ♚f6+ mates in 2) 30. ♙xf6+ ♗xf6 31. ♚xf6+ ♜g7 32. ♚xg7#.

### Answer 3-47

**White to play:** Which of the following are safe?

- a) 29. ♜xf5 [played in the game]   b) 29. ♚f4   c) 29. ♙f4



- a) 29. ♜xf5?, abandoning the bishop, is fairly incomprehensible; I guess White forgot his rook was guarded and was more willing to give up a piece for a pawn than lose the exchange. This is a common problem among amateurs who fear “losing a rook” when in fact it’s only losing the exchange, which is worth only about half as much as the bishop! White, who had a mate on the previous move but missed it (see Answer 3-46), now gives away the remainder of his advantage after the obvious 29... ♜xc7. Then after 30. ♚d2?! see Problem 3-48.
- b) 29. ♚f4, saving the bishop, is best, with decent winning chances. True, it gives up the exchange after 29... ♙xf1 30. ♗xf1, but that’s much better than giving up an entire bishop.

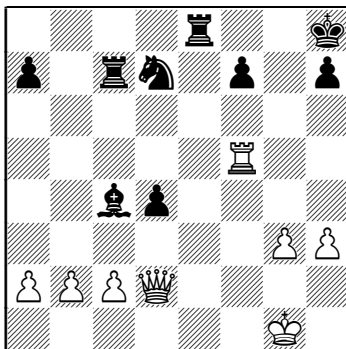
## Middlegame

- c) 29.♙f4 is also safe. Again 29...♙xf1 30.♖xf1 keeps some advantage for White.

### Answer 3-48

**Black to play:** Which of the following are safe?

- a) 30...♘e5 [played in the game] b) 30...♙e6 c) 30...f6

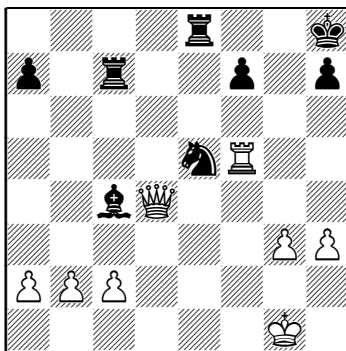


- a) 30...♘e5 is not safe. The best refutation is the cute but complicated 31.b3! and all the bishop retreats are bad, e.g. 31...♙d5 32.♖xd4 hitting the knight and the bishop. 31...♙a6 32.♖a5 also hits the knight and the bishop, while the prettiest is 31...♙b5 32.♖b4! (a computer-type tactic) 32...♙e2 (other bishop moves are similar) 33.♖xe5! and if 33...♖xe5 then 34.♖f8#. However, in the game White understandably missed this (I probably would have, too!), playing 31.♖xd4 and leading to Problem 3-49.
- b) 30...♙e6 31.♖xd4+ f6 is as good as Black can get, a nice advantage.
- c) 30...f6 is also safe. White can try either 31.♖xd4 ♙e6, transposing to (b), or the slightly better 31.g4 when 31...d3 32.cxd3 ♙xa2 is a computer-like continuation, nonetheless slightly better for Black.

**Answer 3-49**

**Black to play:** Which of the following are safe?

- a) 31...♖ce7 [played in the game]    b) 31...f6    c) 31...♗d7

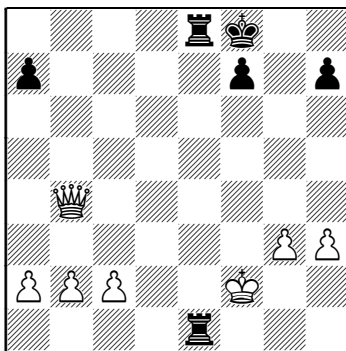


- a) 31...♖ce7? allows the simple removal-of-the-guard tactic 32.♗xe5 ♖xe5 33.♚xc4. To stop analyzing after 32.♗xe5 because White initially loses the exchange would be a quiescence error because you only have to look one half-move further to see that White picks up an additional piece and thus ends up with the major advantage of two pieces for a rook.
- b) 31...f6 is not as bad as 31...♖ce7?, but simply drops a pawn to 32.♗xf6. Yes, it's that easy and thus not safe.
- c) 31...♗d7 is best, when 32.♚c3 ♖d1+ 33.♔g2 ♗d5+ would soon lead to a draw. Safe!

### Answer 3-50

**Black to play:** Which of the following are safe?

- a) 36...♔g8 [played in the game]    b) 36...♖8e7    c) 36...♖1e7

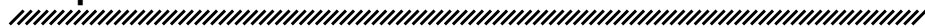


The good news is that Black is losing after any legal move, so technically all the moves are not safe (or equally safe, depending on how you view it). However, if Black is to put up any resistance, he can't allow White to trade the queen for two rooks and enter a trivially lost king-and-pawn endgame two pawns down, so:

- a) 36...♔g8? allowed the simplification 37.♗xe1 ♖xe1 38.♔xe1 and White won easily.
- b) 36...♖8e7? is just as bad as 36...♔g8, again allowing 37.♗xe1.
- c) The only try is 36...♖1e7. White will eventually win by pushing his queenside pawns, but I have seen players draw – and even win – from worse positions when their opponent played badly. So from my point of view this is the only correct (safe?) move.

An even dozen problems from one game! Who said writing a chess book was difficult? ☺

## Chapter 4



# Endgame

As mentioned in the Introduction, the definition of “safe” for problems in the deep endgame should be different than it is for positions that occur earlier in the game. In the late endgame, a move is “safe” if it achieves the desired goal: to preserve a win or a draw. In the earlier endgame, when there are more pieces on the board and the outcome is still in doubt, we can assume the definition used in the rest of the book: a move is safe if it does not lose material or get the player checkmated.

Although the endgame, with fewer pieces, may seem less complex than the middlegame, it’s the phase of the game where one bad move is most likely to turn a win into a draw – or a loss. And there’s little or no time to recover after a mistake.

I remember a game where a student, rated 1700, was winning a king-and-pawn endgame against an expert. He then made one hasty – and bad – move, thinking it was obvious. Then on the next move he stared at the board for a while, wondering where his win had gone. It turned out the previous move was the critical one; the move that he played in haste was the one where he should have taken time. Once that move was made, the expert found the path to saving the game and obtaining a draw.

Playing long time-control games should give you time to analyze carefully in your endgames. Making safe moves in the endgame often spells the difference between winning, drawing, or losing.

The positions in this chapter are ordered roughly by the type of endgame: multiple-piece endgames first, and king-and-pawn endgames last. Additional endgame problems can be found in Chapter 5, “*How Many Safe Moves?*”



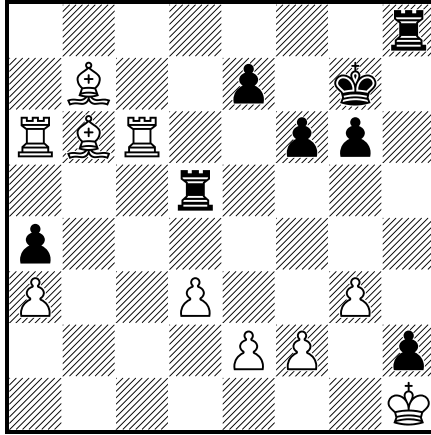
## Endgame

4-1

**White to play:**

Which of the following are safe?

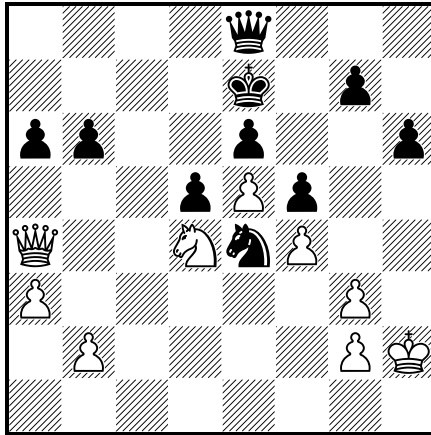
a) 1. ♖c1   b) 1. ♖c8   c) 1. ♖xf6



4-2

**White to play:**

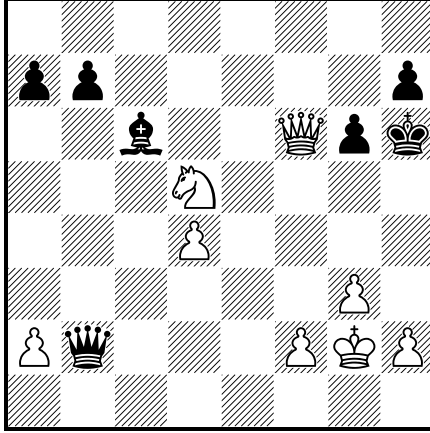
Is 1. ♔xa6 safe?



**4-3**

**White to play:**

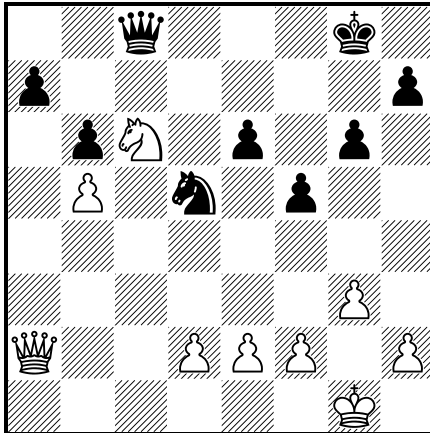
Is 1.♔h3 safe?



**4-4**

**Black to play:**

Is 1...a5 safe?



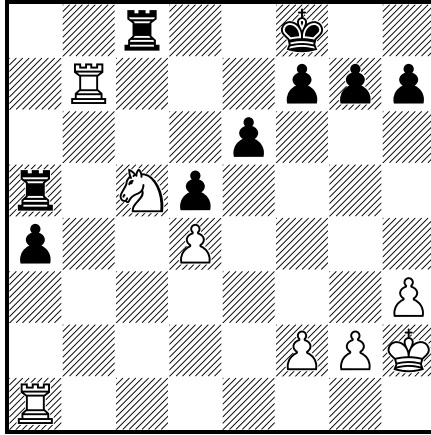
Endgame

4-5

**White to play:**

Which of the following are safe?

- a) 1. ♖xa4    b) 1. ♘xa4

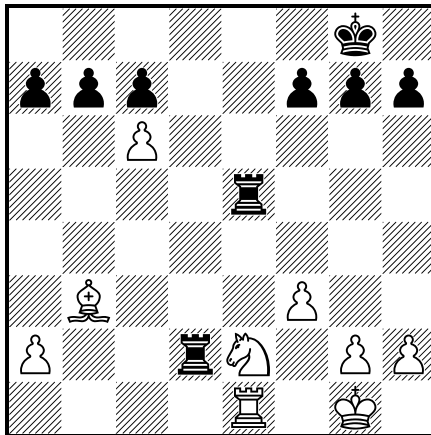


4-6

**Black to play:**

Which of the following are safe?

- a) 1... ♖2xe2    b) 1... ♖5xe2

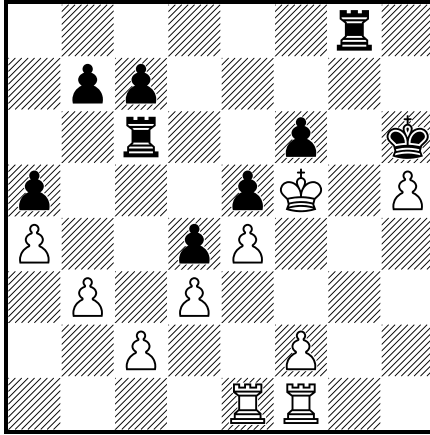


4-7

**White to play:**

Which of the following are safe?

- a) 1.♖c1 b) 1.f4 c) 1.♞g1

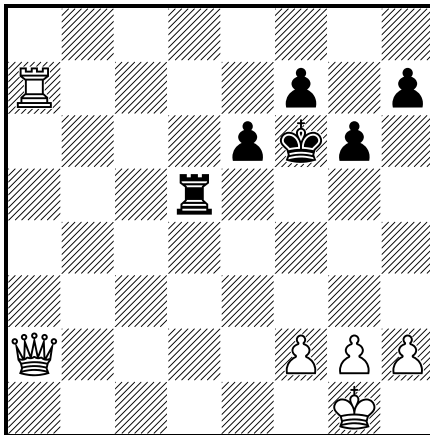


4-8

**White to play:**

Which of the following are safe?

- a) 1.♙a5 b) 1.♙b2+ c) 1.g4 d) 1.♙xd5



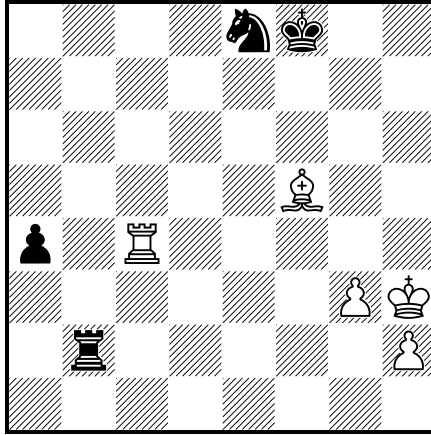
Endgame

4-9

**Black to play:**

Which of the following are safe?

- a) 1...a3   b) 1...♖f2   c) 1...♘d6

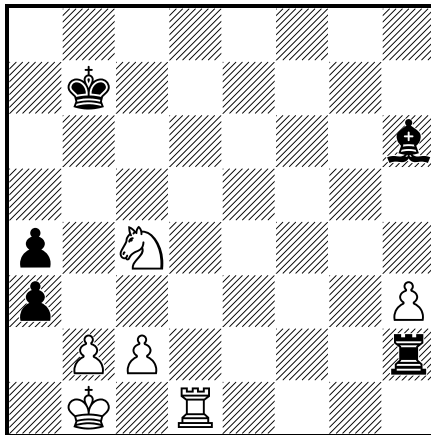


4-10

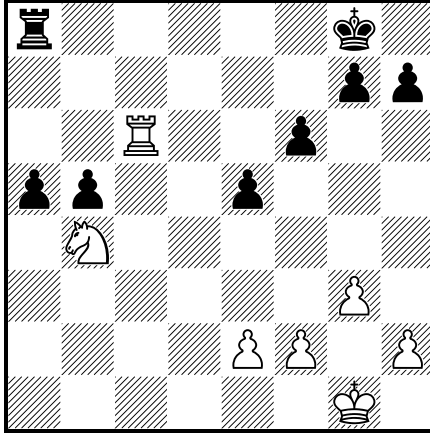
**White to play:**

Which of the following are safe?

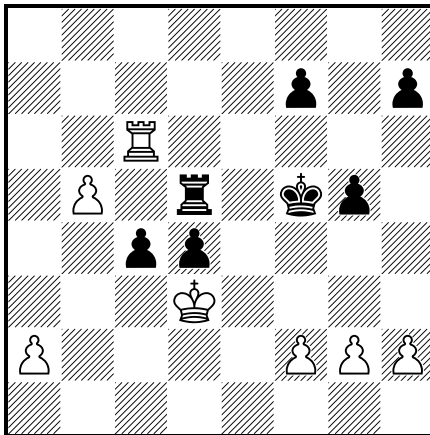
- a) 1.♖d6   b) 1.bxa3   c) 1.♘xa3



**4-11**  
**White to play:**  
Is 1. ♖a6 safe?



**4-12**  
**White to play:**  
Is 1. ♔xc4 safe?



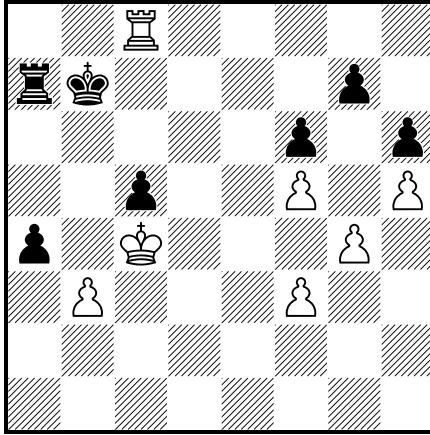
Endgame

**4-13**

**White to play:**

Which of the following are safe?

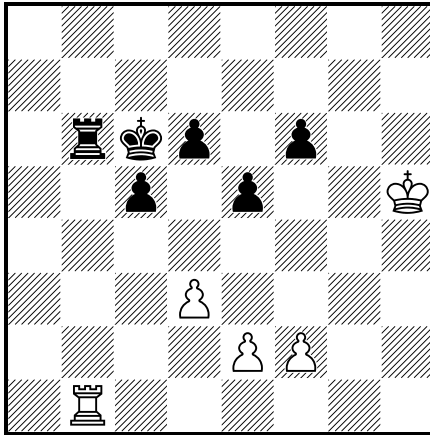
- a) 1.♖g8   b) 1.♖xc5   c) 1.♖f8



**4-14**

**White to play:**

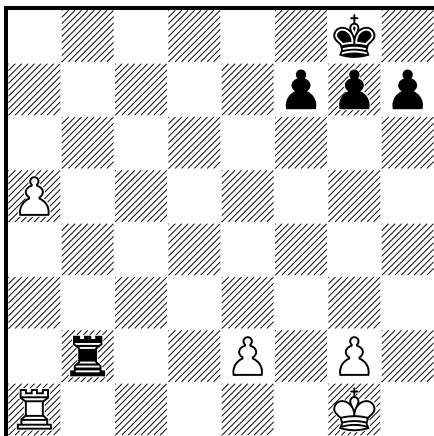
Is 1.♖xb6+ safe?



**4-15**

**Black to play:**

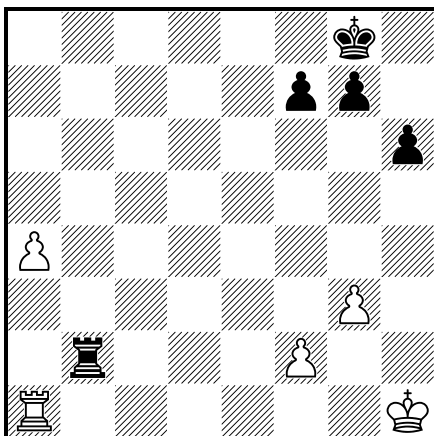
Is 1...♖xe2 safe?



**4-16**

**Black to play:**

Is 1...♖xf2 safe?





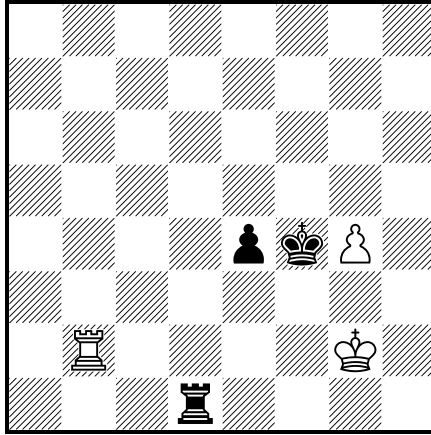
Endgame

4-17

**White to play:**

Which of the following are safe?

- a) 1. ♖b3   b) 1. ♖e2   c) 1. g5   d) 1. ♔f2   e) 1. ♔h3

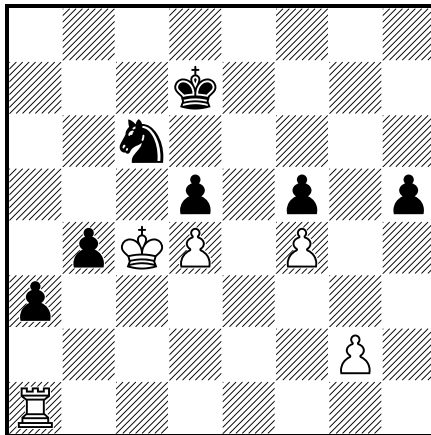


4-18

**White to play:**

Which of the following are safe?

- a) 1. ♔b5   b) 1. ♔c5   c) 1. ♔b3   d) 1. ♔d3   e) 1. ♔xd5

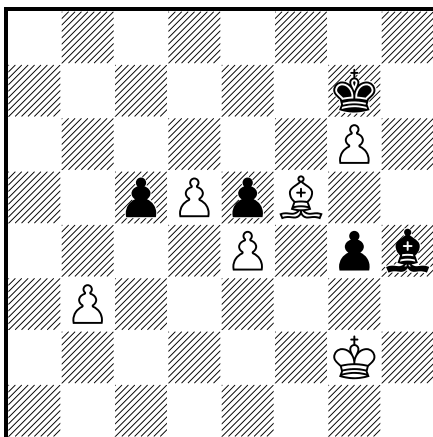


**4-19**

**Black to play:**

Which of the following are safe?

- a) 1...♔f8   b) 1...♔f6   c) 1...g3   d) 1...♔e7

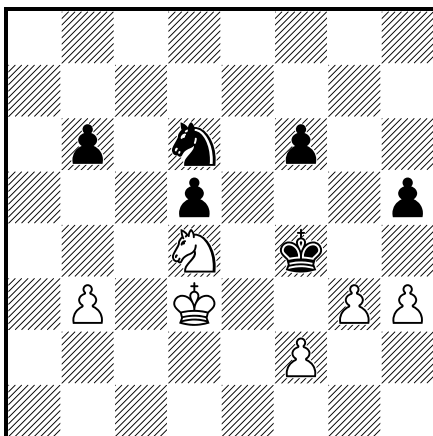


**4-20**

**Black to play:**

Which of the following are safe?

- a) 1...♔g5   b) 1...♔e5



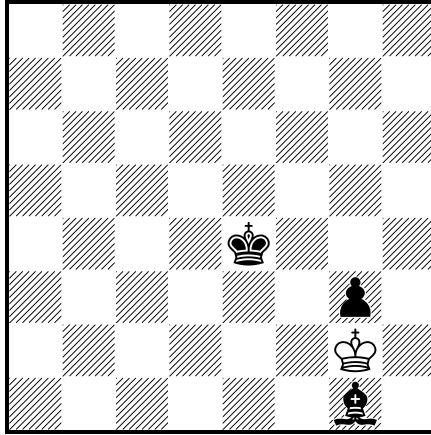
Endgame

**4-21**

**Black to play:**

Which of the following are safe?

- a) 1...♙f2   b) 1...♙h2   c) 1...♚f4

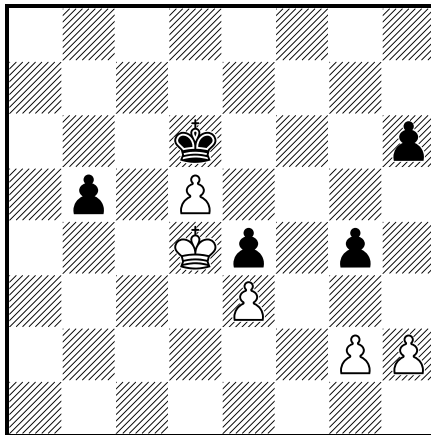


**4-22**

**White to play:**

Which of the following are safe?

- a) 1.♚xe4   b) 1.h3   c) 1.h4   d) 1.g3

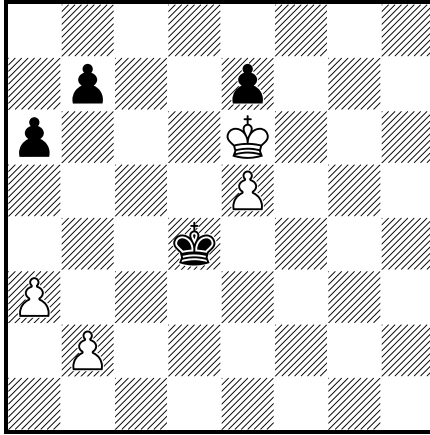


**4-23**

**Black to play:**

Which of the following are safe?

- a) 1...♔e4   b) 1...a5   c) 1...b6   d) 1...b5

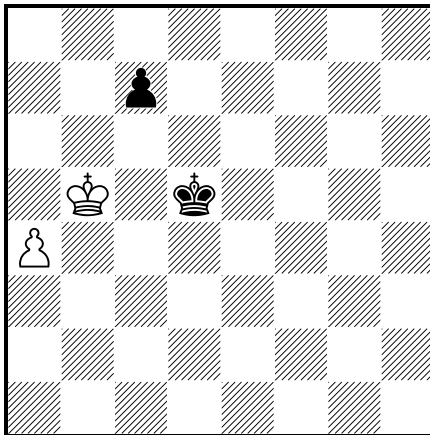


**4-24**

**Black to play:**

Which of the following are safe?

- a) 1...♔d6   b) 1...c6+   c) 1...c5



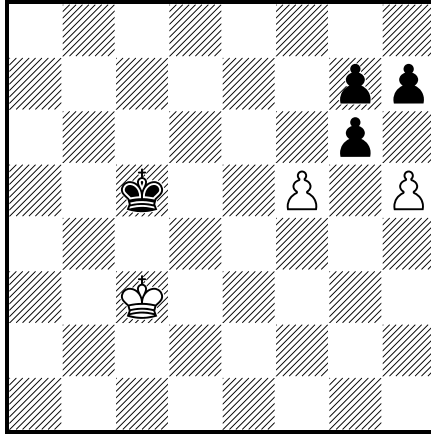
Endgame

**4-25**

**White to play:**

Which of the following are safe?

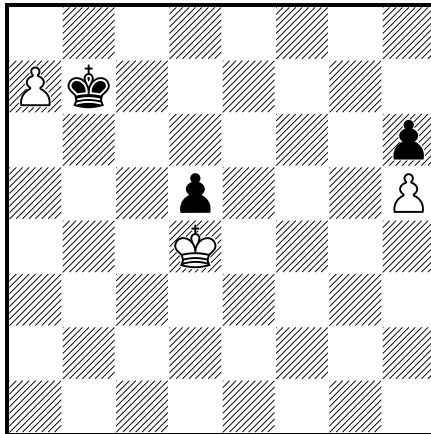
- a) 1.hxg6    b) 1.fxg6



**4-26**

**White to play:**

Is 1.a8<sup>♔</sup>+ safe?

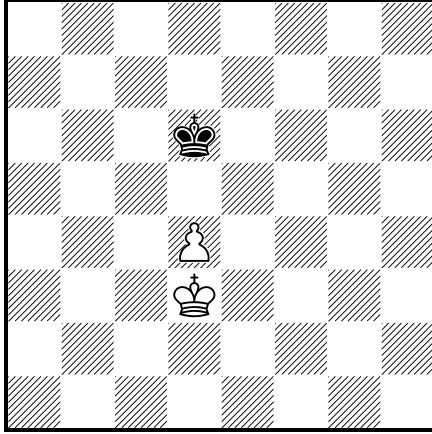


**4-27**

**Black to play:**

Which of the following are safe?

- a) 1...♔c7   b) 1...♔d7   c) 1...♔e7  
d) 1...♔c6   e) 1...♔e6   f) 1...♔d5

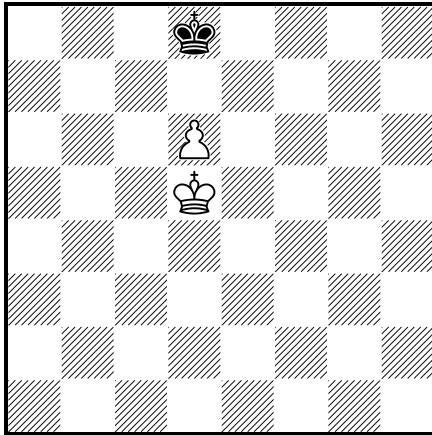


**4-28**

**Black to play:**

Which of the following are safe?

- a) 1...♔d7   b) 1...♔c8   c) 1...♔e8



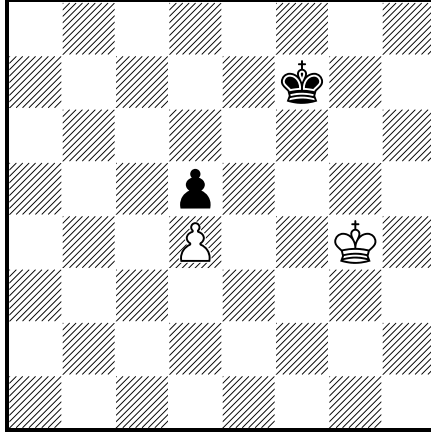
Endgame

**4-29**

**Black to play:**

Which of the following are safe?

- a) 1...♔e6   b) 1...♔e7   c) 1...♔e8   d) 1...♔f6  
e) 1...♔f8   f) 1...♔g8   g) 1...♔g7   h) 1...♔g6

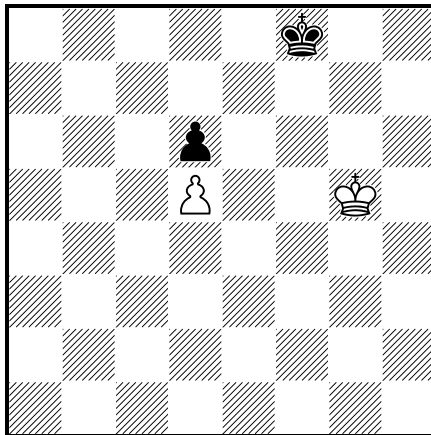


**4-30**

**Black to play:**

Which of the following are safe?

- a) 1...♔e8   b) 1...♔e7   c) 1...♔f7   d) 1...♔g7   e) 1...♔g8

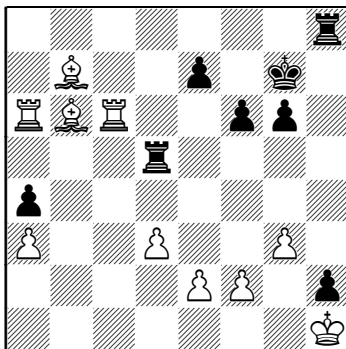


# Answers for Chapter 4

## Answer 4-1

**White to play:** Which of the following are safe?

- a) 1.♖c1   b) 1.♖c8   c) 1.♗xf6



- a) White is ahead two pieces, so all reasonable moves win. However, Black has only one counter-idea: check on the back rank and promote with mate. I call Black's only hope a one-trick pony. If White simply stops that pony, then Black has no play. After the game, I asked Black what he would have done if White had played 1.♖c1 and then said (legally, before pressing the clock), "I am not going to let you check me on the back rank." Black replied he would have resigned. So in that sense 1.♖c1 is the most sensible and safe move.
- b) 1.♖c8 attacks both black rooks and thus forces the trade of at least one of them. That will also permanently remove the back-rank mate threat, so 1.♖c8 is the "best" move.
- c) 1.♗xf6 (as played in the game) was a crazy attempt to win a pawn in a position where White does not need to win any more pawns (at least in the near future) to win the game. Black properly did not play the obliging 1...exf6? or 1...♔xf6



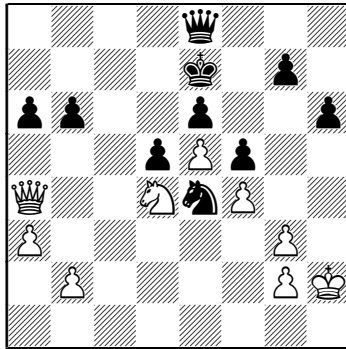
## Endgame

allowing  $2.\text{♙xd5}$ , but instead played  $1...\text{♜b5}$ , threatening the immediate mate. White then went into a deep think and played the winning  $2.\text{♞xg6+!}$  but a few moves later failed to find the correct move in some complications and lost anyway! So  $1.\text{♞xf6}$  is safe but absolutely, unnecessarily complicated.

So (a), (b), and (c) are all safe, but not equally wise!

### Answer 4-2

**White to play:** Is  $1.\text{♞xa6}$  safe?



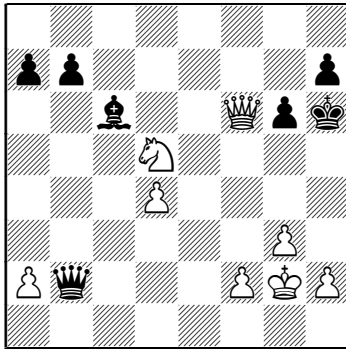
White is not winning. Even if  $1.\text{♞xe8+ ♔xe8}$   $2.\text{♘xe6 ♔f7}$ , Black is equal.

After  $1.\text{♞xa6 ♞h5+}$   $2.\text{♔g1 ♞d1+}$   $3.\text{♔h2 ♞xd4}$ , White gets a perpetual check with  $4.\text{♞b7+}$ . Therefore, since White is not winning and doesn't have anything that gives him more than an equal position,  $1.\text{♞xa6}$  is safe.

Of course, if White wants – or needs – to play longer and see if Black makes a mistake, then forcing a draw immediately might not be in his best interests. But, theoretically speaking, doing so is as good as anything else.

### Answer 4-3

**White to play:** Is 1.♔h3 safe?

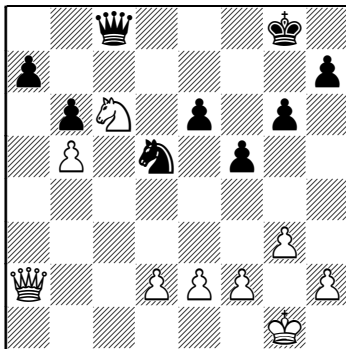


Not only is 1.♔h3! safe, it's the best move by far. White mates in 8 moves or less: 1...♙d7+ (1...♙xd5 2.♚f8+ ♔h5 3.g4+ ♔g5 4.f4#) 2.g4 ♙xg4+ 3.♔h4! ♚xf2+ (Black has few ways to prevent ♚f6-f8#) 4.♚xf2 ♙f5 5.♚e3+ ♔g7 6.♚e7+ ♔g8 7.♙f6+ ♔h8 8.♚xh7#.

I was White, and in some time pressure I played 1.♚f8+ but after 1...♔h5 could not find the winning sacrifices 2.g4+! or 2.♔h3!, and only got a draw after 2.♚f3+?.

### Answer 4-4

**Black to play:** Is 1...a5 safe?



This is one of those problems illustrating the issue of the quiescence error.

## Endgame

At the shallowest level of analysis, 1...a5 looks safe because everything is guarded.

At the next deeper level, 1...a5 looks unsafe because of 2.bxa6 *e.p.*

At the next level after that, 1...a5 looks safe because of 2.bxa6 *e.p.* ♖xc6, when the knight is safely captured and White's a-pawn won't queen, e.g. 3.a7 ♜c7-+.

Looking one move even deeper, 1...a5 looks unsafe due to 2.♞xd5 exd5 3.♜e7+ ♔f7 4.♜xc8.

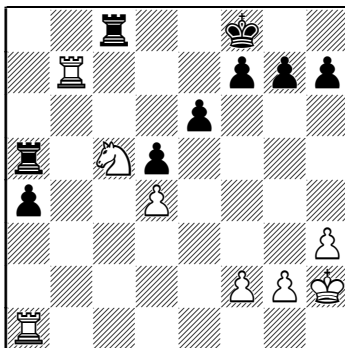
But at the deepest level, it turns out 1...a5 is safe because of 2.♞xd5 exd5 3.♜e7+ ♔f7 4.♜xc8 a4!, and White cannot stop Black's a-pawn from promoting.

Moral of the story: if you see a move like 1...a5, you should not only consider *en passant* captures and queen sacrifices – you should continue your analysis even if the queen sacrifice line looks to be “quiet,” winning a piece. Always ask that critical question at the end: “*Are there any further checks, captures, or threats at the end that would make me think that my evaluation would change?*” In this case, the threat 4...a4 would cause you to analyze further to see if you could stop the a-pawn from promoting. Since it does, that makes 1...a5 safe and 2.♞xd5 a blunder.

### Answer 4-5

**White to play:** Which of the following are safe?

- a) 1.♞xa4    b) 1.♜xa4



Although Black's pawn is attacked twice and guarded only once, neither 1.♖xa4 nor 1.♘xa4 is safe:

- a) 1.♖xa4? ♜8xc5! is a common tactical device everyone should know. If now 2.♖xa5, then 2...♖xa5; while if 2.dxc5, then 2...♖xa4. In all lines Black wins back a piece.
- b) 1.♘xa4? ♜c4 hits the pinned knight, which cannot be guarded again.

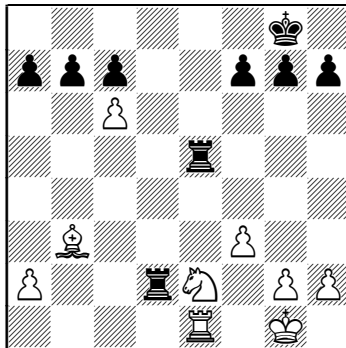
Instead White should just play 1.♖a3, blockading the black a-pawn on the square where it is still attacked by the knight and then a further ♜b7-b4 will win it easily.

Are there any further checks, captures, or threats at the end that would make me think that my evaluation would change?

### Answer 4-6

**Black to play:** Which of the following are safe?

- a) 1...♖2xe2    b) 1...♖5xe2



The only way the answer could be different between (a) and (b) would be if White doesn't have to trade rooks. If he does have to trade, then it will transpose after 1...♖(either)xe2 2.♖xe2 ♜xe2. So let's consider that line first, because if White wins with 2.♖xe2, then the answer to both will be "not safe." Clearly, White is going to try

## Endgame

3.cxb7, when Black will have to play 3...♖e8 or possibly check first (doubtful) and then 4...♖e8. If Black can then untangle himself with his king, he can win, so that would make the initial capture safe.

After 3...♖e8, the best White can do is to guard the pawn with something like 4.♙d5, or maybe first 4.♕f2. But then Black threatens to run his king ...♔f8-e7-d6-c5-b6 and then play ...♖xb7 ♙xb7 ♕xb7 with a winning king-and-pawn endgame. Can White stop him? The answer is no: 4.♙d5 ♔f8 5.♕f2 ♕e7 6.♕e3 ♔d6+ 7.♕d4 f5 (more accurate than 7...c6 8.♙xf7 ♖b8) 8.f4 ♖b8, when the unstoppable threat of 9...c6 wins.

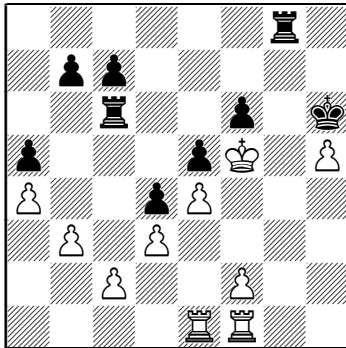
But 1...♖(either)xe2 threatens both 2...♖xe1+ and 2...bxc6, while 1...♖5xe2 also threatens 2...♖xg2+. So 1...♖(either)xe2 pretty much forces 2.♖xe2 ♖xe2, thus the transposition analysis above is the key line.

So both (a) and (b) are safe. How much of this do you have to see to capture? You certainly have to see up to the point where the black rook can safely defend the back rank (3...♖e8). But that doesn't tell you if White can establish a bind with the pawn on the seventh rank or not. So most good players would look further and make sure that they can approach the b7-pawn with the black king before capturing on e2.

### Answer 4-7

**White to play:** Which of the following are safe?

- a) 1.♖c1   b) 1.f4   c) 1.♖g1



- a) No,  $1.\text{♖c1}$  is about as unsafe as a move can be: it allows mate in one with  $1...\text{♗g5}\#$ . If you are too worried about the c-pawn and don't look for your opponent's checks, captures, or threats on the next move, you may miss a mate in one!

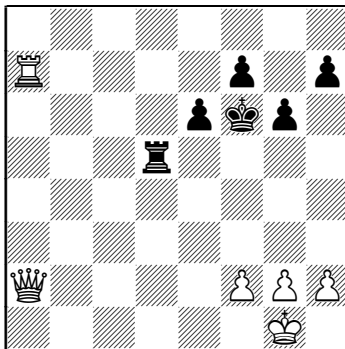
In the game, White first wrote down  $1.\text{♖c1}$  on his scoresheet (yes, recording a move before touching the piece is illegal in a FIDE event, but legal under an alternative rule for the U.S. Chess Federation) and then did a sanity check, realized it was insane, and played a move that stopped the mate. Hopefully when you play, you will first check to see if a move is safe and not have to wait until a sanity check to find it at the last second!

- b) Yes,  $1.f4$  is safe. It is one of only two moves that stop the mate (and thus constitute the ultimate in safety). But if  $1...\text{♗xc2}$ , then  $2.\text{♕xf6}$  is possible. Note also that  $1...\text{♕xh5}??$  is not safe because of  $2.\text{♗h1}\#$  and it's Black who is mated! So both sides can err and get mated...
- c) Yes,  $1.\text{♗g1}$  is the other move which stops mate. Again the attack on the f6-pawn allows White to hold the balance.

### Answer 4-8

**White to play:** Which of the following are safe?

- a)  $1.\text{♙a5}$    b)  $1.\text{♙b2+}$    c)  $1.g4$    d)  $1.\text{♙xd5}$



It's not often you get to talk about four different types of safety in one problem, so this one is instructive.

## Endgame

- a) No, 1. ♖a5 is not safe, but not because of 1... ♜xa5 2. ♜xa5 when White wins easily (see answer (d)). Instead, of course, Black should play 1... ♝d1+ 2. ♖e1 ♜xe1#.
- b) Yes, 1. ♖b2+ is safe, but it's only "temporarily safe" – White can't forget that Black is still threatening a back-rank mate, so he is mainly putting off his decision on how to deal with this for the future.
- c) 1.g4 is pretty much permanently safe. It would take quite a bit of maneuvering for White to get himself mated after this move, so it solves the problem in a way that would make a chess coach breathe freely. Once I see a student play a move like 1.g4, I know he is going to win. Similarly, any pawn move may do (I prefer the ones that go to the fourth rank, but that's just a tiny difference), or even 1. ♔f1. *In general, moves like 1.g4 which permanently stop mate are going to be safer than moves like 1. ♖g2+ which only stop mate for one move.*
- d) Ah, this is the move that makes this problem interesting! Of course, 1. ♖xd5 loses material and, by definition, may be considered unsafe. However, I would play this move instantly in any similar position! Trading down, even if you lose material, to reach an endgame where the opponent has no counterplay and just loses, is always a good idea. It's part of good technique, even if a computer might never play this move. *Often, it's not what you trade off that matters, but what you leave on the board.*

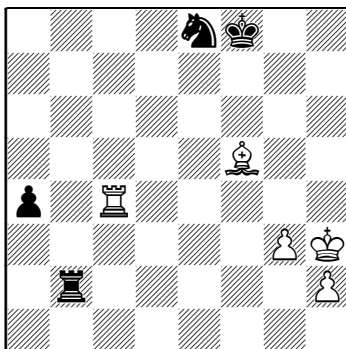
Using similar "defensive" logic, after 1. ♖xd5 exd5, I would next activate my remaining dormant piece, the king. Its mission would be to blockade the d-pawn, so I would start with 2. ♔f1, heading for the d-file. Once the king reaches that file, Black has absolutely no hope, and further play for him is just painful.

In my experience, *when you play this way when far ahead (removing all your opponent's "get back in the game" possibilities), your opponents often get the idea quickly and resign, since you are making their position no fun to play.*

### Answer 4-9

**Black to play:** Which of the following are safe?

- a) 1...a3    b) 1...♖f2    c) 1...♞d6



- a) 1...a3! is Black's only chance. After 2.♖a4 ♖b3, White's pieces are somewhat tied down and the win will be problematic at best.
- b) 1...♖f2? allows 2.♙d7, double-attacking the knight and a-pawn, e.g. 2...a3 3.♞c8 ♖e2 4.♖a8 a2 5.♙xe8 ♖xe8 6.♖xa2 with a technical win.
- c) The tempting fork 1...♞d6? was played in the game. White won after 2.♖xa4 ♞xf5 3.♖f4 ♖b5 4.♙g4, regaining the piece with two connected passed pawns, similar to the position reached at the end of (b).

Often, it's not what you trade off that matters,  
but what you leave on the board.

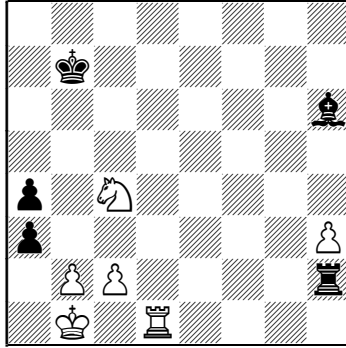


## Endgame

### Answer 4-10

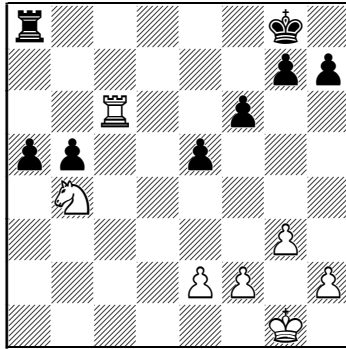
**White to play:** Which of the following are safe?

- a) 1.♖d6   b) 1.bxa3   c) 1.♘xa3



- a) 1.♖d6? jeopardizes the win by allowing Black such equalizing moves as 1...♖xh3, 1...♖h1+, or maybe even 1...♙f4.
- b) 1.bxa3 ends up blocking the white rook from the a-pawn, so after 1...♖xh3 2.♖d4, my a-pawn was a dead duck and I lost in 52 moves. I was hoping (that's not Hope Chess!) that Walter might not find this in the very short time remaining on his clock – but he did. This game was played in the second round of the 1972 New York City Championship, on Board 1.
- c) 1.♘xa3!, as found by my opponent, the recently deceased GM Walter Browne, in time pressure (what else for Walter?), is the move that preserves the win. After 1...♖xh3 2.♖d4, my a-pawn was a dead duck and I lost in 52 moves. I was hoping (that's not Hope Chess!) that Walter might not find this in the very short time remaining on his clock – but he did. This game was played in the second round of the 1972 New York City Championship, on Board 1.

**Answer 4-11**  
**White to play: Is 1.♖a6 safe?**



1.♖a6 is the move White *wants* to play. Why? Because if it works, then the game is over. If Black doesn't trade rooks, then 2.♖xa5 wins. So Black is forced to trade. But is that good for White? You can't just play it and hope that it works. If it wins, then you likely don't have to look at other complicated lines, which requires time.

It turns out 1.♖a6 draws (if you are trying to draw!) and is not the best move. However, it is not likely that White is winning anyway, so technically 1.♖a6 is safe, but it doesn't cause Black the most problems:

1.♖a6 ♖xa6 2.♗xa6 ♔f7 (2...a4? 3.♔f1 and if 3...a3?! then 4.♗b4 blockades and White is winning) 3.♔f1 ♔e7 (3...♔e6? 4.♗c7+ picks up the b-pawn) 4.♗c7= and White is also drawing with any reasonable fourth move.

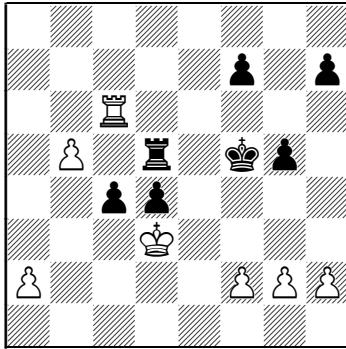
One key is not to play 1.♖a6 quickly because it is very possible Black's two connected passed pawns can cause the knight problems, especially with the white king so far away. I know many players who would play 1.♖a6 fast and then, if it turns out it was safe, just be lucky. You don't want to be lucky, you want to take time and figure it out. You don't get good by hoping to be lucky; you should consistently try to calculate carefully in critical positions.

A better try is 1.♗d5 a4 2.♔f1 a3 3.♖c1 ♖d8 4.e4 f5! 5.♔e2 (5.f3 is also a try) 5...fxe4 6.♗b4±. This is necessary if White is to maintain the pressure, but Black might hold with moves like 6...♖a8 or 6...h5.

## Endgame

### Answer 4-12

**White to play:** Is 1.♔xc4 safe?

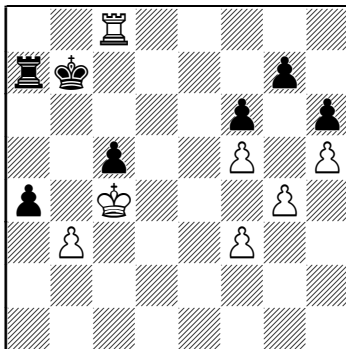


This position occurred in the game Kasparov–Timman, Corus 2000. Both players were in time pressure, but Kasparov correctly calculated 1.♔xc4! d3 2.♔xd5 d2 (how can White catch the runaway d-pawn?) 3.g4+!, and Black resigned because his king is forced onto the fatal fourth rank, e.g. 3...♔xg4 4.♖c4+ ♔h5 5.♖d4+–.

### Answer 4-13

**White to play:** Which of the following are safe?

- a) 1.♖g8   b) 1.♖xc5   c) 1.♖f8



Even “simple” endgame decisions like how to save the rook can be tricky and require a great deal of analysis and care:

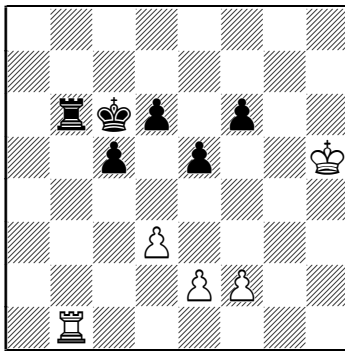
- a) 1.♖g8 (and 1.♖e8) are the correct and safest moves. After 1... a3? 2.♖xg7+ ♔b6 3.♖xa7 ♔xa7 4.♔c3 the white king gets in-

side the “promotion square” of the black a-pawn. Therefore, not only can White catch the a-pawn, but Black does not have enough time to recover, for example 4...♙b6 5.g5!+-.

- b) 1.♖xc5 a3+- and the a-pawn cannot be stopped. Not safe.
- c) 1.♖f8 does not get the crucial g-pawn, and that makes all the difference if the players follow a similar line up to 5.g5! in variation (a). For example, 1.♖f8 a3 and now 2.♖f7+ (not best; 2.♗e8 is, but White is still in trouble) 2...♙b6 3.♖xa7 ♗xa7 4.♙c3 ♙b6 5.♙c2 (on 5.g5, Black can play 5...fxg5; and on 5.f4 ♙b5 6.g5, Black ignores the g-pawn and wins as in the main line) 5...♙a5 (other moves win, too) 6.♙b1 ♙b4 7.♙a2 c4 8.bxc4 ♙xc4 9.♙xa3 ♙d4 winning as White has no way to dissolve the kingside pawns before Black’s king arrives. Not safe.

### Answer 4-14

**White to play:** Is 1.♖xb6+ safe?



Assuming you have sufficient time, *never go into a king-and-pawn endgame unless you are fairly sure, using careful analysis, that you are going to get the result you want.*

For example, for White to simply think, “*I will capture on b6 and then Black can’t save the f-pawn, putting me back even in material*” is what I call “hand-waving” – using generalities when careful analysis is required. That’s great in a speed game, but it won’t get you very far in slow games.

## Endgame

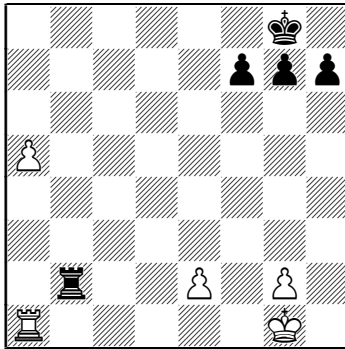
Here, if White plays 1.♖xb6+? then Black wins with his outside majority: 1...♙xb6 2.e4 (2.♙g6 d5 3.♙xf6 c4 is hopeless for White) 2...♙b5 3.♙g6 ♙b4 4.♙xf6 ♙c3 5.♙e6 ♙xd3 6.♙xd6 c4 and Black wins.

Never go into a king-and-pawn endgame unless you are fairly sure, using careful analysis, that you are going to get the result you want.

So White has to bite the bullet and try to draw a dreary rook-and-pawn endgame with 1.♖e1. It won't be fun, but at least refusing to trade rooks gives him some chances. On the other hand, trading rooks into the king-and-pawn endgame is just lost against any alert and careful opponent.

### Answer 4-15

**Black to play:** Is 1...♖xe2 safe?

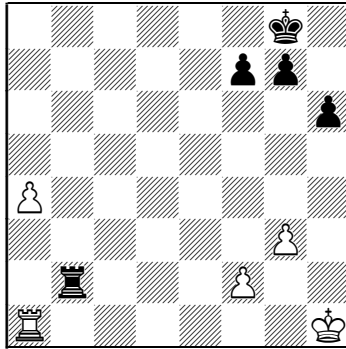


No, after 1...♖xe2?? 2.a6 ♖e8 3.a7 ♖a8 4.♖b1 White wins due to the unstoppable threat of 5.♖b8+, since 4...♖xa7 allows 5.♖b8#. If the black pawn were on h6 instead of h7, that would make all the difference since Black could safely play 4...♖xa7.

When you're in these types of positions, it pays to check your analysis several times because the decision is critical and it only takes one mistake to lose the game. Black should instead play either 1...♙f8 (to remove mate threats) or 1...♖b8 immediately.

**Answer 4-16**

**Black to play:** Is 1...♖xf2 safe?

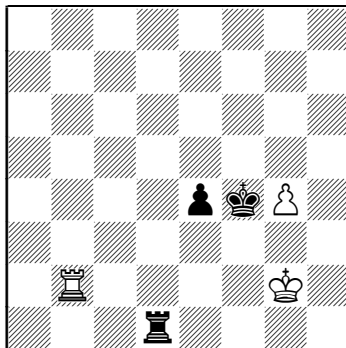


Yes, this time it is safe to play 1...♖xf2. Unlike the previous problem, the combination of the white pawn's being one rank back on a4 and the black king's having an escape square gives Black just enough time to capture the pawn, even though after doing so the rook cannot get immediately to the eighth rank: 1...♖xf2 2.a5 ♖b2 3.a6 ♖b8, and now it doesn't do White any good to continue 4.a7 ♖a8 5.♖b1? since 5...♖xa7 does not allow mate. Again, it pays to be very careful before making any such captures, but if they are safe, they are likely best, as 1...♖xf2 is here. That extra pawn often comes in handy later in the game!

**Answer 4-17**

**White to play:** Which of the following are safe?

- a) 1.♖b3 b) 1.♖e2 c) 1.g5 d) 1.♔f2 e) 1.♔h3



This problem was the product of another agonizing loss on my way to the master title. They say you learn more when you lose, and boy, did I learn from this one!

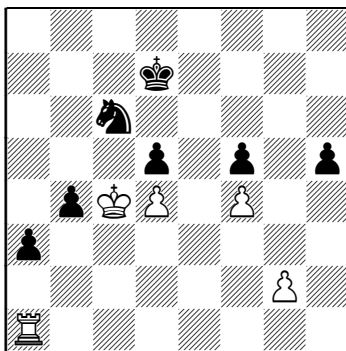
- a) 1.♖b3 is safe. This is similar to the famous Philidor position where White cuts off the black king from the third rank. I did not know this at the time, and my rating was 2100 (probably the equivalent of 2200+ today). This goes to show that this type of specific knowledge is very helpful, especially at the highest levels, but it is hardly necessary to become a very strong player!
- b) 1.♗e2?? is the losing move I chose. I should not worry about the g-pawn; I don't need it to draw. My well-known opponent, the New York master E. Schuyler Jackson, continued 1...e3, when my king was cut off and I lost quickly after 2.g5 ♗d2+.
- c) 1.g5, jettisoning the pawn, is unnecessary but safe and draws easily: 1...♔xg5 2.♔f2 with a Philidor draw.
- d) 1.♔f2 is conceptually the easiest draw. White puts his king in front of the black pawn and then uses his rook to block the black king from getting to the third rank. Then, when the black pawn pushes to the third rank, White places his rook on the eighth rank and can check the black king forever. See any endgame text under "Philidor draw" in the rook-and-pawn endgame section. What I did not know then I teach now, but only to my higher-rated students. *Even though I did not know the Philidor draw, I was already rated 2100, so obviously that type of knowledge is helpful, but not necessary, to become a fairly strong player.*
- e) 1.♔h3? guarding the pawn, is going the wrong way. Black can win with either 1...e3 or 1...♔f3+.

So not only are 1.♖b3, 1.g5, and 1.♔f2 safe, but so are other moves I failed to play, such as 1.♖b8, 1.♗f2+, 1.♖b4, etc. While ability is more important than knowledge in chess, knowledge is still important and it takes quite a bit of knowledge to become a top-notch player.

### Answer 4-18

**White to play:** Which of the following are safe?

- a) 1.♔b5 b) 1.♔c5 c) 1.♔b3 d) 1.♔d3 e) 1.♔xd5



This is a heartbreaking finish to a very historic game. This game was the first time GM Andrew Soltis (who was not quite a GM at the time) played his “Soltis Variation” – ...h7-h5 for Black in the Yugoslav Variation of the Dragon Sicilian – and he chose to do it against me!

All I had to do was to find the right move here and I could draw. Unfortunately I hallucinated:

- a) 1.♔b5? loses to both 1...♜xd4+ and 1...b3, e.g. 1...b3 2.♞xa3 b2 3.♞b3 ♜xd4+.
- b) 1.♔c5! is the only safe move. Now Black has to find the drawing moves, and the only ones are 1...h4! and 1...♔c7!. I wonder if Andy would have found one of these...?!
- c) 1.♔b3 loses to 1...♜xd4+ 2.♔a4 (2.♔xb4? ♜c2+ wins the rook and 2.♔a2 b3+! 3.♔xa3 ♜c2+ wins the endgame for Black also) 2...b3–+ (2...♔d6 and other moves also win).
- d) 1.♔d3 loses to 1...♜a5! 2.♔c2 b3+ 3.♔c3 b2 4.♞d1 ♜c4–+.
- e) 1.♔xd5 is what I played – and yes, it loses too, to 1...♜a5! 2.♔e5 b3 and I resigned. Aagh! It still hurts to lose an historic game where I should have at least drawn.

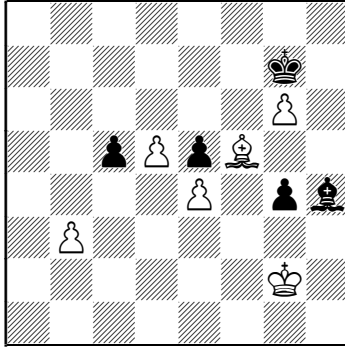


## Endgame

### Answer 4-19

**Black to play:** Which of the following are safe?

- a) 1...♔f8   b) 1...♔f6   c) 1...g3   d) 1...♙e7



- a) 1...♔f8? was played in the root game, and White (me) blundered back with 2.♙xg4?. Instead 2.d6! would win, e.g. 2...g3 3.♔h3+- and Black is in *Zugzwang* and must allow White either to promote one of his passed pawns or to win the g-pawn and promote later.
- b) 1...♔f6? 2.d6! blocks the black king from moving directly to the e-file and wins: 2...g3 3.♔h3, and again Black is in *Zugzwang*.
- c) 1...g3 2.d6! ♔g8 3.♔f3 ♔f8 4.♙e6 ♔g7 5.♙f7 ♔f6 6.d7 ♔e7 7.d8♚+ ♔xd8 8.g7+-.
- d) 1...♙e7 is the only good defense, stopping d5-d6 at the cost of the g-pawn. However, even after corralling that pawn, White can't win: 2.♔g3 ♙d6 3.♔xg4 ♙e7 and White has no way to make further progress. A cute line occurs if White tries to march his king to the queenside: 4.♔f3 ♙f8 5.♔e3 ♔f6! 6.♔d3 ♔e7! 7.♔c4 ♔d6, and Black has switched his fortress to the opposite wing!

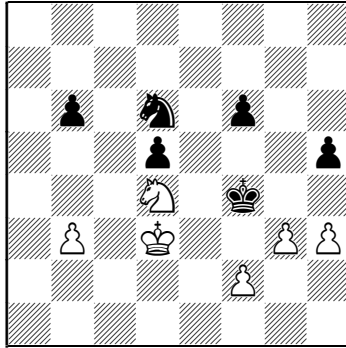
### Answer 4-20

**Black to play:** Which of the following are safe?

- a) 1...♔g5   b) 1...♔e5

(see diagram next page)

## Answers for Chapter 4

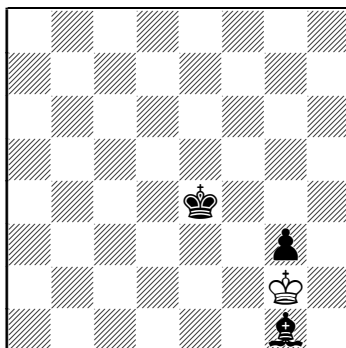


- a)  $1... \text{♔g5}$  is the only hope. White has decent winning chances after  $2.f3!$  but it will take excellent technique to try to win.
- b) This was the first round of my second tournament, and my 1751-rated opponent thought for 20(!) minutes and played  $1... \text{♔e5}??$ . I returned to the board and simply stared at my opponent in disbelief. He then re-examined the board as if seeing it for the first time. It didn't take long for his eyes to get wide, and then he took his middle finger and flicked the black king off the board with a loud "ping"!  $2.f4\#$  mates Black in the middle of the board! About as unsafe as any move can be. It was my only win in the seven-round event...

### Answer 4-21

**Black to play:** Which of the following are safe?

- a)  $1... \text{♙f2}$    b)  $1... \text{♙h2}$    c)  $1... \text{♔f4}$



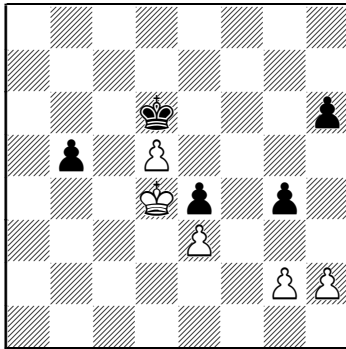
## Endgame

- a) 1...♔f2! is the only safe/winning move, e.g. 2.♕h1 (White is trying to use the corner to create stalemate opportunities) 2...♔e3 3.♕g2 ♔e1 4.♕h1 ♕f3 5.♕g1 g2 6.♕h2 ♕f2-+.
- b) 1...♔h2 is an interesting draw. It's one of the few draws where one side can have a piece and a non-royal pawn and not be winning against a lone king, assuming material is not trivially lost in the next move or two. White will just keep his king in the corner and Black will not be able to approach without stalemating. Attempting to sacrifice the bishop fails, too: 2.♕h1 ♔g1?! 3.♕xg1 (3.♕g2 also draws) 3...♕f3 4.♕f1=.
- c) 1...♕f4 fails for the same reason that the sacrifice in line (b) fails: 2.♕xg1 ♕f3 (2...♕g4 3.♕g2 ♕f4 4.♕g1!= is the well-known drawing maneuver) 3.♕f1 g2+ 4.♕g1 ♕g3, stalemate.

### Answer 4-22

**White to play:** Which of the following are safe?

- a) 1.♕xe4   b) 1.h3   c) 1.h4   d) 1.g3



Problems of this type can be much more difficult than most intermediate players believe, but that's the point: in tricky king-and-pawn endgames, every move can make the difference between winning, drawing, and losing:

- a) 1.♔xe4? looks logical and I suspect many would play it quickly in a speed game. But becoming a good player is not about making the first move that seems reasonable, as you might in speed games. Black wins after 1...b4 2.♔d4 b3 3.♔c3 ♔xd5! (*once the outside passer deflects the king, pushing it further is rarely helpful and often – as here – harmful: 3...b2?? actually turns a win into a loss following 4.♔xb2 ♔xd5 5.♔c3 ♔e4 6.♔d2+-; see Answer 4-26 for another example of this principle*) 4.♔xb3 ♔e4 5.♔c3 ♔xe3-+.
- b) 1.h3 allows 1...g3! and the tempos are wrong for White: 2.h4 h5 3.♔xe4 b4 wins for Black as in answer (a).
- c) Amazingly, the move that allows Black the option of two ways to play (*en passant* and ignore) is the only move that doesn't lose – and it even wins! Let's see: 1.h4!!. Now:
- If Black ignores with 1...g3, then 2.h5 and now it is Black who is in *Zugzwang*, for if 2...b4 3.♔c4 b3 4.♔xb3 ♔xd5 and Black's king gets elbowed out: 5.♔b4! ♔e6 6.♔c5 ♔e5 7.♔c4 ♔e6 8.♔d4 ♔f5 9.♔d5 ♔g5 10.♔xe4 ♔xh5 11.♔f5 ♔h4 12.♔f4 h5 13.♔f3 ♔g5 14.♔xg3+-.
  - Alternatively, Black can try the *en passant* capture 1...gxh3 *e.p.* 2.gxh3 h5 3.h4 b4 4.♔c4+- which is similar to the first line, when Black's king is elbowed out and he loses. So only 1.h4 wins and thus is safe.
- d) 1.g3 h5 and now it is White who's in *Zugzwang*, as in (a) and (b). Black wins, so 1.g3 is not safe.

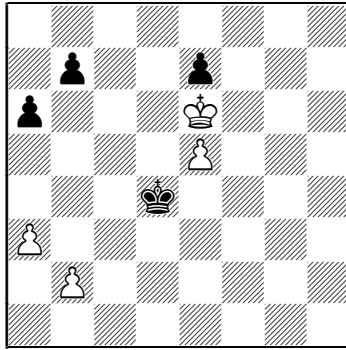
### Answer 4-23

**Black to play:** Which of the following are safe?

- a) 1...♔e4 b) 1...a5 c) 1...b6 d) 1...b5

(see diagram next page)

## Endgame



Sometimes, in king-and-pawn endgames, you just have to take some time and do some very careful counting. This problem is similar to the previous one in that it may look simple, but it's not at all easy. In this position, the first thing you need to figure out for Black is whether you are playing for a win or a draw. It turns out you are playing for a draw (that's the best you can do if White plays well), and there's only one first move that will ensure the draw:

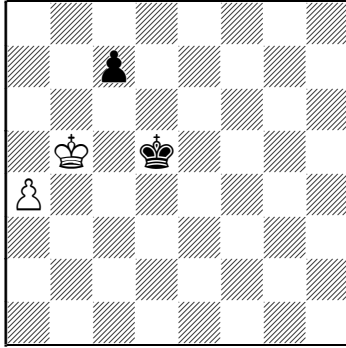
- a) 1...♙e4 2.♙xe7 ♚xe5 3.♙d7 ♚d5 4.♙c7 a5 5.♙xb7 a4 6.♙b6 ♙c4 7.♙a5 ♙b3 8.♙b5 ♙xb2 9.♙xa4 ♙c3 10.♙b5 wins for White. Not safe.
- b) 1...a5 2.♙xe7 ♚xe5 3.♙d7 ♚d5 4.♙c7 b5 5.♙b6 b4 6.a4! b3 7.♙xa5 ♙c5 8.♙a6 ♙c6 9.a5 and White wins, so 1...a5 is not safe either.
- c) 1...b6! is the only drawing move and thus the only safe one, e.g. 2.b4 a5 3.b5 a4 4.♙d7 ♙xe5! 5.♙c6 ♙f5! (or 5...♙f6!) 6.♙xb6 e5 7.♙c5 e4 8.♙d4 e3! (promoting with check kills after 8...♙f4? 9.b6 e3 10.b7 e2 11.b8♚+) 9.♙xe3 ♙e5=.
- d) 1...b5 also loses to 2.b4! ♙e4 3.♙xe7 ♚xe5 4.♙d7 ♚d5 5.♙c7 ♙c4 6.♙b6 ♙d5 (6...♙b3 is equally hopeless) 7.♙xa6 ♙c6 8.♙a5!+-. This move is the only way for White to win, but it does, so 1...b5 is not safe.

If instead White tries the unnecessary 8.a4?? (rather than the winning 8.♙a5), that loses to the very pretty 8...bxa4 9.b5+ ♙c7! 10.♙a7 a3 11.b6+ ♙c6 12.b7 a2 13.b8♚ (13.b8♘+ only delays things) 13...a1♚#!.

**Answer 4-24**

**Black to play:** Which of the following are safe?

- a)  $1... \text{♙d6}$    b)  $1... \text{c6+}$    c)  $1... \text{c5}$



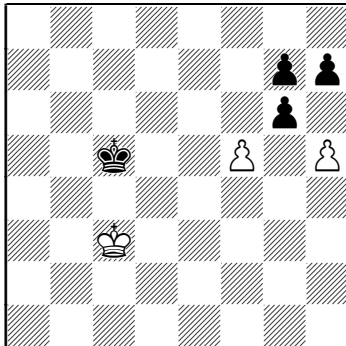
- a)  $1... \text{♙d6}$  does get back safely:  $2. \text{a5 ♙d7}$   $3. \text{a6 ♙c8}$   $4. \text{♙c6 ♙b8=}$ .
- b)  $1... \text{c6+?}$  loses by forcing White's king to block Black's:  $2. \text{♙b6!}$   $\text{c5}$   $3. \text{a5 c4}$   $4. \text{a6}$  and White promotes first, with check.
- c)  $1... \text{c5}$  also draws:  $2. \text{a5 ♙d6}$   $3. \text{a6}$  (or  $3. \text{♙b6}$  or any other reasonable move)  $3... \text{♙c7}$   $4. \text{♙xc5 ♙b8=}$ .

So (a) and (c) are safe (drawing) moves.

**Answer 4-25**

**White to play:** Which of the following are safe?

- a)  $1. \text{hxc6}$    b)  $1. \text{fxg6}$



## Endgame

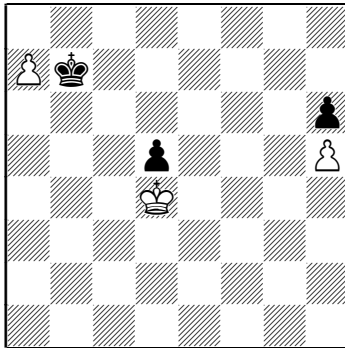
Black's king is closer to the pawns, so White would be very happy to get a draw. Any move that can achieve that would be safe.

- a) 1.hxg6 is safe. White threatens 2.gxh7, so Black must play either 1...h6, 1...h5, or 1...hxg6. But 1...h6 or 1...h5 both lose to 2.f6 ♖d6 (2...gxf6 3.g7+-) 3.fxg7. So that leaves 1...hxg6. But then Black can't win; White will play 2.fxg6 and then use the "dance-around" method we cover in Answer 4-29 to simply play ♔g4 *after* Black captures ...♔xg6, getting the opposition and drawing.
- b) 1.fxg6 doesn't look safe. Sure, White draws after 1...hxg6 2.hxg6, transposing to answer (a) and again using the "dance-around" method. But what about keeping the extra pawn with 1...h6 ? Turns out that *White can still draw* with the non-intuitive 2.♔b3!! . Black can even lose if he gets too greedy and goes after the pawns: 2...♔d5 3.♔b4 ♖e5 4.♔c5 ♔f5?? (4...♔e6! 5.♔c6 ♔e7! draws) 5.♔d6 ♔g5 6.♔e7 ♔xh5 7.♔f7 and White promotes first and wins!

So both are safe!

### Answer 4-26

**White to play:** Is 1.a8♖+ safe?



This is a type of position intermediate players often play quickly and incorrectly. It doesn't seem harmful, and even looks helpful, to promote the pawn and force the black king further away. The problem with this logic is twofold:

- The square a8 is no further than the square a7 from the defending h-pawn's critical squares f7 and f8; and
- It costs White a tempo to push the pawn, and Black has to capture the pawn on the a-file anyway.

Therefore, in positions like these, *where the defending (black) king has to capture the pawn anyway, it never helps, and often hurts, to continue to push the outside passed pawn more than what it would take to get the defending king to move toward taking it.* Since Black has already had to abandon the d-pawn, pushing the a-pawn further cannot be helpful. Some analysis to back this up:

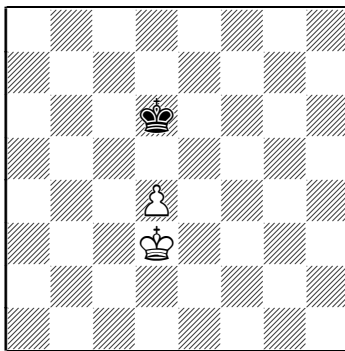
- 1.a8♚+? ♔xa8 2.♕xd5 ♖b7 3.♕e6 ♖c7 4.♕f6 ♖d7 5.♕g6 ♖e7 6.♕xh6 ♖f7 draws.
- But simply 1.♕xd5 ♔xa7 2.♕e6 ♖b7 3.♕f6 ♖c7 4.♕g6 ♖d7 5.♕xh6 ♖e7 6.♕g7 wins.

So 1.a8♚+ is not safe.

### Answer 4-27

**Black to play:** Which of the following are safe?

- a) 1...♖c7 b) 1...♖d7 c) 1...♖e7 d) 1...♖c6 e) 1...♖e6 f) 1...♖d5



This is an important problem because variations of this type of position can occur frequently. I think understanding what is happening will help you defend king-and-pawn-vs.-king endgames



## Endgame

much better than memorizing a more restrictive rule like, “*go straight back on the file in front of the pawn,*” which may work but:

- Is not necessary (other moves may work as well); but more importantly
- Will not help you defend if your king is not already on the same file as the pawn.

The operative, and less restrictive, principle instead is: “*If the king with the pawn (offensive king) is not already in front of the pawn and you can prevent him from getting in front of the pawn, you should do so.*”

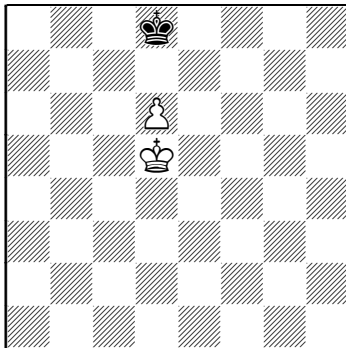
In this situation, all six legal moves by Black will still allow him to stop White from getting in front of the pawn, so *all six, (a) through (f), will draw with proper play and thus all are safe.* Black cannot make a losing move on this move even if he tries!

For example, 1...♔c7 2.♔e4 ♔d6 (forced) 3.d5 ♔c7 (all moves draw, except for the silly 3...♔c5?? 4.♔e5+-) 4.♔e5 ♔d7 5.d6 ♔d8! (as explained in Answer 4-28, when the pawn reaches the sixth rank, then the defender does have to stay on the file until the offensive king advances) 6.♔e6 ♔e8 7.d7+ ♔d8 draws.

### Answer 4-28

**Black to play:** Which of the following are safe?

- a) 1...♔d7    b) 1...♔c8    c) 1...♔e8



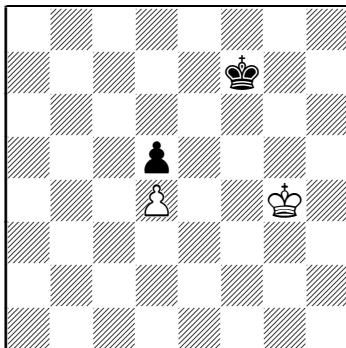
When the pawn reaches the sixth rank, a second rule applies. That rule states: “*When the offensive king is not in front of the pawn and the pawn reaches the sixth rank, then the defensive king should go back and forth on the same file as the pawn.*” When the offensive king advances to the sixth rank, the defensive king should simply follow the first rule given in 4-27 and not allow the offensive king in front of the pawn.

- a) From the above, 1...♔d7 draws: 2.♔e5 ♔d8! (the only move) 3.♔e6 ♔e8, and now 4.d7+ ♔d8 draws by either stalemate (5.♔d6) or lack of mating material (if White’s fifth move is anything other than 5.♔d6, Black follows with 5...♔xd7). But both
- b) 1...♔c8? and
- c) 1...♔e8? lose: 1...♔e8? 2.♔e6. Now Black has the wrong tempo (I would not call this White having the opposition since a pawn is adjacent, but many do; that’s just semantics). 2...♔d8 3.d7 ♔c7 4.♔e7, winning. Mirroring for (b), 1...♔c8? 2.♔c6 ♔d8 3.d7 ♔e7 4.♔c7 wins for White as well.

**Answer 4-29**

**Black to play:** Which of the following are safe?

- a) 1...♔e6   b) 1...♔e7   c) 1...♔e8   d) 1...♔f6
- e) 1...♔f8   f) 1...♔g8   g) 1...♔g7   h) 1...♔g6



I call this type of position a “dance-around” position. Here’s why: After White captures the pawn on d5 (as he can in some lines,

## Endgame

although Black could defend with  $1... \text{♔g6}$ ), Black can always draw by answering  $\text{♕xd5}$  with  $... \text{♗d7}$ , obtaining the opposition. Until then, all Black has to do is “dance around” the d7 square, staying adjacent to it until White captures the pawn.

Since all 8 squares that the black king can currently move to will allow him to get to a square adjacent to d7 by the time White threatens to play  $\text{♕xd5}$ , *all eight moves ([a] through [h]) draw with best play and thus are safe.*

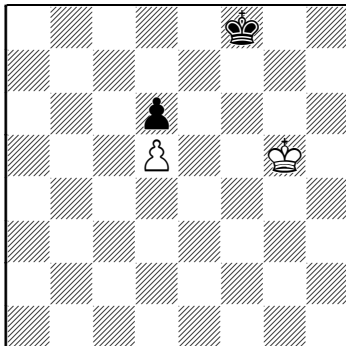
For example,  $1... \text{♔g8}$   $2. \text{♕f5} \text{ ♖f8}$   $3. \text{♕e6} \text{ ♗e8}$   $4. \text{♕e5}$  (teasing;  $4. \text{♕xd5} \text{ ♗d7}$  draws as in the main line)  $4... \text{♗d8}$  ( $4... \text{♗d7??}$   $5. \text{♕xd5} + -$ )  $5. \text{♕xd5} \text{ ♗d7}$  (only now, immediately after the pawn is captured, should the defender jump upon the “dance-around” square)  $6. \text{♕e5} \text{ ♗e7}$   $7. \text{d5} \text{ ♗d7}$   $8. \text{d6} \text{ ♗d8!}$   $9. \text{♕e6} \text{ ♗e8}$ , with a book draw.

Suppose both sides have additional pawns on the board that are fixed. Then, if White can win the pawn, he usually wins similar positions because “dancing around” doesn’t work: White simply uses the newly created passed pawn as a decoy, captures other pawn(s), and wins easily. That’s one reason there is the pawn aspect to the famous principle, “*When ahead, trade pieces, but not necessarily pawns.*” If there are additional pawns on both sides, unless there are some special circumstances like a protected passed pawn, that almost always makes the offensive player’s winning task much easier.

### Answer 4-30

**Black to play:** Which of the following are safe?

- a)  $1... \text{♕e8}$    b)  $1... \text{♕e7}$    c)  $1... \text{♕f7}$    d)  $1... \text{♕g7}$    e)  $1... \text{♕g8}$



This problem is similar to the previous one, except that all the pieces are advanced one rank. Once the white pawn gets to the fifth rank, the situation changes compared to similar positions on lower ranks. With the white pawn on the fifth rank and the black pawn on the sixth, if White captures the black pawn, he has what I call a “tic-tac-toe” win:

*If you have a king and a non-rook pawn vs. a king, find the promotion square and go back one square along the pawn’s file (e.g., if the promotion square is d8, take d7). Then form a “tic-tac-toe” board of 9 squares with that square in the middle (here, those squares would be c6, c7, c8, d6, d7, d8, e6, e7, and e8). If the king with the pawn reaches any of those nine squares and both of the following conditions are met:*

- *The pawn is one rank behind the king*
- *The pawn is not trivially lost (i.e., it can be easily guarded/advanced while the king stays in the tic-tac-toe area)*

*...then the position is a win no matter where the defending king may be, and no matter whose move it is.*

This is a common situation and a powerful rule, thus a good one to know. It may seem a little wordy to describe, but the concept is actually quite simple.

So here, unlike the previous problem, *once Black loses the pawn, it will not help to get the opposition.* If White can eventually play ♔xd6, then it is immediately tic-tac-toe and he wins. Therefore, Black must prevent White from winning the pawn by getting the opposition now. As a result, *only answer (d), 1... ♔g7, is safe. All the other moves lose, e.g. 1... ♔f7?? 2. ♔f5 ♔e7 3. ♔g6 (“outflanking”, or “elbowing out” the opponent’s king) 3... ♔e8 4. ♔f6 ♔d7 5. ♔f7 ♔c7 6. ♔e6 ♔c8 7. ♔xd6 ♔d8.* Black has “the opposition” but it doesn’t matter – his king will be squeezed out with straightforward play: 8. ♔e6 ♔e8 9. d6 ♔d8 10. d7 ♔c7 11. ♔e7, and White wins.

## Endgame

*Hence “tic-tac-toe” is the clear exception to the normal “king in front of the pawn” opposition rule.*

After the correct 1...♔g7 2.♔f5 ♕f7, White can make no progress and the game is drawn.

## Chapter 5

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# How Many Safe Moves?

In this chapter, the reader is asked to find how many safe moves the side to move has in the given position. In most positions, either the player is in check or the opponent has strong possibilities or threats on the next move, either way limiting the number of safe replies. In the endgame problems, it means the reader is asked to find all the moves that give the best result, be it a win or a draw (part of the problem may be figuring out which one you are trying to achieve!).

One of the mistakes I see my students make is that they hastily play the first good or safe move they see. Sometimes this is satisfactory, but it is difficult to become a good player without the ability to compare moves and figure out if one is clearly superior. This is especially true in critical situations and in situations where your choices are limited, so finding them all and determining if there is a clearly best one sometimes becomes not only easier, but more necessary.

So for example, if you are in check, it often pays to ask, “*How many legal moves do I have to get out of check?*” Only after determining this should you proceed to figure out which one you like best (actually, in slow games, you probably should have done this on the previous move, but that’s a story for another book...).

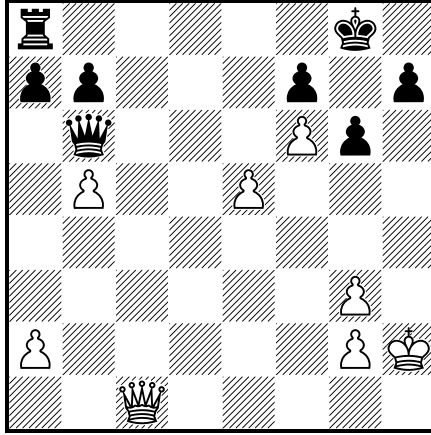
The appearance of the positions in this chapter is roughly in order of difficulty, from the easiest to the most difficult.

How Many Safe Moves?

**5-1**

**Black to play:**

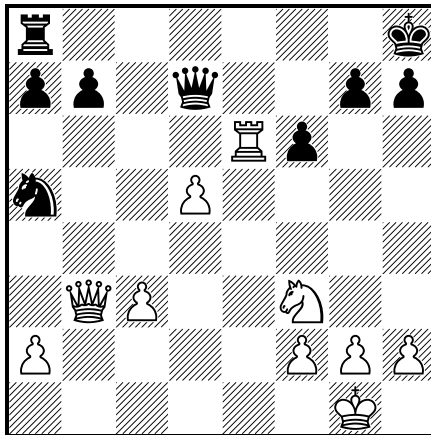
How many safe moves does Black have?



**5-2**

**White to play:**

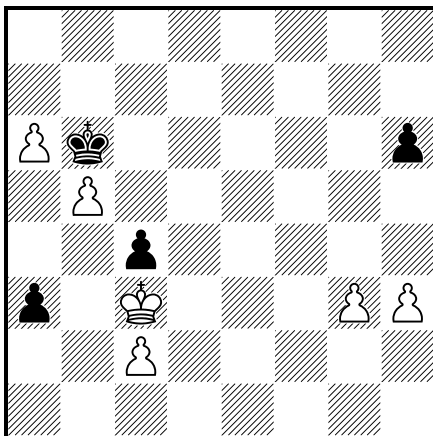
How many safe moves does White have?



**5-3**

**White to play:**

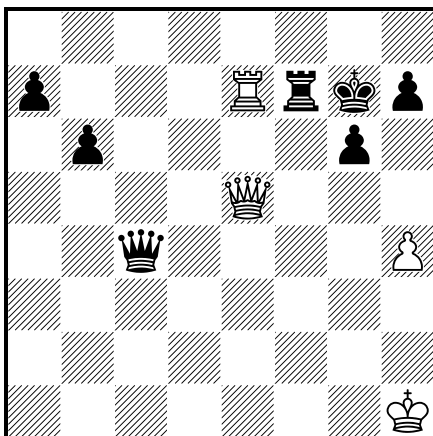
How many safe moves does White have?



**5-4**

**Black to play:**

How many safe moves does Black have?



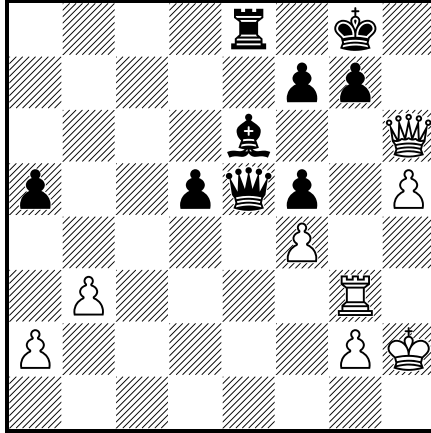


How Many Safe Moves?

**5-5**

**Black to play:**

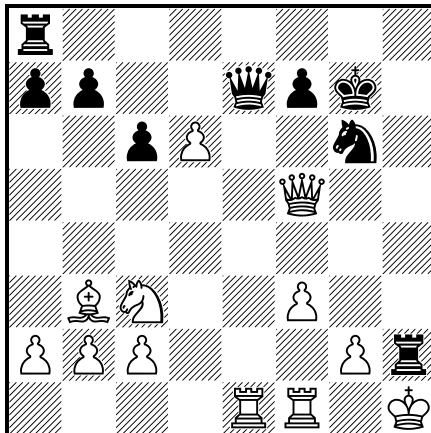
How many safe moves does Black have?



**5-6**

**White to play:**

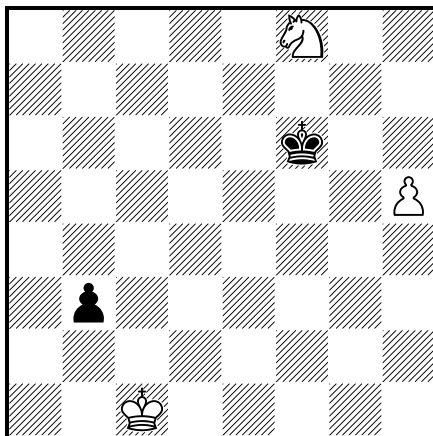
How many safe moves does White have?



5-7

**White to play:**

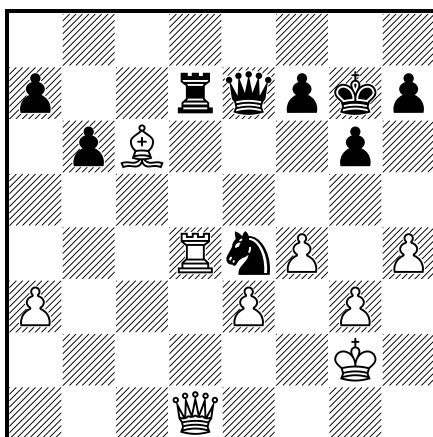
How many safe moves does White have?



5-8

**Black to play:**

How many safe moves does Black have?

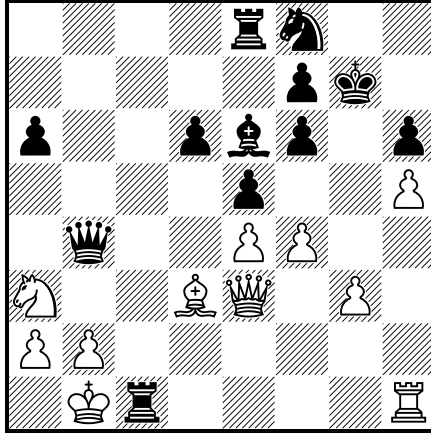


How Many Safe Moves?

**5-9**

**White to play:**

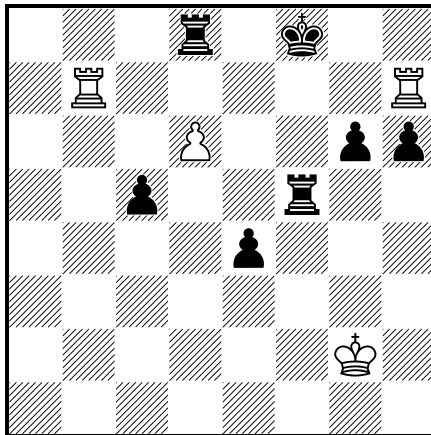
How many safe moves does White have?



**5-10**

**Black to play:**

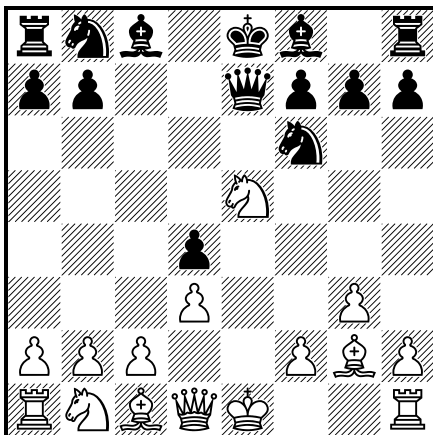
How many safe moves does Black have?



**5-11**

**White to play:**

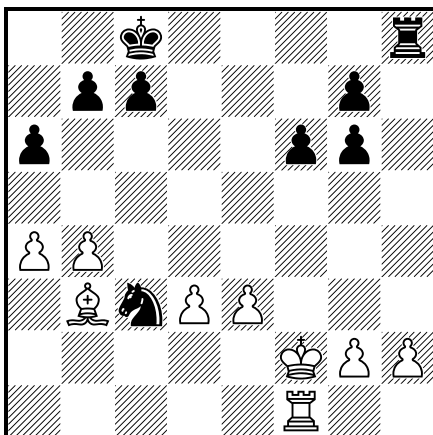
How many safe moves does White have?



**5-12**

**Black to play:**

How many safe moves does Black have?

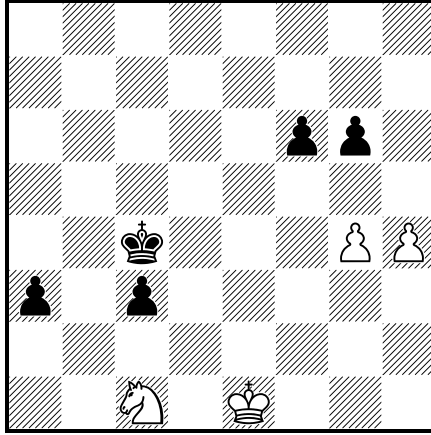


How Many Safe Moves?

**5-13**

**Black to play:**

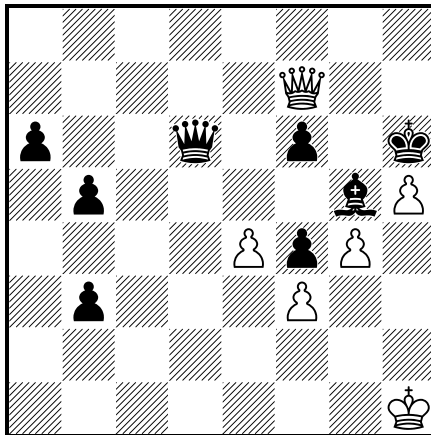
How many safe moves does Black have?



**5-14**

**Black to play:**

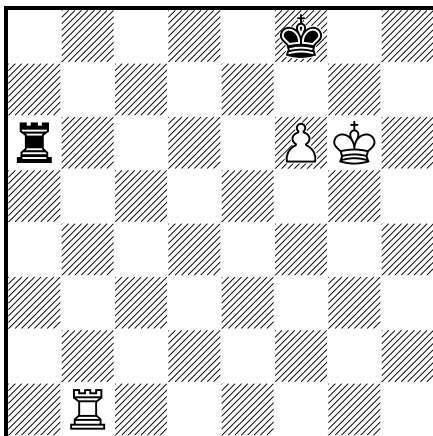
How many safe moves does Black have?



**5-15**

**Black to play:**

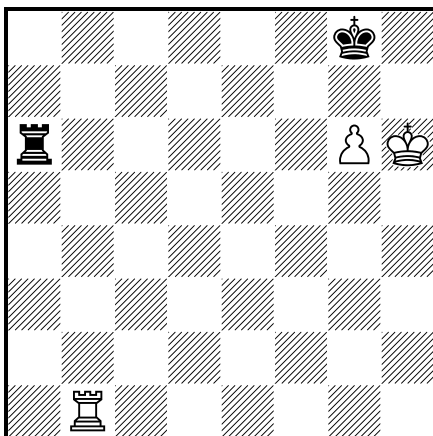
How many safe moves does Black have?



**5-16**

**Black to play:**

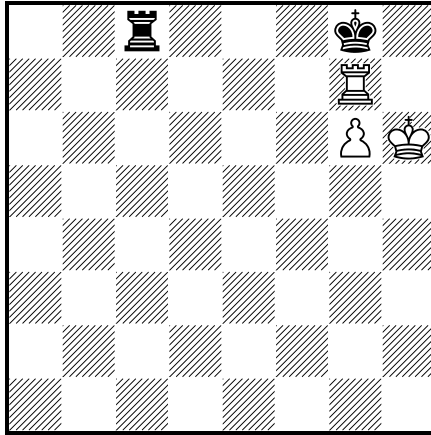
How many safe moves does Black have?



How Many Safe Moves?

5-17 (continued from 5-16)

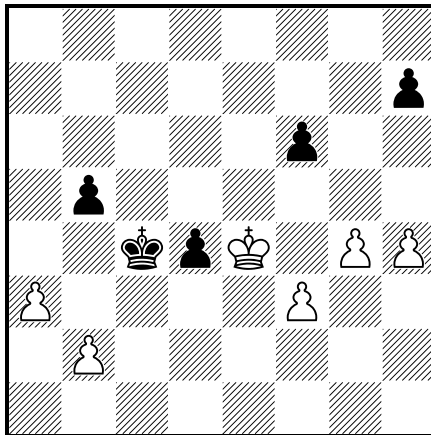
**Black to play after 1...♖a8 2.♜b7 ♜c8 3.♜g7+:**  
How many safe moves does Black have?



5-18

**White to play:**

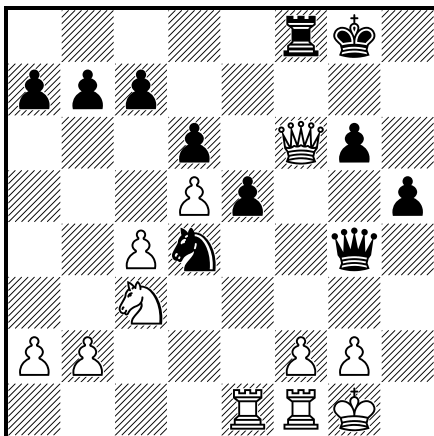
How many safe moves does White have?



**5-19**

**White to play:**

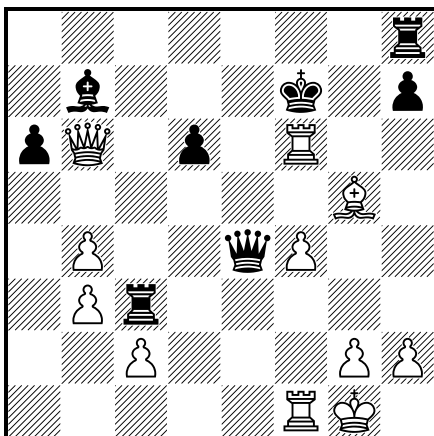
How many safe moves does White have?



**5-20**

**Black to play:**

How many safe moves does Black have?



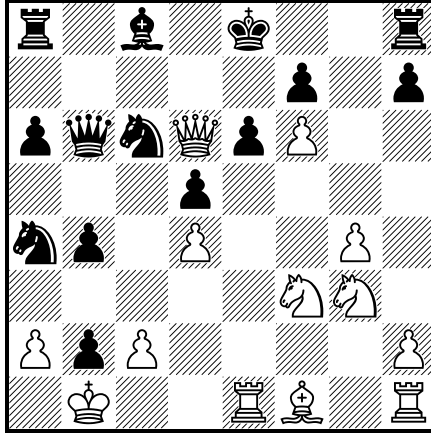


How Many Safe Moves?

**5-21**

**Black to play:**

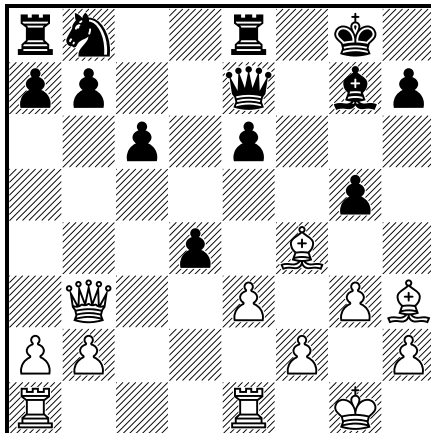
How many safe moves does Black have?



**5-22**

**White to play:**

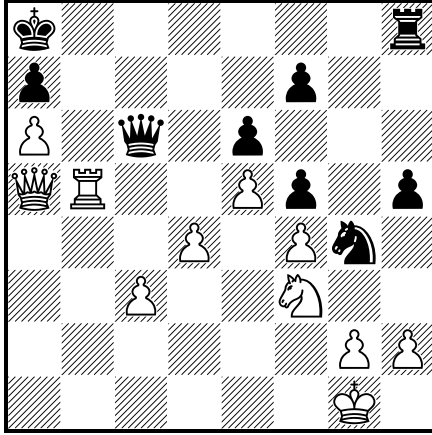
How many safe moves does White have?



**5-23**

**Black to play:**

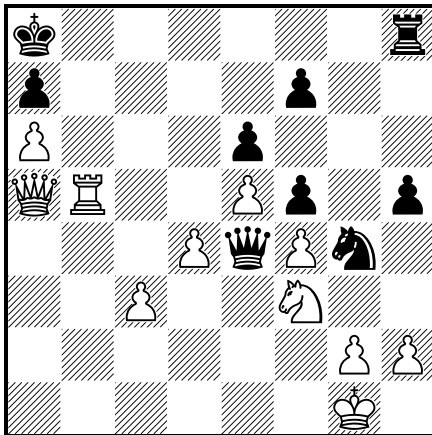
How many safe moves does Black have?



**5-24** (continued from 5-23)

**White to play after 1...♙e4:**

How many safe moves does White have?

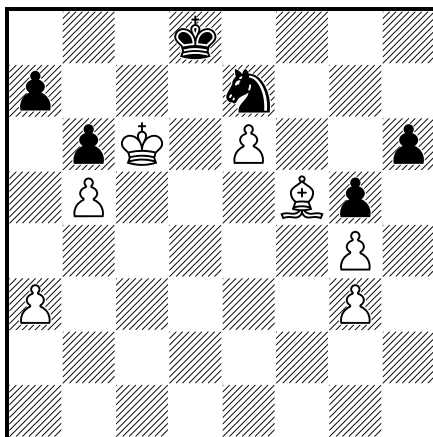


How Many Safe Moves?

5-25

White to play after 1.♙d6 ♖c8+ 2.♙c6 ♜e7+ 3.♙d6 ♖c8+  
4.♙c6 ♜e7+:

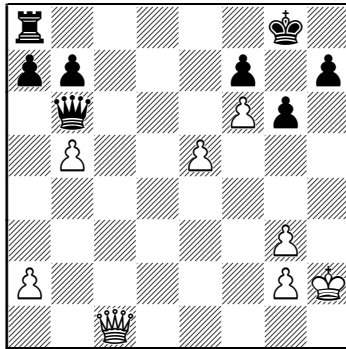
How many safe moves does White have?



# Answers for Chapter 5

## Answer 5-1

**Black to play:** How many safe moves does Black have?



This is a follow-up to Problem 1-4. Black only has two clearly safe moves against the killer threat of 2.♖h6:

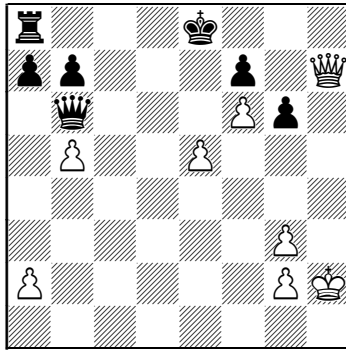
- 1...♗d8 answers 2.♖h6 with 2...♗f8 and Black remains a clear rook ahead.
- 1...♔h8 clears the g8 square for the rook so on 2.♖h6 ♖g8 defends.

These are good patterns to know since these type of defenses are often needed.

The problematic third possibility is, 1...♔f8?!. If White plays 2.♗a3+, Black is forced to repeat with 2...♔g8, since 2...♔e8?? 3.♗e7#. After 2...♔g8 if White plays 3.♗c1, repeating the position, Black still wins by playing one of the other defenses.

White can also win at least a pawn after 1...♔f8 2.♖h6+ ♔e8 3.♗xh7. What would you play here for Black?

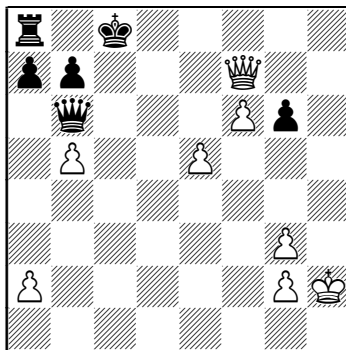
**Black to play and win after 3. ♖xh7**



The only safe move is 3... ♕c5!, intending to interpose on f8 after any queen check. Then, although Black has lost a pawn, he is still clearly winning.

Other third moves for Black moves lose, e.g. 3... ♔d7? 4. ♖xf7+ ♔c8 and now it is...

**White to play and win after 4... ♔c8**  
(hint: this one is not easy!)



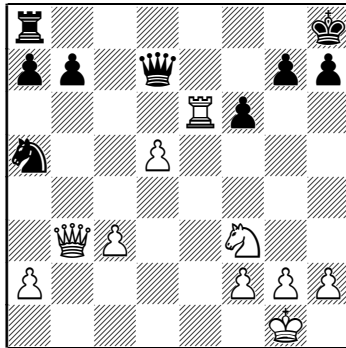
Amazingly, only 5. ♖g7!! is a clear win. Other tries are not so clear, e.g. 5.e6 ♖xb5! 6.e7 (6. ♖h7! is a better try but apparently 6...b6! holds), and now 6... ♖h5+ is a perpetual check.

*When your opponent has a killer threat like 2. ♕h6, the correct idea is to first find all the safe defenses and then pick out the one which seems best, or easiest. If you don't find them all and instead just settle for the first one you find, that is a bad habit. Even with adequate time, many players panic when faced with strong threats and just play the first defense they see, relieved that they have at least that one defense. But you might have something much better. You can't play what you don't see.*

When your opponent has a killer threat, the correct idea is to first find all the safe defenses and then pick out the one which seems best, or easiest.

### Answer 5-2

**White to play:** How many safe moves does White have?

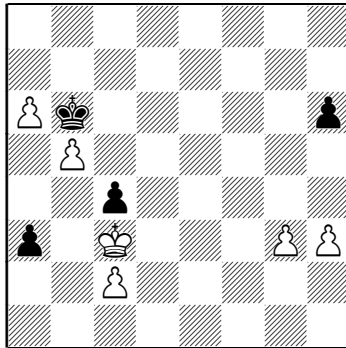


This is one of the easier problems. White is ahead a pawn, his queen is attacked, and Black is also attacking the d-pawn. The only way to save the queen and safely guard the d-pawn is 1. ♕d1. Then Black has a move like 1... ♖d8, seemingly threatening 2... ♕xe6 and 2... ♕xd5. But 2... ♕xd5 is not really a threat because White can answer 3. ♕xd5 ♖xd5 4. ♖e8#. Therefore, White needs only to stop 2... ♕xe6 by playing 2. ♕d4!. That makes 1. ♕d1 safe, and it's the only safe move.

Sometimes when I have students in these simpler situations they play the trickiest move they can find rather than the safest and simplest. “*Keep it Simple,*” the KISS principle, is often best, too!

**Answer 5-3**

**White to play:** How many safe moves does White have?

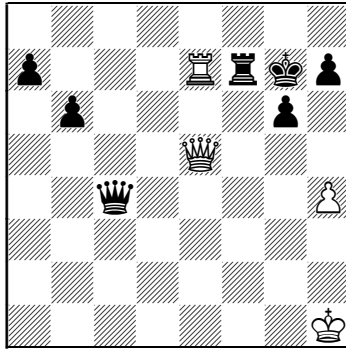


White is winning, so we want to determine all moves that preserve the win. The basic idea is to play 1.g4 followed by 2.h4 and 3.g5 to create a passed pawn on the kingside. The general rule is: *If you have a healthy majority and want to create a passed pawn, then push the potential passed pawn (the one without an opposing pawn on the same file) first.* In this case, the g- and h-pawns vs. the h-pawn is a healthy majority, so the g-pawn should be pushed first.

Because he is so far ahead thanks to his kingside pawn majority, White can afford to make the innocuous move 1.a7 first, though it doesn't buy him anything as after 1...♔xa7 he should play 2.g4 anyway. Every other first move loses, e.g. 1.♕xc4?? a2-+ or 1.h4?? h5-+ as White has put himself into *Zugzwang* by making his g-pawn backward and his majority toothless. Therefore, White has two safe (winning) moves (1.g4 and 1.a7?!) and all other moves lose.

### Answer 5-4

**Black to play:** How many safe moves does Black have?



The only clearly non-safe move is 1...♔f8?? 2.♖e8#.

1...♔h6 is safe because 2.♔g5+ ♔g7 3.♔e5+ repeats the position. However, since Black is three pawns ahead, he doesn't want to allow the perpetual unless all the alternatives are worse.

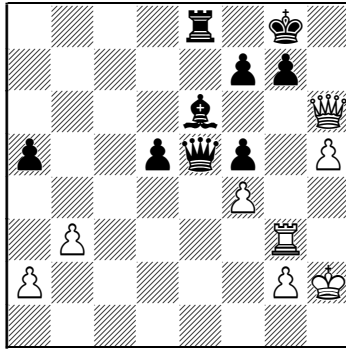
That leads us to 1...♔g8. After 2.♖e8+ ♖f8 White has nothing better than 3.♖xf8+ ♔xf8, when 4.♔b8+ (4.♔h8+ ♔g8 5.♔f6+ ♔f7 escapes) wins the a-pawn with check. So technically that is less safe than 1...♔h6. However, this is a case where *the initial material advantage means that giving back material with a further chance to win is clearly superior to allowing an immediate draw by perpetual check*. After 4.♔b8+ ♔g7 5.♔xa7+ ♔h6 6.♔xb6 ♔xh4+, a tablebase (<http://www.shredderchess.com/online-chess/online-databases/endgame-database.html>) shows that White can still draw, but that doesn't mean it is easy!

Therefore 1...♔g8, the move that gives up material, is better than the other safe move, 1...♔h6, which doesn't. Black, of course, can play 1...♔h6 first and then later ...♔g7-♔g8 to transpose to 1...♔g8, avoiding the perpetual. Both moves can be considered safe.



**Answer 5-5**

**Black to play:** How many safe moves does Black have?



Black is way ahead, but White is threatening his queen and the queen has to continue to watch a possible mate threat on g7.

When faced with such an ultimately critical decision, many players make the first safe move they find, relieved that they have at least one. This may work, but often it is a mistake. As noted elsewhere, but worth repeating, *better is to ask how many safe moves you have, and then try to figure out which is/are best.*

When I gave this problem to my students, many gave me the right answer – four – but the wrong list. They guessed 1...♖d4, 1...♗b2, 1...♗a1, and 1...♔f8.

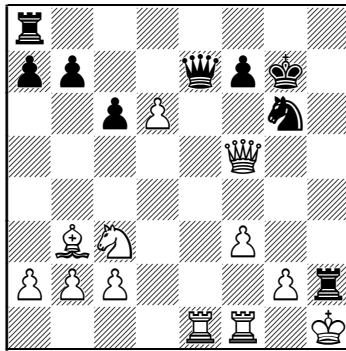
But 1...♔f8 gives back material to the tactic 1...♔f8? 2.♗h8+ ♔e7 3.♗xe8+ ♔xe8 4.fxe5. So 1...♔f8 should not be on the list.

Better is to ask how many safe moves you have, and then try to figure out which is/are best.

However, there is a fourth “invisible” safe move which they often don’t find, which also leaves Black comfortably ahead. That is 1...♗c3, since 2.♖xc3 gxh6 is obviously disastrous for White. Any of the four safe moves wins easily for Black.

### Answer 5-6

**White to play:** How many safe moves does White have?



White only has two legal moves,  $1.\text{♔g1}$  and  $1.\text{♔xh2}$ , so the answer has to be 0, 1, or 2!

The only way to determine the correct answer is with careful analysis. After both of White's legal moves, Black only has a certain number of dangerous replies, so each has to be analyzed. If there is even one forcing continuation for Black that causes safety issues, then Black will choose that one and thus that move by White is not safe. Note that White is ahead a bishop and two pawns at the start of the problem, so he can afford to lose a small amount of material and still have an easily winning position, always an important consideration.

Let's examine each move. I would start with  $1.\text{♔xh2}$  because removing an extra attacker from the board, even if ultimately not as good, has a better chance of being the best when it works:

- a)  $1.\text{♔xh2}$ . Then Black has three dangerous moves that White must be able to meet in order for this move to be safe:
  - $1...\text{♚h4}+2.\text{♔g1}$  ( $2...\text{♚h3}$  is a little more tricky but safe as well)  $2...\text{♚d4}+$  ( $2...\text{♚h8}$  does not even threaten anything; even if White plays the silly  $3.\text{a3}$ , Black has nothing better than  $3...\text{♚h1}+$ )  $4.\text{♔f2}$   $\text{♚h4}+$   $5.\text{♔e2}$   $\text{♚e8}+$   $6.\text{♔d1}$  and the king dances to safety)  $3.\text{♚f2}+-$ . Normally you don't want to self-pin your pieces, but here White is ahead a rook,

bishop, and pawns. Therefore, the self-pin is a minor inconvenience to stop the checks.

- 1...♖xd6+ 2.♔g1 ♗d4+ 3.♗f2 and, as in the first line, White is ahead a rook, bishop, and more.
- 1...♗h8+ 2.♔g1 (one of the big mistakes White could make is 2.♔g3?? ♗h4# – it pays to know these basic mate patterns), and Black has nothing better than 2...♗h4 transposing to (a) or 2...♗xd6+ – when White has an abundance of material and free play.

So even though 1.♔xh2 “exposes” the white king, Black gets nothing more than a couple of checks – 1.♔xh2 is safe.

b) 1.♔g1. Again, Black has several dangerous tries such as 1...♗h8, 1...♗xg2+, and 1...♗h4. If you don’t consider each one, that can cost you the game, as Black only needs one that wins for him. If even one winning line is left for your opponent, then, given the chance, he should take his time, find it, and play it. Let’s examine each possibility and see if that one winner exists:

- 1...♗h8 has no threats. White can just capture the queen either way and win easily: 2.dxe7 ♗xg2+ (what else?) 3.♔xg2 ♖h4+ 4.♔f2 ♖xf5 and White is even mating after 5.♗g1+ ♔f6 6.e8♖+!
- 1...♗xg2+ 2.♔xg2, but now winning the queen with 2...♖h4+ 3.♔h3 ♖xf5 loses again to 4.dxe7.
- 1...♗h4!. Now the check on h1 is mate, so this makes all the difference. Even if White plays 2.♗xf7+, after 2...♔h6 (2...♔h8? 3.♗f6+ saves the day) White has no defense. This was the line played in the game. White tried 2.♗h3, but after 2...♗xh3 3.gxh3 ♗g3+ 4.♔h1 ♗h8 (4...♗xh3+ 5.♔g1 ♗g3+ 6.♔h1 ♗h8# also mates), White resigned!

So there is only one safe move: 1.♔xh2.

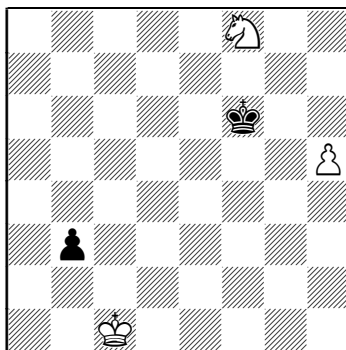
After the game, I asked my student whether he carefully analyzed each possibility – he had 17 minutes remaining plus a 45-second increment. He admitted he did not; he took a minute to “see” that 1.♔xh2 was more exposed and Black had several checks. He thought it would be safer just to tuck his king away on g1 because he already was ahead a bishop and a couple of pawns, plus attacking the queen. Based on all those generalities, he thought, “Why expose the king unnecessarily?”

*I call this type of non-analysis, where you use generalizations and general principles instead of careful analysis, “Hand-waving.” This is an excellent example.*

My student admitted something else interesting. When asked if he had taken several of his 17 minutes to determine that 1.♔xh2 was safe, did he feel like he could beat most opponents ahead a rook, bishop, and two pawns with (say) 7 minutes left *and* a 45-second increment, he surprisingly replied, “No!” If there were no increment, we could see some lower-rated players being a little hesitant to use too much time. However, with such a massive lead in material and a large increment, it would be better if the student had a lot more confidence in his ability to win from such a dominating situation.

### Answer 5-7

**White to play:** How many safe moves does White have?





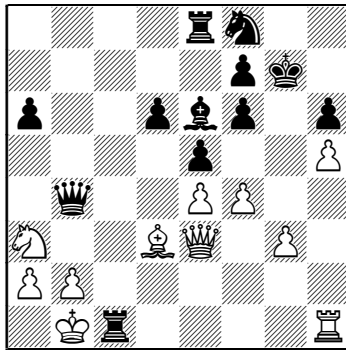
Black has two safe moves:

- 1...♖d6, when after 2.♙xe4 ♚xe4+! 3.♗xe4 ♜xd1 Black is safe; or 2.♗xe4? ♚xe4+ 3.♙xe4 ♜xd1 and Black wins the exchange.
- 1...♗xd4 2.♚xd4+ ♘f6 3.g4 (you have to consider this move, threatening 4.g5, else you might make a quiescence error and assume 1...♗xd4 is safe without checking far enough to make sure it is) 3...♙g8 (3...♙f8 4.g5 ♘g8 is passive) and Black survives.

1...♗d8?? fails to 2.♗xd8 and 1...♗c7? fails to 2.♗xe4 or 2.♙xe4.

### Answer 5-9

**White to play:** How many safe moves does White have?



When you are in check, it's often a good idea to ask, “*How many legal moves do I have that get out of check?*” before trying to find the best one. Some of my students are so relieved when they find a safe way to get out of check, they play the first one they find. That's often quite inefficient and mistaken.

Here White has three legal moves. But how many of them are safe? At first glance, it appears that the only unsafe move is 1.♙xc1, abandoning the a-pawn to 1...♙xa2. And indeed 1.♙xc1 ♜c8+ 2.♙c2 (2.♙b1? ♜b8! and there is no defense against the double threat of 3...♚xb2# and 3...♚xa3) 2...♜b8! and the same double threat is again unstoppable.

## How Many Safe Moves?

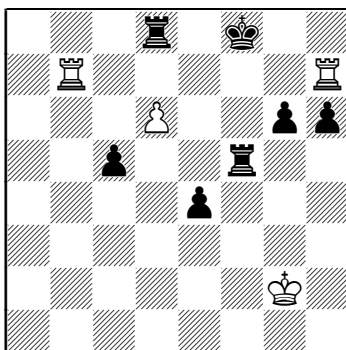
But if you found this double-threat idea (kudos!), then you also realize that 1.♖xc1? also loses to that same idea: 1...♗b8! and, when White defends the mate threat, then 2...♙xa3.

So the only possible safe move is 1.♙xc1. Then Black has 1...♗b8!, when 2.♔a1 runs into 2...♙xa2, at which point 3.♔xa2 allows 3...♗b3+ and 4...♙xd3 regaining the piece with interest; while 2.♔c4, a better try, makes Black find the only “big” move 2...♘d7! with a likely winning attack.

So theoretically White has zero safe moves, but by far the safest and best bet is 1.♙xc1.

### Answer 5-10

**Black to play:** How many safe moves does Black have?

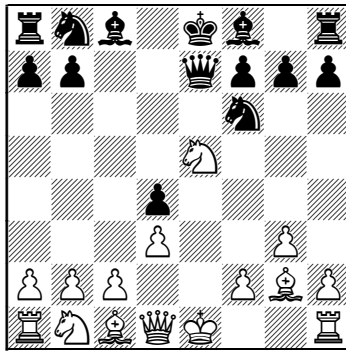


Black has two safe moves, but only one safe idea. He can temporize with 1...♗g5+, but eventually the white king will go to the e-file for coverage. At that point Black needs to secure the draw with ...♔g8, or he can play 1...♔g8 immediately, again with a draw after 2.♗bg7+ ♔f8 3.♗b7= (or moving that rook to any other square to the far left).

In the game, Black, a USCF “A” player (1800-2000), did not calculate the danger correctly and played 1...♔e8??. losing after 2.♗be7+ ♔f8 3.♗h8#. As I pointed out after the game, even prettier is 2.♗h8+ ♗f8 3.♗e7#.

### Answer 5-11

**White to play:** How many safe moves does White have?



This is a follow-up to Problem 1-5 (after the prior  $\text{♞xe5 ♚e7?}$ ). White has three clearly safe moves:  $1.\text{♚e2}$ ,  $1.0-0$ , and  $1.f4$ .

The idea after  $1.0-0$  is that  $1...\text{♚xe5 } 2.\text{♞e1}$  wins material with the basic pin. Many of my students see why the knight is safe after  $1.0-0$  once I show that move to them, but they don't think of it themselves; I guess this shows that stronger players are more aware of "indirect" defenses.  $1.0-0$  is also the move I would play.

Other than the three clearly safe moves  $1.\text{♚e2}$ ,  $1.0-0$ , and  $1.f4$ , there are two other tries that are more problematic. The defending move  $1.\text{♗f4}$  fails to the removal-of-the-guard  $1...g5$ , when either the bishop or the knight is lost. White gets some compensation for that loss, but not enough. In Chapter 2, I called Black's idea "AWL," which stands for "Attack it with something Worth Less" – in this case the pawn being worth clearly less than the bishop, which makes  $1...g5$  an attractive candidate reply to  $1.\text{♗f4}$ . *When you are checking for the safety of a move, after you check for immediate captures on the square to which the piece moved, next check for AWL possibilities!*

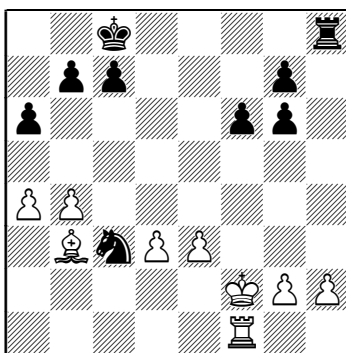
The other move, which is never guessed by my students (for good reason) and similar to  $1.0-0$  in function, is the ugly  $1.\text{♞d2}$ . This is the fourth-best move, but the engine says Black has good compensation for his pawn after  $1...\text{♚c7}$ .



## How Many Safe Moves?

### Answer 5-12

**Black to play:** How many safe moves does Black have?



On the surface, it looks like White's last move might not have been safe, and Black can safely play  $1... \text{R}xh2$ . But if you are not playing "Hope Chess," you should ask, "If I play  $1... \text{R}xh2$ , what are White's checks, captures, and threats in reply, and can I meet them all?" As it turns out, if you ask that, you should catch the threat  $1... \text{R}xh2?$   $2. \text{R}c1$  and the knight is trapped. None of its eight squares are safe! That means you have to find moves that save the knight now, and not wait until next move when it would be too late. Candidates include  $1...c6$ ,  $1...b5$ ,  $1... \text{B}d8$ , and  $1... \text{R}h5$ .

However,  $1...c6$  fails to  $2. \text{R}c1 \text{ N}d5$   $3. \text{B}xd5$  and the c-pawn is pinned. So that's out.

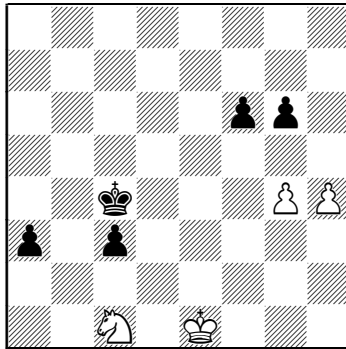
$1... \text{B}d8$   $2. \text{R}c1 \text{ N}d5$  is clearly safe, but that brings up the question of whether  $1... \text{B}d8$   $2. \text{R}c1 \text{ R}xd3$  is safe too, winning a pawn to boot. It's tricky, but after  $3. \text{B}c4$  attempting to remove the guard  $3... \text{N}e4+$  ( $3... \text{B}d2+$   $4. \text{Q}e1$  leaves both black pieces hanging)  $4. \text{Q}f3 \text{ N}g5+$   $5. \text{Q}e2 \text{ B}a3$ , Black does get away with that, too. So that means that  $1... \text{B}d8$   $2. \text{R}c1$  is not even that good for White due to  $2... \text{R}xd3$ .

$1...b5$  works as well, providing a safe haven for the knight on a4. So does  $1... \text{R}h5$ , guarding d5.

Borderline are 1...a5 and 1...c5, sacrificing material to give time to save the knight. I would not count those. So the answer is three: 1...♖d8, 1...b5, and 1...♗h5, with 1...♖d8 as best and an equal position after White's best reply, 2.d4.

### Answer 5-13

**Black to play:** How many safe moves does Black have?



Black doesn't have too many reasonable moves against White's threat of 2.h5, so the answer is going to be low – probably zero, one, or two.

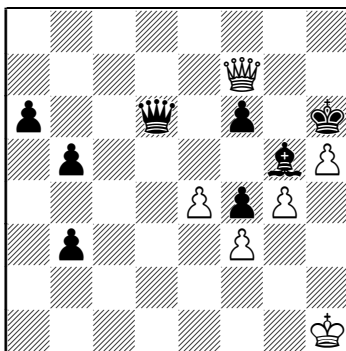
It turns out Black can save the game by abandoning the queenside and heading toward White's promotion square. 1...♖d4 does not work due to the self-interference 2.h5 gxh5 3.gxh5 ♖e5 4.h6+- as the f6-square is unavailable and Black cannot get inside the promotion square.

So only 1...♖d5 works. White cannot promote with the immediate 2.h5 gxh5 3.gxh5 ♖e6 4.h6 ♖f7=. But if White waits, Black has time to attack the kingside pawns anyway, e.g. 2.♖d1 ♖e4 3.♖c2 ♖f4 4.h5 gxh5 5.gxh5 ♖g5=.

So there is only one safe move: 1...♖d5.

### Answer 5-14

**Black to play:** How many safe moves does Black have?



Because White is threatening  $2.\text{♕g6\#}$ , that greatly narrows Black's possibilities. Black has no place to run the king, as  $1...\text{♔h4}$  still allows  $2.\text{♕g6\#}$ . So, using "chess logic," White either has to guard g6 immediately or later after a series of checks.

The only piece that can guard g6 is the queen, and there are only two possibilities: either he immediately opens the sixth rank with  $1...f5$  (which is clearly therefore safe), or he first starts with  $1...\text{♕d1+}$  and then later addresses the problem. But since this check takes the black queen off the sixth rank, you had better make sure you calculate carefully before playing such a move, as a later  $...f6-f5$  may no longer be helpful.

As it turns out,  $1...\text{♕d1+}$  is safe as Black can maneuver to win the white pawns with check and thus defend:

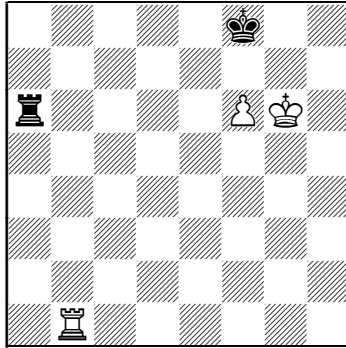
$1...\text{♕d1+}$   $2.\text{♔g2 ♕e2+}$   $3.\text{♔g1}$  ( $3.\text{♔h1 ♕xf3+}$  and the white pawns start to fall with check)  $3...\text{♕e1+}$   $4.\text{♔g2 ♕g3+}$ . The key idea  $5.\text{♔h1 ♕xf3+}$   $6.\text{♔h2 ♕g3+}$   $7.\text{♔h1 ♕h3+}$   $8.\text{♔g1 ♕xg4+}$   $9.\text{♔f1 ♕f3+}$   $10.\text{♔g1 ♕xe4}$ . Now that the queen is guarding g6 and the h-pawn is no longer guarded, White doesn't have a move like  $11.\text{♕f8+}$  since  $11...\text{♔xh5}$  wins easily.

In the root game, White saw Black's winning ideas a move or so before the diagram position and resigned in Mamedov–Caruana, World Cup 2015.

So there are two safe moves – 1...f5 and the better, but much more complicated and risky, 1...♖d1+.

### Answer 5-15

**Black to play:** How many safe moves does Black have?

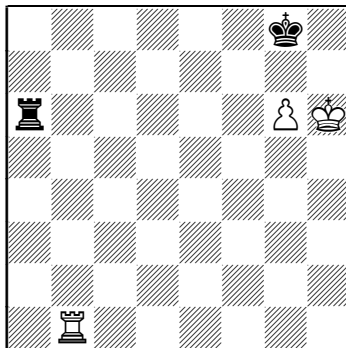


If Black allows this position, it's too late; no moves are safe.

With a bishop pawn protecting the king on the sixth rank, going to the back rank to defend the mate threat no longer works: 1...♖a8 2.♖h1 ♔g8 3.f7+ ♔f8 4.♖h8+ +-. But staying on the sixth rank is no better: 1...♕e8 (to prevent mate) 2.♖b8+ ♕d7 3.♕g7 ♕c7 (3... ♖a1 4.f7 ♖g1+ 5.♕h6 and the White king zigzags along the g- and h-files to attack the black rook) 4.♖e8 ♖a1 5.f7 ♖g1+, and again the zigzag approach wins for White.

### Answer 5-16

**Black to play:** How many safe moves does Black have?

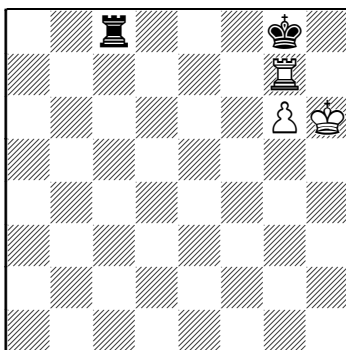


## How Many Safe Moves?

With the pawn on the g-file, now one move is safe: only the back-rank defense  $1... \text{♖a8}$  works.  $1... \text{♔f8}$ ?  $2. \text{♔h7} \text{ ♖a7+}$   $3. \text{♔h8}$  wins for White, as do other tries. Following  $1... \text{♖a8}$   $2. \text{♖b7} \text{ ♖c8}$   $3. \text{♖g7+}$  we have Problem 5-17.

### Answer 5-17

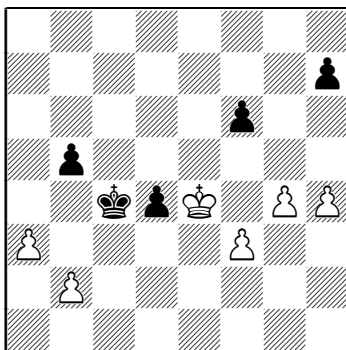
**Black to play after  $1... \text{♖a8}$   $2. \text{♖b7} \text{ ♖c8}$   $3. \text{♖g7+}$ :** How many safe moves does Black have?



Again, the answer is one:  $3... \text{♔h8}$  and White can make no progress. After  $3... \text{♔f8}$ ? White wins with  $4. \text{♔h7} \text{ ♖c1}$   $5. \text{♖g8+} \text{ ♔e7}$   $6. \text{♖h8} \text{ ♔f6}$   $7. \text{g7} \text{ ♖h1+}$   $8. \text{♔g8} \text{ ♖a1}$   $9. \text{♖h2} \text{ ♖g1}$   $10. \text{♔h8+-}$ , for  $10... \text{♖xg7}$  allows the common tactic  $11. \text{♖f2+} \text{ ♔g6}$   $12. \text{♖g2+}$ , winning the rook.

### Answer 5-18

**White to play:** How many safe moves does White have?



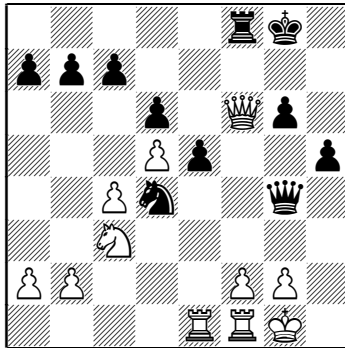
In the game, White, expecting to win, played the reasonable-looking 1.g5? but was surprised with 1...f5+! when Black can draw with 2.♔f4 ♔b3 3.h5 d3 4.g6 hxg6 5.hxg6 d2 6.g7 d1♚ 7.g8♚+ ♔xb2 8.♚f8 or 8.♚e8=.

Instead of 1.g5 White had two winning lines, and thus two safe moves:

- 1.f4 d3 2.♔e3 d2 (what else? 2...h6 3.g5+-) 3.♔xd2 ♔d4 4.g5 (most other reasonable moves win, too) 4...fxg5 5.fxg5 ♔e5 6.h5 ♔f5 7.g6+-.
- 1.h5 d3 2.♔e3 h6 3.f4 d2 (there's nothing else) 4.♔xd2 ♔d4 5.g5+-.

### Answer 5-19

**White to play:** How many safe moves does White have?



White is ahead a rook, so he wants to maintain a winning advantage. The obvious 1.♚e7 allows Black to attack the queen consistently with the rook, and the queen cannot abandon h4, e.g. 1.♚e7 ♖f7 2.♚d8+ ♖f8 3.♚xc7?? (3.♚e7 or 3.♚xf8+ are both equal) 3...♘f3+ 4.♔h1 ♚h4#.

So that greatly restricts White's possibilities. The immediate 1.♚xf8+ also does not preserve winning chances: Black then has 1...♔xf8 and White has to find 2.♖e4 just to get an equal position.

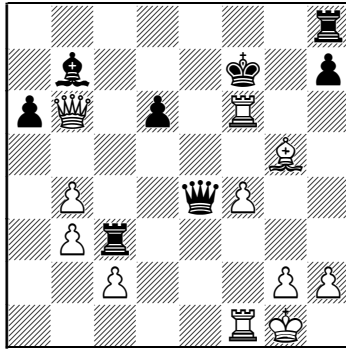
## How Many Safe Moves?

White retains some winning possibilities after 1.f3 ♘xf3+ (1... ♖g3 2.♗e4! ♗xf3+ 3.♙xf3+-) 2.♙xf3! ♖xf3 3.♖xf3 ♙xc4.

However, the only safe move that preserves White's clear win is 1.♗e4!. No matter how Black twists or turns, White retains his winning advantage, e.g. 1...♗f3+ 2.♖h1 ♗xe1 3.♖xe1 ♙xe4? (desperation, but nothing else works) 4.♙xf8+ +-.

### Answer 5-20

**Black to play:** How many safe moves does Black have?



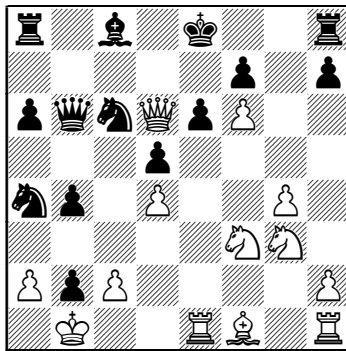
Black has only four legal moves to get out of check:

- 1...♗e7? loses to the discovered check, with mate in four: 2.♖xd6+ ♗f7 3.♖d7+ ♙e7 4.♖xe7+ ♗f8 5.♙d8#.
- 1...♗e8 loses to the nice sacrifice 2.♖e6+! ♙xe6 3.♙xb7+- when White has many threats to the exposed king and three pawns for the exchange, e.g. 3...♖xc2 4.f5 ♙e2 5.f6+-.
- 1...♗g7! is the saver. Then White's best is 2.♙f2, allowing 2...♖xc2 3.♖e1! ♖xf2 4.♖xe4 ♖xg2+ 5.♗xg2 ♗xe4+ 6.♗f2 and White has only a slight advantage in the endgame.
- 1...♗g8? allows mate in three: 2.♙d8+ ♙e8 3.♙xe8+ ♗g7 4.♙f7#.

So Black has only one safe move,  $1... \text{♔g7}$ . I was Black, found that move in the game and preserved my chances. Unfortunately for my opponent, White soon blundered due to time trouble and the complications and ended up losing!

### Answer 5-21

**Black to play:** How many safe moves does Black have?



Black is winning with best play, so any moves that throw away the win are not safe. White threatens  $2. \text{♖f5}$  followed by  $3. \text{♗g7\#}$  – finding that makes identifying candidate moves for Black easier but more critical – so Black’s choices are limited.

For example, the attempted defense  $1... \text{♞g8}$ ? not only allows  $2. \text{♗f5+}$ , but even better  $2. \text{♗e5}$  and there is no good way for Black to save the pinned knight on c6 since  $2... \text{♝b7}$  allows  $3. \text{♞d7+ ♔f8}$   $4. \text{♞xf7\#}$ .

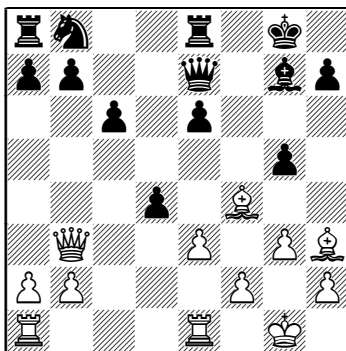
The only idea which preserves the win is  $1... \text{♞a7}$ ! intending to meet  $2. \text{♗e5}$  with  $2... \text{♗c3+}$   $3. \text{♔xb2 ♞a5!-+}$  and  $2. \text{♗f5}$  with  $2... \text{♞d7-+}$ .

Black can also play  $1... \text{♗c3+}$  first, and then  $2. \text{♔xb2 ♞a7}$ , but after  $3. \text{♔a1}$  or  $3. \text{♔c1}$  the win is much more difficult than after  $1... \text{♞a7}$ . Therefore, technically, this is the other safe move and two safe moves is the correct answer. After any other moves, White should be able to at least draw with best play.



## Answer 5-22

**White to play:** How many safe moves does White have?



This is one of those tricky problems where “safe” depends on how you view it. White is winning and has only one clearly winning move, so by that definition the answer is one. However, if we are simply looking for moves that don’t lose the bishop and give White at least an equal game, then there are three additional moves, for a total of four. In practice, of course, you want the one clearly winning move, and would not be satisfied if you threw away the win with a merely safe-looking move.

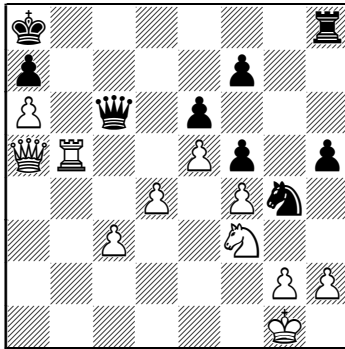
In ascending order of goodness for White, here are the four:

- a) 1.♙xb8. Of course. Trading off the attacked bishop will save it and after 2.♖axb8 the position is equal.
- b) 1.♙e5. Believe it or not, this unsafe-looking move is actually better(!) than 1.♙xb8. After 1...♙xe5 2.exd4 the bishop is pinned to an attack on the black e-pawn. If 2...♙xd4?, then 3.♖xe6 simultaneously hits the black queen and threatens a discovered attack, and 3...♗f7? 4.♖xe8+ is not a defense. So Black should settle for 2...♘d7, returning the piece after 3.dxe5, and White only has a small advantage.
- c) 1.♙g5 takes advantage of the queen’s being overworked on b7 and g5. After 1...♗xg5 2.♗xb7 ♘a6 3.♗xa6 ♗h5, White is much better and may even be winning with perfect play.

- d) The clear win is 1.exd4! with a threat similar to (b). Black has no good defense. Best is 1...♘a6 (so that the ♖e8 is guarded by the other rook), and then if 2.♞xe6 ♔f7 3.♙xg5+- Black has avoided disaster but the game is clearly lost nonetheless. Of course, if 1...gxf4 then 2.♞xe6 wins as in (b).

### Answer 5-23

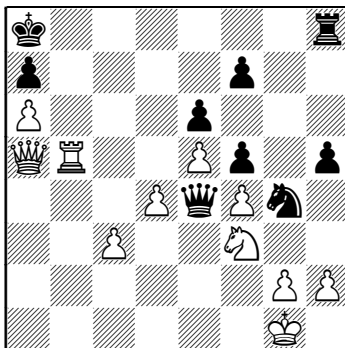
**Black to play:** How many safe moves does Black have?



One. Only 1...♔e4, threatening 2...♔e3+, draws. Black is down two pawns, and all other moves just keep him that way and thus lose. When you are behind in material, look for tactical resorts to draw – or even win. After 1...♔e4, see Answer 5-24 for how *White* can save the draw.

### Answer 5-24

**White to play after 1...♔e4:** How many safe moves does White have?



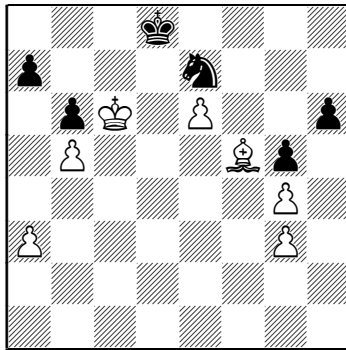
## How Many Safe Moves?

One! After Black's threat, only the hard-to-spot 2. ♖a2! gets the draw – for White! For example, 2. ♕h1 loses to 2... ♗d3 (or 2... ♗e2), when if White plays 3. h3 (3. ♖a1 ♗xb5–+) 3... ♗f1+ 4. ♘g1 ♗xf4!–+. Or White can try 2. ♖a1 immediately, when Black wins with 2... ♗e3+ 3. ♕h1 ♘f2+ 4. ♕g1 ♘d1+ 5. ♕h1 ♗e2! 6. h3 ♙g8 7. ♘g5 ♗f1+ 8. ♕h2 ♗xf4+ 9. ♕h1 ♗xg5–+.

However, after the only defense 2. ♖a2!, Black has to settle for 2... ♗e3+ 3. ♕f1 ♗c1+ 4. ♕e2 ♗e3+ 5. ♕f1 (5. ♕d1?? ♗d3+ picks up the rook) with a draw by perpetual check.

### Answer 5-25

**White to play after 1. ♕d6 ♘c8+ 2. ♕c6 ♘e7+ 3. ♕d6 ♘c8+ 4. ♕c6 ♘e7+:** How many safe moves does White have?



I thought I might finish with something a little fun. If the question were, “Is 1. ♕d6 safe?” (without the prefacing moves), then it would depend on whether 1. ♕b7 wins. If 1. ♕b7 wins, then 1. ♕d6 also wins because Black has nothing better than 1. ♕d6 ♘c8+ 2. ♕c6 ♘e7+ 3. ♕b7 when White still wins by getting to b7 anyway – it just takes him an extra two moves to get there by transposition. But if 1. ♕b7 draws or loses, then clearly 1. ♕d6 is safe because it at least draws.

However, by prefacing the question with the repetition of two moves, it should be clear that 5. ♕d6 allows Black to claim a draw by threefold repetition of position. And the repetition is safe only if 5. ♕b7 *doesn't* win! That is logical because if 5. ♕b7 wins, then only obtaining a draw with 5. ♕d6 throws away the win.

Therefore, let's examine 5.♔b7. At first glance this looks dangerous due to Black's playing either 5...♟xf5 6.gxf5 h5 with an outside passed pawn that cannot be caught, or 5...h5 right away. Let's examine some of the critical lines of both of these moves after 5.♔b7:

- 5...♟xf5 6.gxf5 h5 7.f6 (7.♔c6 first, reversing course, is also possible) 7...h4 8.gxh4 gxh4 9.♔c6! h3 10.♔d6 and White wins, e.g. 10...h2 11.e7+ ♔e8 12.♔e6 h1♚ 13.f7#.
- 5...h5 6.gxh5 ♟xf5 7.♔xa7 ♔e7 (7...g4 8.♔xb6 ♟xg3 9.h6+-) 8.♔xb6 (8.a4 first is easily winning, too) 8...♔xe6 9.a4 g4 10.a5 ♟xg3 and now White can push either rook-pawn and win easily.

Bottom line: 5.♔b7 wins and 5.♔d6 draws. Therefore, 5.♔d6 throws away the win and is not safe, and White has only one safe move, 5.♔b7.

# Bibliography

- de Groot, Adriaan.<sup>1</sup> *Thought and Choice in Chess*. Amsterdam Academic Archive, 2008.
- Heisman, Dan. *Looking for Trouble*, 2<sup>nd</sup> ed. Russell Enterprises, 2013.
- Heisman, Dan. “New Ideas for Black in the Lolli,” Forum, *New in Chess Yearbook* #94. New in Chess, 2010.
- Heisman, Dan. *The Improving Chess Thinker*, 2<sup>nd</sup> ed. Mongoose Press, 2014.
- Hertan, Charles. *Power Chess for Kids*. New in Chess, 2011.
- Kaufman, Larry. *The Kaufman Repertoire for Black & White*. New in Chess, 2012.
- Krabbé, Tim. *Chess Curiosities*. George Allen and Unwin, 1985.
- Lalić, Bogdan. *The Classical Nimzo-Indian*. Everyman Chess, 2001.
- Pinsky, Jan. *The Two Knights Defense*. Everyman Chess, 2003.
- Shredder* Tablebase: online at <http://www.shredderchess.com/online-chess/online-databases/endgame-database.html>
- Soltis, Andrew. *Grandmaster Secrets: Openings*. Thinker’s Press, 2002.
- Spielmann, Rudolf. *The Art of the Sacrifice*. David McKay Company, Inc., 1969.
- Vuković, Vladimir. *Art of Attack in Chess*. Everyman Chess, 1999.

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1 *Ed. note:* In Dutch (Adriaan de Groot was born in the Netherlands), surname prefixes are not capitalized when preceded by the person’s first name or initial, otherwise they are capitalized.