

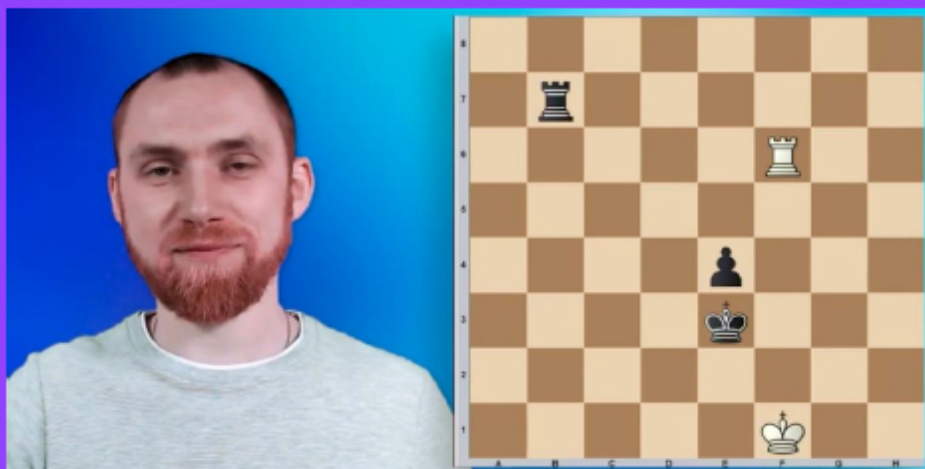


# IMPROVING ENDGAME TECHNIQUE:

Rook Endgames

by

**GM Valeriy Aveskulov**



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Improving Endgame Technique:

# Rook Endgames

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**2024**

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# Improving Endgame Technique: Rook Endgames

by GM Valeriy Aveskulov

Discover the key theoretical positions to aim for in rook endings — and how to consistently reach them in practical games to save the draw or clinch the win.

Roughly 1 in 3 games that reach the endgame involves at least a rook. But regardless of their frequency, there's no telling how deep the subtleties go in a random rook endgame.

Simple piece placement may win outright in some positions. But in others, even a 2-pawn advantage won't suffice. Add the long-winded maneuvers, super-specific rules, plus other "technical difficulties"... And it's easy to see why most players dread entering rook endgames... even when it's favorable.

But not you — after you complete this course by Grandmaster Valeriy Aveskulov.

Aveskulov is a peak-2545-rated pro... a Ukrainian chess champion... and one of the highest rated authors here on Chessable.

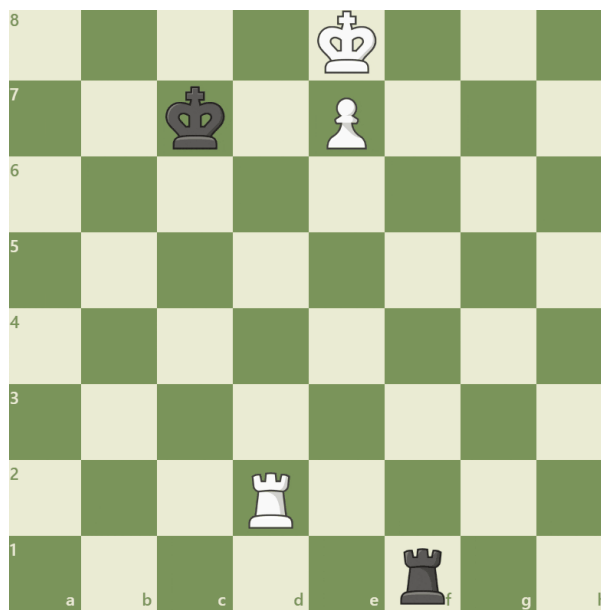
In Improving Endgame Technique: Rook Endgames, he boils down expert endgame play into 2 steps.

Step one, set goalposts in the form of key positions, ultimately analyzed to a draw or a win. Step two, practice steering real-life endgames to these key positions, where...

Let's tour you around the course:

In the first 4 chapters, Aveskulov lays down the 42 technical rook endings every player must know... along with the correct drawing and winning method for each.

He covers textbook techniques involving the Lucena and Phildor positions... the Kling-Horwitz defense... and the cutting-off mechanism.



The Holy Grail of Rook Endings:  
The Lucena position teaches you how to  
"build a bridge" to promote your pawn

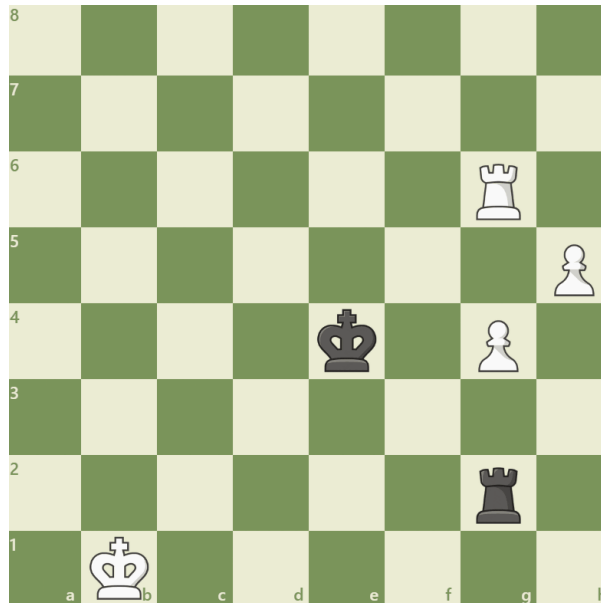
But he also shows you how to:

☞ "Change the leader" of your pawns, and promote one of them by force.

☞ Lock the opponent away from your soon-to-be queen with the "six squares for the king" method.

🎯 “Arrest the king” and force it to physically stop its own pawn from reaching the 8th rank.

🎯 Score the easiest win of your life with self-propelling pawns.



Their king may be far away... their rook might be blocking the way... but these self-propelling pawns WILL score a touchdown!

Plus many more.

These 42 technical rook endings have a clear, predictable result — a win or a draw...

That’s why in the second part, Aveskulov gives you plenty of practice aiming for these endings. So when you do reach them, the rest is just a matter of technique.

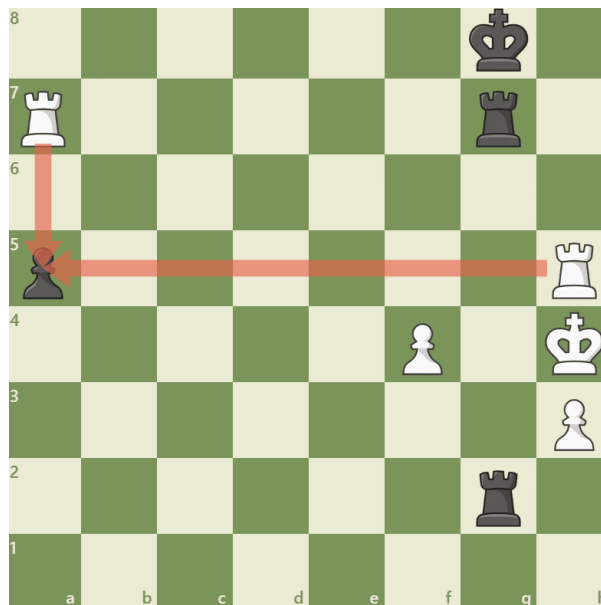
Chapters 5 to 9 replay real-world endgame scenarios from 39

grandmaster-level encounters. The same scenarios that have and will again appear in your games.

Aveskulov shows you how to steer:

- 🎯 Rook endgames with or without passed pawns
- 🎯 Pawns sitting on the same side of the board
- 🎯 Endgames with all 4 rooks
- 🎯 Plus other material and positional imbalances

...to the 42 technical endings, which you already know how to convert.



When you know your technical rook endgames, it's easier to avoid the trap of  $Rxa5$ ? — and force exchanges to create the “self-propelling pawns” we saw earlier

To consolidate your newfound endgame skills, Aveskulov also serves you 78 test positions. All peppered with the right amount of analysis, explaining the ideas behind the moves.

We're confident in Aveskulov's ability to take you from "clueless" to "crushing rook endgames" in the most efficient way possible.

But don't take our word for it.

See for yourself when you take Improve Endgame Technique: Rook Endgames for a month-long test drive... while our 100% satisfaction, 30-day money-back guarantee shoulders the risk.

The course has 6.5 hours of video and 263 MoveTrainer exercises.

So if you study 10 rook endgames per day, you can complete the course... absorb the practical endgame wisdom of Aveskulov... and start reaping the rewards in less than 30 days.

But if you decide Aveskulov's endgame course isn't for you, we'll rush you a refund. No questions asked.



## GM Valeriy Aveskulov



Valeriy Aveskulov is a grandmaster from Ukraine, with a peak rating of 2545 FIDE.

Aveskulov's father taught him the game when he was 6 years old...

And only 6 years later — at age 12 — Aveskulov not only qualified for the World Rapid Championship in Disneyland Paris. He also took home the silver medal, and got to meet the legend Anatoly Karpov during the awards ceremony.

Clinching the grandmaster title at age 20 was also a bright spot in Aveskulov's career. Not only because of the title's prestige, but also because of the way he won it.

Aveskulov had to face an 11-time Belarussian champion, who only lost one game for an entire year. The early part of the game saw our hero seize the upper hand...

Only to blunder his advantage. Move by move, his confidence slipped. But the game reached an endgame, with 4 rooks on the board. And thanks to the passed pawn he was able to create, Aveskulov took down his solid opponent and bagged the GM title.

Since then, Aveskulov won the Ukrainian championship in 2007... took home 3 medals from the 2008 World Mind Sports Games... and finished first in events in the USA, Kazakhstan, Belarus, and other countries.

Aveskulov walked away from tournament play in 2009. But while competitive chess lost a warrior, chess improvers gained a top-tier coach.

His goal since then is to help as many students as possible reach their best in chess. And in Chessable, he's found a platform where he can pass on his knowledge to thousands of students.

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☐ Introduction  
☒ Introduction

I'm happy to present the fourth part of the 'Improving Endgame Technique' series. Within this course, I will tell you all about the practical rook endgames. For a long time, I hesitated about how much time I should spend on the theory of rook endgames in my course. I paid little attention to the theoretical positions in the first three courses of this series. At first, I wanted to do the same with the rook endgames. But later, I decided that this part should have theoretical material because, during the analysis, I must refer to many theoretical rules, ideas, and positions. For example, explaining the practical aspect of the Kling & Horwitz defensive technique for a specific game is much easier when I have already covered the theory in a reference chapter. So I gathered the main rules, ideas, and positions to help you better understand the given analysis in the practical section. That's why I ask you not to judge the theoretical section as the manual, as it primarily serves as a reference for the primary theoretical knowledge about rook endgames. I named all theoretical positions and ideas (well, many already had names or terms for a long time) for easy reference. In my annotations, you can see, for example, references to the six squares for the king or the change of the leader positions, and quickly understand what they mean by looking at the appropriate example in the theoretical section. The second section of the course has 49 comprehensively annotated rook endgames, with the material divided in: ♠ ♣ Endgames with all pawns on one side ♠ ♣ Endgames with an outside passed pawn ♠ ♣ Many-pawn rook endgames without passed pawns ♠ ♣ Many-pawn rook endgames with many passed pawns ♠ ♣ Endgames with four rooks Of course, this division is symbolic

because, in many cases, one type of endgame transfers to another. The third section includes two groups of exercises divided by difficulty. A specialty of this section is that some positions are from the games I analyze in the main section. It may be confusing for some, but this method will help you see more nuances of these positions (compared to the first time studying). The reason is that when you go through the lines as a reader, you leave aside many tricks the position contains. But, when you need to find a concrete solution, you should double-check all details and pay attention to what you could have missed while studying (not solving). Also, it is possible that you are interested in first solving the exercises and then going to the main section to see how those games continued. You might have more questions about the game text and my notes in this case. The reason is that when you try hard to find the solution, you can see those lines and opportunities that I should have seen (or decided to leave out of the analysis). Whatever you choose - to go through the chapters in order or begin with the exercises - studying the course will make you a better rook endgame player! You can post your questions, feedback, or proposals on the Chessable platform or send them to [vdaveskulov@gmail.com](mailto:vdaveskulov@gmail.com). I will happily answer you. Z0

☐ Introduction  
☒ About the Author

Valeriy Aveskulov (born in 1986), International Grandmaster since 2006. My most significant achievements as a player are: ♠ ♣ Ukrainian Champion of 2007 ♠ ♣ 3-times prize winner at the first World Mind Sports Games (Beijing, 2008) as a member of the Ukrainian national team ♠ ♣ Silver prize winner of the World

Rapid Championship U-12 (Paris, 1998) – Winner and prize-winner of international tournaments held in different cities of Ukraine, Oklahoma, Miami, Chicago (USA), Pavlodar (Kazakhstan), Minsk (Belarus), Budapest (Hungary), Saratov (Russia), and others. In 2009, I stopped actively playing and started coaching online. You can find information about my coaching approach and students' achievements on my web page: [www.chesstao.com](http://www.chesstao.com). Having been coaching for quite a while, I have always added examples to different folders on my computer. One day I felt it was time to share all this with a chess audience. So, you see the fourth part of the Improving Endgame Technique series. Z0

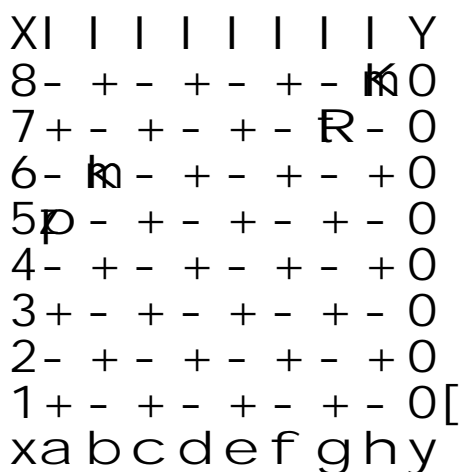
## 1) Theory: Rook vs. Pawn Rook vs. Pawn

As I said in the Introduction, the main goal of the theoretical section is not to become a new fundamental academic work on the theory of the rook endgames. It is a collection of the positions and ideas I recommend studying, as they will be used in the main part of the course. Since any rook endgame can transfer to the endgame – rook vs. pawn, it is essential to remember the key positions and ideas which happen in it. First, one must know when the rook can stop the pawn without the king's assistance. Z0

## 1) Theory: Rook vs. Pawn Rook Stops the Pawn

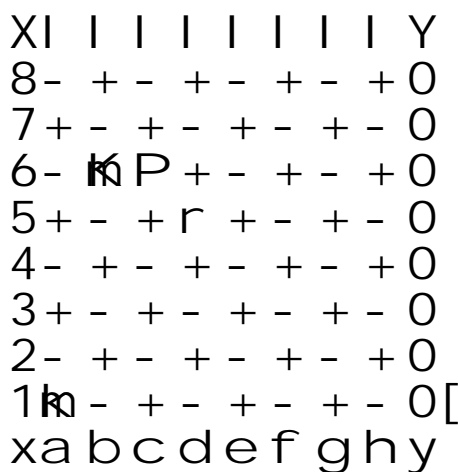
(Diagram)

1. | g5 White is winning regardless of their king's position if the opponent's king is cut



off along the 5th rank (or along the 4th rank when we talk about the white king). Black can't continue advancing the pawn without losing it. a4 2.♖g7 a3 3. | g3 a2 4. | a3

## 1) Theory: Rook vs. Pawn Saavedra Position



To introduce the next position it is enough to say one word – Saavedra. Every player should know this name and this position! The first moves are easy. 1.c7 | d6+ The only way to prevent c7 - c8=Q. 2.♖b5 [ 2.♖b7? | d7 and ... Rxc7. ; 2.♖c5? | d1 and ... Rc1. ] 2... | d5+ 3.♖b4 [It is still premature to move on the c-file. 3.♖c4? | d1 ] 3... | d4+ 4.♖b3 [ 4.♖c3 | d1 5.♖c2 leads to the same position. ] 4... | d3+ 5.♖c2 At first, it looks like it's

time to resign. But Black has one more trap.  
 1. d4 6.c8 A rare situation when 'rook vs. rook' does not end with a draw. Black has only one move to stop the checkmate from a8. [The point of trap is 6.c8? 1.c4+ 7.Exc4 with a stalemate. ] 6... a4 7.Cb3 A double attack " on a4 and c1 " decides the game. Situations with such a double attack by the king are deservingly named after Saavedra.

### 1) Theory: Rook vs. Pawn

#### Underpromotion to the Knight

X	1	2	3	4	5	6	7	8	Y
8	-	+	-	+	-	+	-	+	0
7	+	-	+	-	+	-	+	-	0
6	-	+	-	+	-	+	-	+	0
5	+	-	+	-	+	-	+	-	0
4	-	+	-	K	-	+	-	R	0
3	+	-	+	-	+	-	+	-	0
2	-	+	p	K	-	+	-	+	0
1	+	-	+	-	+	-	+	-	0
	x	a	b	c	d	e	f	g	h

1. h2+ When the pawn is close to the promotion square, two main ideas should be considered by both players. The first trick is an underpromotion with a check that helps to avoid the checkmate and often helps to save half the point. This is the simplest example of this theme. C d1 It is worth mentioning that with a pawn on b2 , Black could also play for another stalemate ( Kb1 Kc3 Ka1! ) . 2.C d3 c1 + [ 2...c1? 3. h1# ] 3.C e3 [ 3.C c3 e2+ ] 3... b3 White can't do anything to disconnect the opponent's king and knight. Remember: the promotion into a knight does not help with the rook's pawn because there is an easy win with the rook against the knight in the corner.

### 1) Theory: Rook vs. Pawn

#### Outflanking

X	1	2	3	4	5	6	7	8	Y
8	-	+	-	+	-	+	-	+	0
7	+	-	+	-	K	-	+	-	0
6	-	+	-	+	-	+	-	+	0
5	+	-	+	p	K	-	+	-	0
4	-	+	-	R	-	+	-	+	0
3	+	-	+	-	+	-	+	-	0
2	-	+	-	+	-	+	-	+	0
1	+	-	+	-	+	-	+	-	0
	x	a	b	c	d	e	f	g	h

Another important nuance of the "rook vs. pawn" endgame is that pushing the defending king with a king from the rear does not help the strongest side. The correct strategy is to place the king on a different side from the pawn (opposite to the opponent's king). One of the best illustrations of this idea belongs to Richard Reti. 1. d2 [The most natural retreat leads to a position of reciprocal zugzwang. After 1. d1? d4 2.C d7 C d5! 3.C c7 C c5 , White needs to make a move with the rook, which gives Black an important tempo. 4. d2 C c4 5.C d6 C c3 Here it is! 6. d1 d3 7.C e5 d2 8.C e4 C c2 ] 1...d4 2. d1 Puts Black in zugzwang. C d5 3.C d7 The white king is ready to outflank the opponent's king. C e4 [Here we have a mirrored line. 3...C c4 4.C e6 d3 5.C e5 C c3 6.C e4 d2 7.C e3 ] 4.C c6 d3 5.C c5 C e3 6.C c4 d2 7.C c3

### 1) Theory: Rook vs. Pawn

#### Stalemate Idea With an A- Or

Rg8+ the threat of ... h1=Q forces White to repeat the position. 1. g8+ If we talk about the rook's pawn, we need to mention the stalemate idea, which can help

X	I	I	I	I	I	I	I	Y		
8	R	+	-	+	-	+	-	+	0	
7	+	-	+	-	+	-	+	-	0	
6	-	+	-	+	-	+	-	+	0	
5	+	-	+	-	+	-	+	-	0	
4	-	+	-	+	-	+	-	+	0	
3	+	-	+	-	+	-	+	-	0	
2	-	+	-	+	K	+	k	p	0	
1	+	-	+	-	+	-	+	-	0	
	x	a	b	c	d	e	f	g	h	y

the defending side. The position is drawn, since the black king moves to the corner after the check, and White should make another rook move due to a stalemate. ♖h1 2. ♖h8 ♕g2

- 1) Theory: Rook vs. Pawn  
 ■ The Time-Gaining Check

X	I	I	I	I	I	I	I	Y		
8	R	+	-	+	-	+	-	+	0	
7	+	-	+	-	+	-	+	-	0	
6	-	+	-	+	-	+	-	+	0	
5	+	-	+	-	+	-	+	-	0	
4	-	+	K	+	-	+	p	+	0	
3	+	-	+	-	+	-	k	-	0	
2	-	+	-	+	-	+	-	+	0	
1	+	-	+	-	+	-	+	-	0	
	x	a	b	c	d	e	f	g	h	y

72...♕f2 One of the popular tricks in the rook endgames is an in-between move (also known as an intermezzo or zwischenzug). The purpose of this check might be different. In the rook vs. pawn endgame, such a check drives the opponent's king back. In this position, Edwin Kengis resigned against Viktor Kortchnoj (Bern Cup, 1996) because 73.Rf8+ forces the black king to lose time by returning to the

third rank. 73. ♖f8+ [ 73.♕d3? g3 74. ♖f8+ ♕e1! 75.♕e3 g2 76. ♖g8 ♕f1 ] 73...♕e2 74. ♖g8 ♕f3 75.♕d3 g3 76. ♖f8+ The e1 -square is not available for the black king. ♕g2 77.♕e2 ♕h2 78. ♖g8 g2 79.♕f2

- 1) Theory: Rook vs. Pawn  
 ■ Rook vs. Pawn (to Memorize)

X	I	I	I	I	I	I	I	Y		
8	R	+	-	+	-	+	-	+	0	
7	+	-	+	-	+	-	+	-	0	
6	-	+	-	+	-	+	-	+	0	
5	+	-	+	-	+	-	+	-	0	
4	-	+	-	+	-	+	-	+	0	
3	+	-	+	-	K	-	k	p	0	
2	-	+	-	+	-	+	-	+	0	
1	+	-	+	-	+	-	+	-	0	
	x	a	b	c	d	e	f	g	h	y

The next position is better to be memorized. White moves - White wins; Black moves - draw. 1. ♖g8+ [Kg2! 1. ♖g8+ Kf1! The king leaves the h-file for the pawn. Kf3 h2 Rh8 Kg1= ] 1...♕h2 The stalemate idea is too slow here. 2.♕f2 ♕h1 3.♕g3 h2 4. ♖e8 ♕g1 5. ♖e1#

- 2) Theory: Rook vs. Two Pawns  
 ■ Rook vs. Two Pawns

Playing with the rook against two pawns is, of course, more complicated. To list the most important moments, I picked up the following positions. Z0

- 2) Theory: Rook vs. Two Pawns  
 ■ Rook vs. Two Pawns (no Kings)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	P	+	-	+	-	+	-	0
5	+	P	+	-	+	-	+	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
	x	a	b	c	d	e	f	g

If the kings do not participate in the 'rook vs. pawns' fight, such a setup with connected pawns (one on the 6th rank, the second on the 5th rank) is important to remember. If White moves - White wins; if Black moves - Black wins. No draw is possible! **1.a7**

[ White can also begin with another pawn. **1.b6** | **b1** **2.a7** ; **Ra1!** First, Black needs to stop the more advanced pawn. **1.♠f3** **Ra5+** and the rook takes both pawns. ]

**1... | a1** **2.b6** The rook can't prevent a promotion. To conclude, two connected pawns on the 6th rank win against a rook, while the pawns also win if there is one on the 7th and one on the 5th rank. If the pawns are below these checkpoints, they become an easy breakfast for the rook. All this relates only to those situations where both kings do not influence the situation.

- 2) Theory: Rook vs. Two Pawns  
 ■ The Intermediate Check

(Diagram)

In the next position (from the game Fridstein - Lutikov, URS team championship, Riga, 1954) , White forgot

X	I	I	I	I	I	I	I	Y
8	-	R	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	+	-	+	-	+	-	+	0
4	-	+	-	K	-	+	K	0
3	+	p	p	-	+	-	+	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
	x	a	b	c	d	e	f	g

about the intermediate check and resigned.

**1. | b4+** [Obviously, Fridstein calculated only an immediate capture of the pawn:

**1. | xb3?** **c2** and here checks do not help White. **2. | b4+** **♠d5** (**2...♠c5?** **3. | b8** and **4.Rc8**) **3. | b5+** **♠d6** **4. | b6+** **♠c7** ]

**1...♠d3** [ **1...♠c5** **2. | xb3** ] **2. | xb3**

- 2) Theory: Rook vs. Two Pawns  
 ■ The Change of the Leader

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	P	K	-	+	-	+	-	0
5	+	P	+	-	+	-	+	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	-	+	-	K	-	+	-	0
1	t	-	+	-	+	-	+	0
	x	a	b	c	d	e	f	g

A more difficult motif is the so-called 'exchange of the leader.' To explain what it means, I am offering you the next position. The defensive plan in such a situation is as follows. The rook controls the file of the more advanced pawn, and the king tries to catch the second pawn. For this reason, White needs to switch the pawns'

roles - the b-pawn becomes a leader while the a6 -pawn defends the king from the back checks. **73.♠a7** Visually, Kb6 - a7 loses time, but the opposite situation happens. Black needs to spend time on ... Rb1 , making the king's path longer (instead of the two moves (... Kc3 - c4 ) to catch the b5 -pawn, the king needs to make three moves (... Kc3 - b4 - a5 ) to touch the a6 -pawn). In the game Topalov, V - Beliavsky, A, Linares, 1995, Black immediately resigned. Black can't stop both pawns. [ 73.a7? Here, the black king catches the b-pawn right on time. ♠c3 74.♠b7 ♠c4 75.b6 ♠c5 ] **73...♠c3 74.b6 ♠b1 75.b7**

## □ 2) Theory: Rook vs. Two Pawns ■ Pursuing the King

XI	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	+	-	+	0	
7+	-	+	-	+	-	+	-	0	
6-	+	-	+	-	<del>K</del>	-	+	0	
5+	-	+	-	+	-	+	<del>k</del>	0	
4-	+	-	+	-	+	-	+	0	
3p	-	+	-	+	-	+	-	0	
2-	<del>p</del>	-	+	-	+	-	+	0	
1+	R	+	-	+	-	+	-	0[	
x	a	b	c	d	e	f	g	h	y

The pawns have already crossed the required checkpoints to win the fight against the lone rook. Only the checkmating threats can delay the ... a2 move. Is this enough? **1.♠f5 ♠h4** [ There is no sense to move up. 1...♠h6 2.♠f6 ♠h7 3.♠f7 ] **2.♠f4 ♠h3 3.♠f3 ♠h2** White cannot renew the mating threat, but with the black king on the second rank, a3 - a2 became impossible (due to the Rxb2 check). **4.♠e3** [ 4.♠f4 is also enough for a draw. ♠g2 ( 4...♠h3 5.♠f3

is a repetition. ) **5.♠e3 ♠g3** with a transposition to the 4...Kg3 line. ] **4...♠g2** [ 4...♠g3 5.♠g1+! ♠h3 ( 5...♠h2 6.♠b1 is a repetition. ) **6.♠f3 ♠h4** ( 6...♠h2?? even loses due to zugzwang. 7.♠b1 ) **7.♠f4 ] 5.♠d3 ♠f3** The king escaped from the mating net, but the white king can already help the rook. **6.♠c3 a2 7.♠xb2 axb1♠+ 8.♠xb1** An interesting fact: I can't recall any interesting ♠rook vs. pawn/pawns's endgames from my practice. So, I think that understanding the mentioned ideas is enough. More skills might be achieved by reading the Endgame books' corresponding chapters and analyzing the practical examples (see the main block of this course).

## □ 3) Theory: Rook & Pawn vs. Rook ■ Rook & Pawn vs. Rook

Now it is time to look at the main theoretical positions and ideas of endgames with two rooks on the board. Like all other authors, I will not be unique and begin with the ♠rook and pawn vs. rook's positions. The variety of the ♠rook and pawn vs. rook's positions is so huge that it is nearly impossible to know/understand all of them. But of course, there are several basic positions that everyone should know. I would like to credit Jesus de la Villa for his excellent book 100 Endgames You Must Know: Vital Lessons for Every Chess Player. The author has selected the most important theoretical positions and moved smoothly and logically from one to another. At the same time, he hasn't overloaded his book with extremely complicated examples, as in most endgame manuals. It covers only those positions which are required to get better in the theory of endgames. If you read this manual carefully, you will be guaranteed to get seriously stronger in all types of theoretical



endgames and better understand the connections between main positions. Z0

### □ 3) Theory: Rook & Pawn vs. Ro ■ Lucena Position

XI								Y
8-	+	-	+	K	+	-	+	O
7+	-	<del>Kn</del>	-	<del>P</del>	-	+	-	O
6-	+	-	+	-	+	-	+	O
5+	-	+	-	+	-	+	-	O
4-	+	-	+	-	+	-	+	O
3+	-	+	-	+	-	+	-	O
2-	+	-	<del>R</del>	-	+	-	+	O
1+	-	+	-	+	r	+	-	O
x	a	b	c	d	e	f	g	h
								y

If you ask chess players which rook endgame positions they know, more than half will say "Lucena" or "Philidor" (or both together). The first teaches us how to win when the pawn reaches the 7th rank, and the second shows us one of the simplest defending techniques. Since winning is always more interesting, I offer to begin with the Lucena position and move to other positions where we can learn/recall how to convert the winning advantage. This position is named after the Spaniard Luis Ramirez de Lucena, even though he did not examine it in his book dated 1497 and considered the oldest still-existing chess book. The first analysis of an analogic position was published in 1634 by Salvio. The importance of the so-called Lucena method is hard to over-evaluate. Jeremy Silman even called it 'The Sacred Key' or 'the Holy Grail' of all rook endings. Practically any 'rook+pawn against rook' endgame can reach a similar position. So, one should know the winning ideas. It is worth mentioning that such a win works only if the pawn is not on the rook file. The

white king is trapped on e8 and can't free the way for the pawn. But White can push away both king and rook. So, there are two winning ideas to know. One is widely known as the 'bridge'; the other has no name in literature but is also very important.

1. ♖c2+ [If White wants to use the f-file, the rook needs to be brought to f8. 1. ♖h2 it is equally good to use the g2 - g8 - f8 path. ♜f3 Black's pieces are placed in the perfect position, and there is nothing to improve. 2. ♖h8 ♜f2 3. ♖f8 ♜e2 4. ♜f7 and the king goes down to the second rank to escape from the checks. ♜f2+ 5. ♜g6 ♜g2+ 6. ♜h5 ♜h2+ 7. ♜g4 ♜g2+ 8. ♜f3 This is the only winning idea when the pawn is on the rook file. The opponent's king should be far enough from the pawn for this. At the same time, if we move the starting positions two files to the right (the pawn will be on g7), the only winning strategy there is the 'bridge.']

1... ♜b7 [After 1... ♜d6 White wins faster by a move 2. ♜d8 followed by e8=Q.]

2. ♖c4 A mysterious move that helps White to build a bridge that should help the king to hide from the checks. [White can't simply start the king walk. 2. ♜d7 ♜d1+ 3. ♜e6 ♜e1+ 4. ♜f6 ♜f1+ 5. ♜g5 ♜e1 Here is nothing else but to bring the king back to e8 through a repetition. 6. ♜f6]

2... ♜f2 [If Black decides to lock down the d-file door, the king uses another exit with the same ideas. 2... ♜d1 3. ♜f7] 3. ♜d7

Once the e8=Q threat is created, Black can't wait but should give checks. ♜d2+ 4. ♜e6 ♜e2+ 5. ♜d6 ♜d2+ [This check is not so forced. But after the waiting move 5... ♜e1 White brings the bridge to the 5th rank. 6. ♜c5 followed by Re5. ;Black can prevent the Rc5 - e5 idea by playing 5... ♜b6 It also does not help because White has a few winning ways. 6. ♜d4 It is my favorite method. The bridge is now on the d-file. Black can't prevent Kd7 and e7 - e8=Q. (6. ♜c8 is another useful winning

mechanism. The rook controls the promotion square and creates a threat of e8=Q . What is left is to hide from the checks. | d2+ 7. ♖e6 | e2+ 8. ♖f6 | f2+ 9. ♖g5 | g2+ 10. ♖h4 | h2+ 11. ♖g3 ; It is most important for White not to blunder a tactic after 6. | c5?? (with an idea of Re5 ) | xe7 )] 6. ♖e5 | e2+ 7. | e4 The bridge is here, and the promotion is unavoidable.

### □ 3) Theory: Rook & Pawn vs. Ro ■ Reaching the 7th Rank

X	I								Y
8-	+	-	+	-	+	-	+	-	0
7+	-	+	-	+	K	+	k	0	
6-	+	-	+	R	P	-	+	0	
5+	-	+	-	+	-	+	-	0	
4-	+	-	+	-	+	-	+	0	
3+	-	+	-	+	-	+	-	0	
2-	+	-	+	-	+	-	+	0	
1t	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

The next position does not have an official name, so I called it simply Reaching the 7th rank. Many strong players failed in this type of position. So be sure that you learn how to win here. It is easy to create something different when one does not know their target position. But everything looks simpler when you know that having the king on f8 with an f7 -pawn position is an automatic win. 1. ♖f8 Other moves lead to a draw. You can check this yourself. | a8+ 2. | e8 | a6 [ 2... | a7 3. | e7+! ] 3.f7 | a7 Black prevents Ke7 , but it does not help. White uses the e8 -square to leave the promotion square. 4. | d8 Followed by Ke8 is the simplest. [ Another winning idea is to play 4. | e1 with an idea of 5.Rh1 Kg6 6.Kg8 . | a8+

5. ♖e7 | a7+ 6. ♖f6 | a6+ 7. | e6 | a8 8. | e8 | a6+ 9. ♖e5 The king hides from the checks on the b-file. ] 4... ♖g6 [ 4... | a1 5. ♖e7 | e1+ 6. ♖d6 | d1+ 7. ♖c7 | c1+ 8. ♖b6 The king goes down to the 2nd rank. ] 5. | d6+ ♖h7 6. ♖e8 | a8+ 7. | d8 There is no way to prevent f8=Q . [ 7. ♖e7? ♖g7 Here we see the stop the pawn at the 7th rank position'. ]

### □ 3) Theory: Rook & Pawn vs. Ro ■ Stop the Pawn at the 7th Rank

X	I								Y
8-	+	-	+	-	+	-	+	-	0{
7+	-	+	-	+	K	+	k	0	
6-	+	-	+	R	P	-	+	0	
5+	-	+	-	+	-	+	-	0	
4-	+	-	+	-	+	-	+	0	
3+	-	+	-	+	-	+	-	0	
2-	+	-	+	-	+	-	+	0	
1t	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

The move order in the previous position decides the result of the game. If there it is Black's turn, Black can draw the game. The white pawn is already too close. All White needs to win is to play Kf8 , f7 . 1... | a8 The only move. Black prevents Kf7 - f8 . The plan is to meet the f6 - f7 advance with ... Kg7 . Waiting moves can be made by the king. [ 1... | a7+? 2. ♖f8 | a8+ 3. | e8 | a6 4.f7 | a7 5. | d8 Black can't stop Ke8 and f8=Q . ] 2. | e8 [ Black uses a similar stopping mechanism in the following line. 2. ♖e7 ♖g6 3.f7+ ♖g7 4. | a6 | b8 5. | a7 | f8 6. ♖e6 | b8 ] 2... | a7+ 3. | e7 [ 3. ♖f8 ♖g6 4. | e6 | f7+ ; 3. ♖e6 | a6+ 4. ♖e7 | a7+ 5. ♖d6 | a6+ ] 3... | a8 Black immediately puts the rook on the optimal square. The key to a good defense is control of the f8 -square (to

prevent the Kf8 , f6 - f7 idea).

[ A popular mistake in this position is to put the rook on the 6th rank. 3... | a6?

It's funny that moving to any square between a1 and a5 draws. The point is that the black rook can't reach the g-file after the next moves. 4.♣f8+ ♣g6 5.f7 ♣f6 6.♣g8 ; 3... | a1 4.♣f8+ ♣g6 5.f7 ♣f6

The white rook is passive. 6.♣g8 ( 6. | e8 | a7 ; 6. | e2 | a8+ 7. | e8 | a7 ) 6... | g1+!

7.♣f8 | a1 ] 4. | b7 Since the white rook should guard the 7th rank to prevent the side checks, White's only active idea is to play Ke7 and f6 - f7 . Black needs to keep the rook on the 8th rank and the king near the g7 -square (to meet f6 - f7 with Kg7 ).

[ 4.♣e6+ ♣g8 4...Kg6 also holds the position, but it is more logical to approach the f8 -square and to transfer to the

Philidor position. 5. | g7+ ( 5.♣f5 | a1 )

5...♣f8 6. | h7 | a6+ 7.♣f5 | a1 ] 4...♣h6

5.♣e7 ♣g6 6.f7 ♣g7 This is a position to memorize!

□ 3) Theory: Rook & Pawn vs. Ro

■ Side Checks Technique

X	I	I	I	I	I	I	I	Y
8-	+	-	+	K	+	-	+	0{
7+	-	+	-	P	-	K	-	0
6-	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	-	+	0
3+	-	+	-	+	-	+	-	0
2r	+	-	+	-	+	-	+	0
1+	-	+	-	+	R	+	-	0
x	a	b	c	d	e	f	g	h
								y

In the situation with the pawn on the 7th rank, the defending side often can stop it with the side checks technique. Black will give many checks to push the opponent's king away from the pawn. To succeed, the

defender needs a distance of three files between the rook and the pawn. For this reason, when there is a chance, the defending king should choose the short side of the board. 1... | a8+ 2.♣d7 | a7+ 3.♣e6 | a6+ 4.♣d5 | a5+ 5.♣c6 | a6+ 6.♣b7 | e6 If the black king were on g8 , White would win with the maneuver e8 - d7 - e6 - e5 - f6 - g5 - g6 and then Rf6 - d6 - d8 . If there were only two files between the rook and the pawn (for example, the passed pawn was on d7 ), White would win with the maneuver d8 - c7 - c8 - b7 .

□ 3) Theory: Rook & Pawn vs. Ro

■ Insufficient Side Checks (Two

X	I	I	I	I	I	I	I	Y
8-	+	-	K	-	+	-	+	0{
7+	-	+	P	+	K	+	-	0
6-	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	-	+	0
3+	-	+	-	+	-	+	-	0
2r	+	-	+	-	+	-	+	0
1+	-	+	-	R	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

1... | a8+ But if there are only two files between the pawn and the rook, the stronger side can easily win. The white king escapes from the checks. 2.♣c7 | a7+ 3.♣c6 | a6+ 4.♣b7 | d6 5.♣c7

□ 3) Theory: Rook & Pawn vs. Ro

■ Stalemate at the Last Moment

(Diagram)

While discussing the ♠rook+pawn vs. rook♠ endgames, we must mention the

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	R
6	-	+	-	+	-	+	-	0
5	+	-	+	-	+	-	+	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	P	K	+	0
2	R	+	-	+	-	+	-	0
1	+	-	+	-	+	K	+	0
	a	b	c	d	e	f	g	h

stalemate idea, which can help when everything is already too bad. In this position, none of the techniques mentioned earlier helps White to save the game. But there is a place for a miracle! 1. f2+ Pushes the black king back and allows White to transfer to the Philidor position with a draw. e4 2. f8

- 3) Theory: Rook & Pawn vs. Ro  
 ■ Philidor Position

X	I	I	I	I	I	I	I	Y
8	-	+	-	K	-	+	-	0
7	+	-	+	-	+	-	+	R
6	-	+	-	+	-	+	-	0
5	+	-	+	P	K	-	+	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	+	-	0
1	T	-	+	-	+	-	+	0
	a	b	c	d	e	f	g	h

When the pawn is on the 5th rank (4th for the black pawn) , the defending side dreams of building the Philidor position. This position was analyzed by François-André Danican Philidor in 1777 and illustrated a drawing technique when the active king and pawn are on the 5th rank (or

the 4th rank for Black). 1... a6  
 Black does not allow the opponent's king to move on to the 6th rank. White can't improve the position without a pawn move. 2.d6 But now the rook goes to the 1st rank to give multiple checks from there. a1  
 I would dare assume this is the most famous rook endgame position.

- 3) Theory: Rook & Pawn vs. Ro  
 ■ Kling & Horwitz Defense

X	I	I	I	I	I	I	I	Y
8	-	+	-	K	-	+	-	0
7	+	-	+	-	+	-	+	R
6	-	+	-	+	K	+	-	0
5	+	-	+	P	+	-	+	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	+	-	0
1	T	-	+	-	+	-	+	0
	a	b	c	d	e	f	g	h

If the defending side had no chance to reach the Philidor position and the opponent's king moved to the 6th rank, they need to apply the second method called 'Kling and Horwitz Defense.' By the way, even GMs often forget about it. 1... d1 Black does not allow White to advance the pawn to the 6th rank without an obvious draw. 2.e4 [ 2. h8+ c7 White has nothing but to repeat the position. 3. h7+ c8 ; In the case of 2.d6 , Black gives many checks (like in the Philidor position). 2.d6 e1+ 3.c5 d1+ 4.e5 e1+ ] 2...c8 [ 2...e8 can also make a draw, but it is more accurate to keep the king on the short side and leave the long side for the side checks. ] 3. h8+ b7 4. d8 [ White aims to play Ke7 and d6 , but Black throws the rook to the long side. If White tries to advance the pawn with a move like

4. ♖e6 Black prevents it with ♖c7 with a transposition to the 2.Rh8 line. ; If White prepares an advance with the move 4. ♗h5 , simplest is to bring the king back to the back rank. ♖c8 and Black is again ready to meet the opponent's king if they decide to leave the d-file. 5. ♖e6 ♗e1+ 6. ♗e5 ♗xe5+ 7. ♖xe5 ♖d7 ] 4... ♗h1 5. ♗e8 Black returns to the initial technique since the side checks technique does not have an effect (because of Re7 , Re6 ). [ 5. ♖e7 ♗h7+ Black has the perfect three files between the rook and the pawn (in this specific situation, even two files would be enough). ] 5... ♗d1 6. ♖e6 ♖c7 White can't make progress.

□ 3) Theory: Rook & Pawn vs. Ro  
 ■ Kling & Horwitz Does Not Help

XI	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	♞	-	+	O	
7R	-	+	-	+	-	+	-	O	
6-	+	-	+	-	+	K	+	O	
5+	-	+	-	+	-	P	-	O	
4-	+	-	+	-	+	-	+	O	
3+	-	+	-	+	-	+	-	O	
2-	+	-	+	-	+	r	+	O	
1+	-	+	-	+	-	+	-	O[	
x	a	b	c	d	e	f	g	h	y

Rh2 Re4+ Kd7 Kf7 Rf2+ Kg6 Rg2+ Kf6 Rf2+ Kg5 Rg2+ Rg4+- It is important to remember that the "Kling & Horwitz" helps only when the pawn is on the two central files. When we talk about b- and g-pawns, or c- and f-pawns, this technique does not help. 1. ♗a8+ ♖e7 2. ♗g8 This is the only winning way in this position. Black can't prevent Kh7 ( Kg7 ), followed by g5 - g6 . When the king and the pawn reach the 8th and the 7th ranks correspondingly, it will be time to recall

the 'bridge' method described in the Lucena position . According to my database, such a position has happened 40 times (Karpov - Unzicker, 1980; Sasikiran - Aronian, 2010; Grachev - Kurnosov, 2010, to name the highest rated pairs). If we add the games with the black rook on other squares, the mirror situation on the b-file, and the same positions with the reversed colors, the overall number of times where the Rg8 - idea helped the strongest side win will run in the hundreds. I think it is worth memorizing! [ 2. ♗h8 ♗g1 3. ♗h5 ♖f8 4. ♖h7 ♖f7 ] 2... ♗g1 Black can only wait, since there is no space for the side checks technique that helps when the pawn is on the d- or e-file. 3. ♖h7 Black can't stop the white king from advancing to g8 , nor the pawn advancing to g7 . ♗g2 4. g6 ♗h2+ 5. ♖g7 ♗g2 6. ♗a8 ♗g1 7. ♖h7 ♗h1+ 8. ♖g8 ♗g1 9. g7 ♗h1 Now it is time for the Lucena position . 10. ♗a4

Now the bridge technique helps. If you forgot how Lucena taught us to win in such positions, then please take a look at the following line and the explanations in the variation on the Lucena position .

□ 3) Theory: Rook & Pawn vs. Ro  
 ■ The First Rank Defense (B- Or

(Diagram)

1. ♗g7+ But facing the b- or g-pawn is not always a disadvantage. In this case, the defending side has an additional defending technique that does not work against the pawn on one of 4 central files. White can't make progress. ♖h8 Move to memorize! Surprisingly, even with the pawn on the g-file, the defending side should think about the short and long sides to keep the long side free for checks. The same defending technique does not work with the c/f pawn

X	I	I	I	I	I	I	I	Y		
8	r	+	-	+	-	+	k	+	0	
7	+	R	+	-	+	-	+	-	0	
6	-	+	-	+	-	+	P	k	0	
5	+	-	+	-	+	-	+	-	0	
4	-	+	-	+	-	+	-	+	0	
3	+	-	+	-	+	-	+	-	0	
2	-	+	-	+	-	+	-	+	0	
1	+	-	+	-	+	-	+	-	0	
	x	a	b	c	d	e	f	g	h	y

because White has an idea of Rh7 , f6 - f7 + , Rh8 (with the b/g pawn, there is not enough place for this maneuver). [ 1... ♖f8? 2. ♖h7 ♗a1 3. ♗g8+ ♕e7 4. ♗b8 ♗h1+ 5. ♖g8 ♗g1 6. ♗g7 ♗h1 7. ♗b4! We transpose to the Lucena position (the 'bridge' method). ]

□ 3) Theory: Rook & Pawn vs. Ro  
 ■ Frontal Checks

X	I	I	I	I	I	I	I	Y		
8	-	+	r	+	-	+	-	+	0	
7	+	-	+	-	+	-	+	-	0	
6	-	+	-	+	k	+	-	+	0	
5	+	-	+	-	+	-	+	-	0	
4	-	+	P	+	-	+	-	+	0	
3	+	-	k	-	+	-	+	-	0	
2	-	+	-	+	-	+	-	+	0	
1	+	-	+	R	+	-	+	-	0	
	x	a	b	c	d	e	f	g	h	y

1. ♖b4 Special techniques are used when the pawn is still in its half. Here the first thing to remember is the idea of the frontal check. This is a typical situation where the frontal defense helps the weakest side to save the game. The pawn has not crossed the middle line, and the white pieces can't provide it's advancing. If White manages to play c4 - c5 , it would be winning for him.

♗b8+ 2. ♖a5 ♗c8 [After a careless 2... ♗a8+? there is no way to stop c4 - c5 . 3. ♖b6 ♗b8+ 4. ♖c7 ] 3. ♖b5 ♗b8+ 4. ♖a6 ♗c8 5. ♗d4 The white rook is tied with two missions - to defend the pawn and to cut off the black king. White's threat is to play Kb7 which guarantees the c4 - c5 advance. Black must hurry up and drive the rook away from the optimal position. ♖e5 6. ♗h4 ♖d6 [Though many other moves also give Black a draw, I prefer 6... ♖d6 , because I see no sense in delaying the king's march to the pawn file. Let me remind you that the most effective defending technique is connected to placing the king in front of the pawn (if possible). ]

□ 3) Theory: Rook & Pawn vs. Ro  
 ■ Exchange Offer

X	I	I	I	I	I	I	I	Y		
8	-	+	-	+	-	+	-	t	0	
7	+	-	+	-	k	-	+	-	0	
6	-	+	-	+	-	+	-	+	0	
5	+	-	P	-	+	-	+	-	0	
4	-	+	K	+	-	+	-	+	0	
3	+	-	+	-	+	-	+	-	0	
2	-	+	-	+	-	+	-	+	0	
1	+	-	+	R	+	-	+	-	0	
	x	a	b	c	d	e	f	g	h	y

The frontal strategy does not help because the white pawn is already on the Black's half of the board. The rook can't save this without the king's assistance. 1... ♗d8 2. ♗h1 [ 2. ♗xd8 ♖xd8 3. ♖b5 ♖c7 ] 2... ♖d7 And the king is in front of the pawn.

□ 3) Theory: Rook & Pawn vs. Ro  
 ■ The Perfect Square for the Ro

X\I	I	I	I	I	I	I	I	Y		
8-	+	-	+	-	<b>r</b>	-	+	0		
7+	-	+	<b>k</b>	+	-	+	-	0		
6-	+	-	+	-	+	-	+	0		
5+	-	+	-	+	-	+	-	0		
4-	+	-	+	-	<b>P</b>	-	+	0		
3+	-	+	-	+	<b>K</b>	+	-	0		
2-	+	-	+	<b>R</b>	+	-	+	0		
1+	-	+	-	+	-	+	-	0		
	x	a	b	c	d	e	f	g	h	y

When the defending rook is on the back rank and does not allow the opponent's king to move forward, the stronger side should try to place his rook on the optimal square - where it defends the pawn along the rank and cuts off the opponent's king along the file. This position with reversed colors happened in the game Kochyev, A - Smyslov, V (Lvov, 1978). With his last move Kd6 - d7, Kochyev moved the king the wrong way and allowed the former World Champion to demonstrate the perfect position for the rook. 1.♠g4 | g8+ 2.♙h5 | f8 3.♠g5 | g8+ 4.♙h6 | f8 5.♙e4 Here it is! It is a good moment for Black to play ... Kd5, but his king is too far. So, White gets enough time to play Kg7. ♠d6 6.♠g7 | f5 7.♠g6 Kochyev resigned because the pawn reached the 5th rank while the king was stuck on the long side.

□ 3) Theory: Rook & Pawn vs. Ro  
 ■ Attacking the Perfect Rook

Knowledge of the previous position helps us understand what the defending king should do in these types of positions. Black only has one drawing move. 53...♠d5

X	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	<b>r</b>	-	+	0{	
7+	-	+	-	+	-	+	-	0	
6-	+	-	<b>k</b>	-	+	-	+	0	
5+	-	+	-	+	-	<b>k</b>	-	0	
4-	+	-	+	-	+	-	+	0	
3+	-	+	-	<b>R</b>	-	<b>P</b>	-	0	
2-	+	-	+	-	+	-	+	0	
1+	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

[ 53...♙g8+? 54.♠f6 ♠d5 now this does not help. 55.♙e5+ ♠d6 56.♙g5! | f8+ 57.♠g7 Sasikiran - Aronian, World Team Championship, 2010. ] 54.♠g6 [ The frontal checks help Black in case of 54.g4. | g8+ 55.♠f4 | f8+ 56.♠g3 | g8. ] 54...♠d4 55.♙a3 ♠e4 Black begins the attack against the g3 -pawn. 56.g4 [ 56.♠g7 | f3 ] 56...♙g8+ 57.♙h5 | h8+ 58.♠g5 | g8+ 59.♙h4 | h8+ 60.♠g3 ♠e5 The idea is to place the king before the pawn. The cut-off along a rank does not help because the black king is one rank higher than the pawn. 61.♙a6 | h1

□ 3) Theory: Rook & Pawn vs. Ro  
 ■ Cut Off Along a Rank #1

(Diagram)

In this serious (neither rapid nor blitz) game vs. Fabiano Caruana, Magnus Carlsen forced exchanges on the board and, from the drawn position, arrived at the position where the next idea helped his opponent to win the game. If the World Champion can forget about such a trick, how often will your opponent blunder it? This position comes from the game Jobava - Nakamura (FIDE GP Khanty-Mansiysk, 2015). At first, it is difficult to understand if Black h

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	k	+	0{
7+	-	+	-	+	-	<del>k</del>	<del>p</del>	0
6-	+	-	+	-	+	r	+	0
5+	-	+	-	+	-	R	0	
4-	+	-	+	-	+	-	+	0
3+	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

as any winning chances with the king and the pawn in the starting positions. The American GM showed us a good understanding of the cut-off technique.

69... | a6 Black cuts off the king along the 6th rank. 70. | f5 g6 71. | f6 | a7+ [ 71... | xf6?? 72. ♖xf6 ♖h7 73. ♖g5 ] 72. ♖e6 ♖g7 White needs to defend the rook 73. | f3 Black cuts off the king one more time. | a5 This time the cutting-off happens on the 5th rank. 74. | f7+ ♖h6 75. | f1 g5 Continued in the next variation.

- 3) Theory: Rook & Pawn vs. Ro  
 ■ Cut Off Along a Rank #2

(Diagram)

76. ♖f6 Continuation of the previous variation. The counterplay looks strong, but Nakamura correctly calculated the lines. The cutting-off mechanism is moving one more rank up. | a4 77. | h1+ | h4 78. | g1 | f4+ 79. ♖e5 ♖g6 80. | h1 | a4 White resigned because nothing could stop the advancement of the black pawn.

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	K	+	<del>k</del> 0
5+	-	+	-	+	-	<del>p</del>	-	0
4-	+	-	+	-	+	-	+	0
3+	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	R	+	0[
x	a	b	c	d	e	f	g	h
y								

- 3) Theory: Rook & Pawn vs. Ro  
 ■ Arrest in the Corner

XI	I	I	I	I	I	I	I	Y
8K	+	-	+	-	+	-	+	0
7P	-	<del>k</del>	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	-	+	0
3+	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	R	+	0
1+	r	+	-	+	-	+	-	0[
x	a	b	c	d	e	f	g	h
y								

The endgame positions with the rook & pawn occupy a special place in the theory of rook and pawn vs. rook. Before going to the special ideas that the players can use here, I would like to note that not all the above ideas work in the 'rook and pawn vs. rook' positions. The opposite is true, as the lion's share of them does not work here. Here is the list of the ideas that work: ♖ Philidor position ♖ The first rank defense ♖ Frontal checks ♖ Exchange offers ♖ Cut off along a rank. If the strongest side tries to reach the position where the king is ahead of the pawn, the defender aims to lock down the king in the



corner with an easy draw. The black king and the black rook hold the king in the corner. White has no plan to play for a win. Black can also keep the rook on the c-file to prevent the checks along this file. If White gives the rank checks, the king moves between the c7 - and c8 -squares. Z0

- 3) Theory: Rook & Pawn vs. Ro  
 ■ Acceptable Cut Off With an A-

X	I	I	I	I	I	I	I	Y
8K	+	-	+	-	+	-	+	0
7P	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	-	+	0
3+	-	+	-	+	-	+	-	0
2-	+	-	R	-	+	-	+	0
1+	r	+	-	+	-	+	-	0
	x	a	b	c	d	e	f	g

1. ♖h2 The strongest rook can't help its king if both the opponent's king and rook participate in the operation 'arrest of the king.' But even if the king is cut off along a file, the defending side has saving chances. The important thing is to memorize how many files can be between the pawn and the king. The only winning method in this position consists of bringing the rook to b8. Having been cut off by three files (b, c, and d with the a-pawn, or e, f, and g with the h-pawn), the black king can substitute the rook on time. ♜d7 2. ♖h8 ♜c7 3. ♖b8 ♖c1

- 3) Theory: Rook & Pawn vs. Ro  
 ■ Freeing the King From a8 (h8)

The black king is cut off by four files, which is enough to free the white king and

X	I	I	I	I	I	I	I	Y
8K	+	-	+	-	+	-	+	0
7P	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	-	+	0
3+	-	+	-	+	-	+	-	0
2-	+	-	+	R	+	-	+	0
1+	r	+	-	+	-	+	-	0
	x	a	b	c	d	e	f	g

promote the pawn. If there were only three files in between, the position would be drawn. 1. ♖c2 [The rook goes to b8. The rook can also use the h-file for the maneuver. If after 1. ♖h2 Black prevents 2. ♖h8 with ♜g7, it will be even further from the queenside and the rook will move back to 2. ♖c2 with an even easier win.] 1... ♜e7 2. ♖c8 [The b7 -square is not good because of a checkmate idea. 2. ♖c7+ ♜d8 3. ♖b7 ♖c1! and if White insists on freeing the promoting square 4. ♜b8??

Black checkmates in 1. ♖c8# ] 2... ♜d6 This move blocks the c5 -path but does not block the c8 -exit. [The win is easier when the king goes to d7. 2... ♜d7 3. ♖b8 ♖a1 4. ♜b7 ♖b1+ 5. ♜a6 ♖a1+ 6. ♜b6 ♖b1+ 7. ♜c5 ] 3. ♖b8 ♖a1 4. ♜b7 ♖b1+ 5. ♜c8 ♖c1+ 6. ♜d8 ♖h1 The most stubborn defense. [ 6... ♖g1 7. ♜e8 ] 7. ♖b6+ [ 7. ♜e8?? ♖h8+ 8. ♜f7 ♖h7+ 9. ♜g6 ♖xa7 ] 7... ♜c5 8. ♖c6+ [The key move in this theoretical position. 8. ♖b1, ♖b2, ♖b3 are more difficult ways to win.] 8... ♜b5 [Or 8... ♜d5 9. ♖a6 ( ♖c8 ♖d6 ) ( ♖c8+ ) ♖h8+ 10. ♜c7 ♖h7+ ( ♖a8 ♖b7+- ) 11. ♜b6 ♖h6+ 12. ♜b5 ] 9. ♖c8 ♖h8+ 10. ♜c7 ♖h7+ 11. ♜b8 Finally, everything is ready for a8=Q.

□ 3) Theory: Rook & Pawn vs. Ro  
 ■ Six Squares for the King

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	R O
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	+	-	<del>K</del>	-	+	-	+	P O
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	<del>K</del>	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	r O[
	x	a	b	c	d	e	f	g h y

In the tie-break of the World Championship match against Viswanathan Anand, Boris Gelfand had to score 1.5 in the last two games to level the score. In his white game, he had excellent chances but failed to apply the idea that I call 'six squares for the king.' 'I'm sure that memorizing the idea that is being missed even by such experienced players is worth it. This position happened in the game Ju Weijing - Goryachkina, Skolkovo, FIDE Women's Grand Prix, 2019. 57.h6 Moving the pawn to the 6th rank sticks the defending king in the queenside corner. [Here is how the game ended. 57.♠g4? ♠d6 58.h6 ♠e7 59.h7 ♠f7 60.♠a8 ♠xh7 Draw. ] 57...♠c6 When the black king is stuck in the opposite corner, White has all-time in the world to direct her king to h7, then to take under control the g-file, to leave the h7 - square, and to advance the pawn. For example, Black must go closer to one of six squares ( a7 , b7 , c7 , a6 , b6 , c6 ). Otherwise, the move h6 - h7 immediately wins. [ 57...♠d6 58.h7 ♠e7 59.♠a8! ♠xh7 60.♠a7+ ♠f6 61.♠xh7 ] 58.♠g4 ♠g1+ 59.♠f5 ♠h1 60.♠g6 ♠g1+ 61.♠h7 ♠d7 62.♠g8 ♠f1 [ 62...♠h1 63.♠g6 ♠e7 64.♠g7 ] 63.♠g7 [ 63.♠g6? ♠e7! The white king can't give way to the pawn.

64.♠g7 ♠f7+ ; 63.♠g4! This move wins in a more complicated manner. ] 63...♠g1+ [ 63...♠e6 64.h7 ♠g1+ 65.♠f8 ] 64.♠h8 ♠f1 65.h7 Again, transferring to the freeing the king from a8 ( h8 ) position. Here is its main line. ♠e6 66.♠g7 ♠g1+ 67.♠f8 ♠f1+ 68.♠e8 ♠a1 69.♠g6+ ♠f5 70.♠f6+ ♠g5 71.♠f8

□ 3) Theory: Rook & Pawn vs. Ro  
 ■ Vancura Defense

X	I	I	I	I	I	I	I	Y
8	R	+	-	+	-	+	-	0
7	+	-	+	-	+	-	<del>K</del>	0
6	P	+	-	+	-	<del>r</del>	-	0
5	+	-	+	-	+	-	+	0
4	-	+	K	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0[
	x	a	b	c	d	e	f	g h y

1.♠c5 To end this chapter, I would like to show an idea that is easy to use and to miss. The black king stands on the g7 - and h7 - squares to avoid the tactical motifs that win the rook. The black rook attacks the pawn laterally; this sticks the white rook to the a7 - and a8 -squares. Once White plays a6 - a7 , Black plays ... Ra6 . If the white king instead approaches the pawn, it will be thrown back by checks, and Black's rook returns to f6 , still attacking the pawn. ♠f5+ [The waiting move 1...♠h7 is also fine. Only when the white rook is ready to leave the a-file (with the white king defending the pawn) is Black forced to give a check. Until this happens the waiting moves don't worsen anything. ♠A tactical motif that Black should be careful about is 1...♠f7?? 2.a7 ♠a6 3.♠h8! which is why the king should be closer to the corner (on the g7 -

and h7 -squares). | xa7 4. | h7+ ♠g6  
5. | xa7 ] 2. ♠b6 | f6+ 3. ♠b7 | f7+

#### □ 4) Theory: Rook & Two Pawns v ■ Rook & Two Pawns vs. Rook

Usually, two pawns guarantee the strongest side a win. The winning strategy remains the same - to promote one of the pawns into the queen. Sometimes, reaching the promotion square is possible without the king's assistance. Z0

#### □ 4) Theory: Rook & Two Pawns v ■ Self-Propelled Pawns

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	R	+	0
5+	-	+	-	+	-	P	0	
4-	+	-	+	-	+	P	+	0
3+	-	+	-	+	K	+	-	0
2-	+	-	+	-	r	+	0	
1+	K	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

72... ♠e4 This is the most famous example of the self-propelled pawns taken from the Szabo, L - Keres, P (Alekhine Memorial, Moscow, 1956) game. Black can't save the endgame even with the far distant white king. The rook and pawns simply go forward. 73.h6 [It is important to play 73.h6 first and to prevent ... Kf5 for now, since in the case of g5, Black plays Kf5 and wins the g-pawn. ] 73... | h2 74.g5 ♠d3 [Or 74... ♠f5 75. | g7 followed by h7, g6, Rg8 and h8=Q. ] 75. | g7 ♠c3 76.h7 ♠b3 77. | b7+ Black resigned.

#### □ 4) Theory: Rook & Two Pawns v ■ Rook and Bishop Pawns

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5P	K	P	-	+	-	+	-	0
4-	R	-	+	-	+	-	+	0
3+	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	r	0
x	a	b	c	d	e	f	g	h
								y

Of course, there are possible exceptions when the defending side can draw the game even without two pawns. For example, two connected pawns can be blocked, but it is hard to offer something worthy of memorizing. Instead, I offer to memorize two other defending constructions. The first is when the pawns are placed on one side on the rook and bishop files. This position happened in the game Grischuk - Eljanov, Elista FIDE GP. White wants to play a5 - a6, followed by Ra4 with a winning position. That's why the next move is forced. 63... ♠b7 The first thing to memorize for the defending side: the best square for the black king is b7. 64.a6+ ♠a7 Only here. The general idea of the defense can be described as follows. The king stands on b7 and waits for the a5 - a6 check. After that, it moves to a7 and waits for the moment when it is possible to take on a6 and transfer to the drawn endgame with the bishop's pawn. [Let's see what happens if the king chooses the c-file. 64... ♠c7? 65. | a4! | b1+ 66. ♠c4 | c1+ 67. ♠b4! ( 67. ♠d4? ♠b8 Black moves their king to a7 and directs the rook to the h-file to give the side checks. ) 67... ♠b8 ( 67... | b1+ 68. ♠c3 ♠b8 69. | b4+ ) 68. ♠b5! A) 68... | b1+ 69. | b4

( This line illustrates Black's main idea in this endgame 69.♟c6? ♟a7 70.♟c7 ♟h1 71.♟d4 A lot depends on if Black has time to take on a6 and to switch to the position stopping the pawn on the 7th rank . This time Black is on time. ♟xa6 72.c6 ♟h7+ 73.♟d7 ♟h8 74.♟e7 ♟a7 75.♟d7 ♟b6 76.c7 ♟b7 ) 69...♟h1 70.♟b6 ; **B**) 68...♟a7 69.c6 ♟c2 70.♟c4 The c-pawn is unstoppable. ] **65.♟d4** From now on, there is only one primary objective for Black â€” avoid pushing the king to the back rank. ♟b1+ **66.♟c6 ♟h1 67.♟d8 ♟h2** [ 67...♟h5? The Ukrainian GM instinctively prevented Kc7 and got trapped. Visually it looks so that White wants to play Kc7 , c5 - c6 , Kc8 , and so on. But, after Kc7 , Black can take on a6 and transfer to the drawn stop the pawn at the 7th rank setup. That's why Black could make any waiting move. 68.♟b5! This is the point. Black has no check from the b-file, and the rook should go to the 7th rank, which is too passive. ♟h7 69.♟d5! White takes the 5th rank under control to prepare c5 - c6 . ♟h1 There is no sense to stay passive. 70.♟d7+ ♟b8 71.c6! The a6 - and c6 -pawns guarantee White the win (worth memorizing!). ♟b1+ Checks do not save the game â€” the king has a hiding square on d8 . 72.♟c5 ♟c1+ 73.♟b6 ♟b1+ 74.♟c5 ♟c1+ 75.♟d6 ♟d1+ 76.♟e7 ♟c1 77.♟d8+ ♟a7 ( 77...♟c7 78.a7 ) 78.♟d7 ♟d1+ 79.♟c8 Black resigned because there was no way to stop c6 - c7 . ; 67...♟h6+? **A**) It is instructive to see that 68.♟c7 also wins. Black can't take on a6 by the king either now or after the preparatory check from h7 . ♟h7+ ( 68...♟xa6 69.♟d6+ ) 69.♟c8! **A1**) 69...♟h6 70.♟d7+! ♟a8 ( 70...♟xa6 71.♟d6+ ) 71.♟c7 ; **A2**) 69...♟xa6 The pawn on c5 is in a dangerous position, but White manages to advance it safely. 70.♟d6+! ♟b5 71.c6 ♟b6 72.c7+ ♟a7 73.♟d1 ; **B**) 68.♟b5 ♟h7 Transposes to the game text. ;

The following line illustrates well why the optimal position for the defending rook is in the corner. 67...♟c1? 68.♟d6! ♟xa6 69.c6 ♟d1+ This is the only move to disturb White from advancing the pawn. 70.♟c7 ♟h1 Too late. 71.♟c8 ( 71.♟a8+ ♟b5 72.♟b7 )] **68.♟c7** [ 68.♟d6 ♟xa6 ] **68...♟xa6 69.c6 ♟h7+**

#### □ 4) Theory: Rook & Two Pawns v ■ The Doubled Knight Pawns #1

XI								Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	p	-	0
6R	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	p	+	0
3+	-	+	-	+	k	+	-	0
2-	+	-	+	r	+	-	+	0
1+	-	+	-	+	-	k	-	0
x	a	b	c	d	e	f	g	h
								y

The doubled pawns are much weaker than the pawns on different files. But still, a defense against them requires concrete knowledge. The most challenging endgames occur when the pawns are placed on the knightâ€™s file. This position happened in the Carlsen - Kramnik (Tata Steel, 2018) game. The World Champion proved that he knows the basic positions very well. Black is winning if his king reaches h3 . That's why all fight goes around this. **46.♟a1** [ 46.♟a3+?? ♟e3 The black king is coming to h3 . 47.♟a1 ♟g3 48.♟b1 ♟h3 The following plan is a must-know idea. Black advances his pawns to g2 and g4 , plays ... Rf3 and ... Rf1 transfers the endgame to a winning king and pawn endgame. 49.♟a1 g3 50.♟b1 g5 51.♟a1 g4 52.♟b1 g2 53.♟c1 ♟f3 54.♟a1 ♟f1+ 55.♟xf1 gxf1♙+ 56.♟xf1 ♟h2 ]

**46... | e8** [White uses the Philidor technique after 46... ♖g3 47. | a3+ ♕h4 48. | b3 . ] **47. | b1 g3** [ 47... | e3!?

This might have been a bit harder for White to handle. 48. ♕h2! The only move. g3+ Luckily all retreats lead to a draw. But imagine that you don't know this. Would it then be easy to go here? ( 48... ♕f2 does not help 49. | b2+ and White is ready for the rook exchange. | e2 50. | xe2+ ♕xe2 51. ♕g3 ) 49. ♕g1 ♕g4 50. | b8 The most natural and simple. White is going to meet the ( 50. | b5 is less esthetic but still enough way to prepare the check on the h-file. ;With the rook on the e-file, White can even play 50. ♕g2 meaning to attack the rook after the check. | e2+ 51. ♕f1 | a2 52. | b8 ) 50... ♕h3 move with a check. 51. | h8+ ] **48. | b3+ | e3** **49. | b1** If Black plays ... Kg4 with the idea of ... Kh3 , White needs to prepare the check on the h-file. | e8 **50. | b3+ ♕g4** **51. | b5** The only path to reach the h-file. [ Again, White can use the position of the black rook and play 51. ♕g2 | e2+ 52. ♕f1 but it does not look technical. Continued in the next variation. ]

☐ 4) Theory: Rook & Two Pawns v  
☒ The Doubled Knight Pawns #2

(Diagram)

**51... | e1+** Continuation of the previous variation. **52. ♕g2 | e2+** **53. ♕g1 g5** The only tricky moment for White. As we already know, White should disturb the black king from coming to h3 . ... g7 - g5 created a threat of ... Kh3 (the 5th rank is blocked), so White should put the rook on a rank from which it can check the king if it goes to h3 . **54. | b8 | e1+** **55. ♕g2 | e2+** **56. ♕g1 | a2** **57. | c8 | a1+** **58. ♕g2 | a2+** **59. ♕g1** Continued in the next variation.

X	I							Y
8-	+	-	+	r	+	-	+	O{
7+	-	+	-	+	-	p	-	O
6-	+	-	+	-	+	-	+	O
5+	R	+	-	+	-	+	-	O
4-	+	-	+	-	+	k	+	O
3+	-	+	-	+	-	p	-	O
2-	+	-	+	-	+	-	+	O
1+	-	+	-	+	-	K	-	O
x	a	b	c	d	e	f	g	h
								y

☐ 4) Theory: Rook & Two Pawns v  
☒ The Doubled Knight Pawns #3

X	I							Y
8-	+	R	+	-	+	-	+	O{
7+	-	+	-	+	-	+	-	O
6-	+	-	+	-	+	-	+	O
5+	-	+	-	+	-	p	-	O
4-	+	-	+	-	+	k	+	O
3+	-	+	-	+	-	p	-	O
2r	+	-	+	-	+	-	+	O
1+	-	+	-	+	-	K	-	O
x	a	b	c	d	e	f	g	h
								y

**59...g2** Continuation of the previous variation. With a pawn on g2 , the Philidor technique works well. **60. | c4+ ♕h3** **61. | c3+ ♕h4** **62. | c4+ g4** **63. | c3** [ Kh5 And the opponents agreed on a draw. Or g3 63. | c8 Rxcg3! also saves the game Ra1+ Kh2= Kf2= Kxcg3?? Ra2++ ]

☐ 4) Theory: Rook & Two Pawns v  
☒ Vancura Idea (Rook Pawns) #1

Continued in the next variation. Now let's learn how the Vancura idea helps even against two rook's pawns (a and

XI								Y	
8-	+	-	+	-	+	-	+	0{	
7+	-	+	-	+	-	+	-	k 0	
6R	+	-	+	-	+	-	+	P 0	
5P	-	+	-	+	-	+	-	0	
4-	+	-	+	-	+	-	+	0	
3r	-	p	K	+	-	+	P	0	
2-	+	-	+	-	+	-	+	0	
1+	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

h). Levon Aronian showed this in his game against Magnus Carlsen (Sinquefeld Cup 2014). 46... | b3 The only correct idea " Black directs his rook to attack the a5 - pawn from the side. 47. ♖c2 | b5 48. ♖xc3 White has even three extra pawns, but there is no win (the doubled h-pawns can't help White). His rook is stuck to the squares in front of the a-pawn while his king is unable to seriously influence the game. Carlsen has tested his opponent as much as possible, but Aronian has never failed. | f5 49. | a8 | b5 50. ♖c4 | f5 The only correct square on the 5th rank. [ 50... | e5? is too close. After 51. ♖b4 | e4+ is forced, because otherwise the white rook is free to leave the a-file. 52. ♖c5 | e5+ 53. ♖b6 | e6+ Again, the check is forced for the same reason. 54. ♖c7 | e5 ( After 54... | e7+ 55. ♖d6 there is no way to attack a5 . ) 55. a6 | e6 56. a7 | a6 This is the whole idea of the Vancura technique " when the pawn reaches the 7th rank, the rook should stand behind the pawn. But in this case, the white king is near. 57. ♖b7 ; 50... | g5? is too far. 51. ♖b4 and there is no check on the 4th rank. ] 51. ♖b4 White prepares Ra8 . So the next move is forced. | f4+ 52. ♖c5 | f5+ 53. ♖d4 | b5 [To make the Vancura idea work, the black king should be on g7 or h7 . 53... ♖xh6? 54. a6 | f6 (Leads to the position seen in six squares for the king .

White is winning. 54... | a5 55. ♖c4 ♖g7 56. ♖b4 | a1 57. ♖b5 ) 55. a7 | a6 56. | h8+ ]

□ 4) Theory: Rook & Two Pawns v  
 ■ Vancura Idea (Rook Pawns) #2

XI								Y	
8R	+	-	+	-	+	-	+	0	
7+	-	+	-	+	-	+	-	k 0	
6-	+	-	+	-	+	-	+	P 0	
5P	r	+	-	+	-	+	-	0	
4-	+	-	K	-	+	-	+	0	
3+	-	+	-	+	-	+	P	0	
2-	+	-	+	-	+	-	+	0	
1+	-	+	-	+	-	+	-	0[	
x	a	b	c	d	e	f	g	h	y

Continued in the next variation. 54. ♖e4 Continuation of the previous variation. White begins moving back and forth, hoping to provoke a mistake. | c5 55. | a6 | b5 56. h4 | c5 Black is just waiting. 57. ♖d4 | b5 58. ♖c4 | f5 The rook is ready for side checks. 59. ♖b4 The white rook wants to leave the a-file, so it is time to start giving checks. | f4+ 60. ♖c5 | f5+ 61. ♖b6 | f6+ 62. ♖b7 | f7+ [ 62... | f5 was equally good. The main task is to prevent the white rook from leaving the a-file, saving the a-pawn. ] 63. ♖c8 | f8+ 64. ♖d7 | f5 The king came too close, so it was time to end the checks and return to the pawn's attack. [ 64... | f7+? 65. ♖e6 followed by the rook moving along the 6th rank and a5 - a6 . ]

□ 4) Theory: Rook & Two Pawns v  
 ■ Vancura Idea (Rook Pawns) #3

65. | a8 Continuation of the previous variation. | d5+ 66. ♖e6 | b5 67. ♖f6

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	K	+	-	+	k	0
6R	+	-	+	-	+	-	P	0
5P	-	+	-	+	r	+	-	0
4-	+	-	+	-	+	-	P	0
3+	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

| c5 68. | a7+ ♖xh6 [Even 68...♖h8 was fine, the black rook can control the situation on both sides. 69.♖g6 | c6+ ] 69.♖f7 | b5 70.a6 | b6 [ 70...| a5? again fails as in the six squares for the king position. 71.♖e6 | a1 72. | a8 ] 71.♖g8 | b8+ [Of course, there is no need to check what might happen in case of waiting 71...| c6? 72. | h7+ ♖g6 73.h5+ ♖g5 74. | g7+! ♖xh5 75.a7 | c8+ A) There is an interesting king run with a zugzwang position at the end in case of 76.♖h7 | a8 77. | b7 ♖g5 78.♖g7 ♖f5 79.♖f7 ♖e5 80.♖e7 ♖d5 81.♖d7 ♖c5 ( 81...♖c4 82.♖c6 ) 82.♖c7 and Black should worsen his position. If it were White's turn the game would end in a draw. ; B) 76.♖f7 | c7+ 77.♖f6 | c8 78.♖e6 and the king goes to the queenside to help promote the pawn. ] 72.♖f7 | b6 73.♖e7 ♖g6 74.♖d7 The king goes to the a-pawn and the rook returns to the kingside. | f6 Continued in the next variation.

- ☐ 4) Theory: Rook & Two Pawns v  
☒ Vancura Idea (Rook Pawns) #4

(Diagram)

75. | a8 Continuation of the previous variation. a6 - a7 followed by a check is a

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7R	-	+	K	+	-	+	-	0
6P	+	-	+	-	t	k	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	-	P	0
3+	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

threat, so the king should move closer to the 8th rank. ♖g7 76.♖c7 | f7+ 77.♖d6 | f6+ 78.♖e5 | b6 79. | a7+ ♖g6 [ 79...♖g8 would not change anything ] 80.h5+ ♖h6 The 5th rank is prohibited for the king. [ 80...♖xh5?? 81. | a8 Black does not have enough time to stop a6 - a7 and Rg8 / h8 +. ] 81.♖f5 | c6 82. | e7 | xa6 83. | e6+ | xe6 84.♖xe6 ♖xh5 Allowing the game to come to the position with only two kings on the board shows how upset White was here. A nice save by Aronian!

- ☐ 5) Endgames With All Pawns on  
☒ All Pawns Are on One Side

Usually, with all pawns on one side, having one extra pawn does not give us the winning position. Most of such situations are objectively drawish. The strong players know a lot of typical pawn formations and can approximately value the winning chances in that or another endgame. But in practice, things often end not as they should have ended. Z0

☐ 5) Endgames With All Pawns on  
☒ Yuriy Kryvoruchko vs. Marc Ar

```

XI | | | | | | | Y
8- + - + - + k + 0
7+ - + - + p p - 0
6- + - + - + - p 0
5+ - + - + - + - 0
4- R - + - + - + 0
3t p + - P - P P 0
2- + - + - P K + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

Despite a material balance on the board, White hopes to get the advantage by winning the b-pawn. **40.g4** A player with four pawns against three should almost automatically play such a move. Its goal is to disturb Black from placing their pawns on the perfect squares - h5 , g6 , f7 . From now the h-pawn is a perspective weakness.

☐ 5) Endgames With All Pawns on  
☒ Yuriy Kryvoruchko vs. Marc Ar

```

XI | | | | | | | Y
8- + - + - + - + 0
7+ - + - + p k - 0
6- R - + - + - p 0
5+ - + - P K + P 0
4- + - + - P - + 0
3t p + - P - k - 0
2- + - + - P - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

**45.gxh5** How can Black force a draw? | a5

**46. Ch4** | a1 White can't avoid alternating

attacks on the king and h5 -pawn. **47.f4**

| h1+ **48. Cg4** | g1+ **49. Cf3** | h1

☐ 5) Endgames With All Pawns on  
☒ Yuriy Kryvoruchko vs. Marc Ar

```

XI | | | | | | | Y
8- + - + - + - + 0
7+ - + - + p + k 0
6- R - + - + - p 0
5t - + - + - + P 0
4- + - + P + - + 0
3+ - + - + P k - 0
2- p - + - + - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

**48. Ch4** What simple move would have led to a draw? f5

☐ 5) Endgames With All Pawns on  
☒ Yuriy Kryvoruchko vs. Marc Ar

```

XI | | | | | | | Y
8- + - + - + k + 0
7+ - + - + p + - 0
6- R - + - + - p 0
5+ - + - P K + P 0
4- + - + - P - + 0
3+ - + - + - + - 0
2r p - + - + - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

**53. Cf6** It is never too late to lose the game. What move wins the game for Black here?  
 | a6

☐ 5) Endgames With All Pawns on  
☒ Yuriy Kryvoruchko vs. Marc Ar

**53... Cg7** Black correctly calculated that the move e5 - e6 does not cause significant



X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	k	+ 0{
7	+	R	+	-	+	p	+	- 0
6	-	+	-	+	-	+	p	0
5	+	-	+	-	P	K	+	P 0
4	-	+	-	+	-	P	-	+ 0
3	+	-	+	-	+	-	+	- 0
2	r	p	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
	x	a	b	c	d	e	f	g h y

problems. But it was better to keep the king closer to the center. With his king cut off on the g7 - and h7 -squares, the e5 -pawn has more chances to become a queen.

54. | b8 White picked up a chance and locked the black king in the corner. A zugzwang forces Black to give up on b2 for free. b1£+ 55. | xb1

□ 5) Endgames With All Pawns on  
 ■ Yuriy Kryvoruchko vs. Marc Ar

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+ 0{
7	R	-	+	-	+	p	k	- 0
6	-	t	-	+	-	+	-	p 0
5	+	-	+	-	P	P	+	P 0
4	-	+	-	+	-	+	-	+ 0
3	+	-	+	-	+	K	+	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
	x	a	b	c	d	e	f	g h y

61... | b3+ Keeping the king in the corner finally kills Black. As I said earlier, the e5 -pawn is more dangerous with the king on the g7 - and h7 -squares. In many lines, the pawn simply becomes the queen. 62.♙e4 White is winning. ♙g8 63. | a8+ ♙h7 64.e6 Both the black king and rook are

badly placed to stop the e-pawn march. fxe6 65.fxe6 | b4+ 66.♙e5 | b3 67.e7 Black resigned. His king has not helped the rook fight against the f- and e-pawns.

□ 5) Endgames With All Pawns on  
 ■ Yuriy Kryvoruchko vs. Marc Ar, Reykjavik 2012)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	k	+ 0
7	+	-	+	-	+	p	p	- 0
6	-	+	-	+	-	+	-	p 0
5	+	-	+	-	+	-	+	- 0
4	-	R	-	+	-	+	-	+ 0
3	t	p	+	-	P	-	P	P 0
2	-	+	-	+	-	P	K	+ 0
1	+	-	+	-	+	-	+	- 0[
	x	a	b	c	d	e	f	g h y

Despite a material balance on the board, White hopes to get the advantage by winning the b-pawn. Black's task is to exchange this pawn for some pawn on the kingside. 40.g4 A player with four pawns against three should almost automatically play such a move. Its goal is to disturb Black from placing their pawns on the perfect squares - h5 , g6 , f7 . From now the h-pawn is a perspective weakness. g6 41.h4 ♙g7 42. | b6 ♙f8 43.♙g3 ♙g7 44.h5 White goes for an exchange of one pair of the pawns and also fixes the pawn on h6 . At the same time, the h5 -pawn is a target for the black rook. gxh5 45.gxh5 ♙h7 [Black could already give up the b-pawn and force a draw. 45... | a5 46.♙h4 | a1 White can't avoid alternating attacks on the king and h5 -pawn. 47.f4 ( 47. | xb3 | h1+ 48.♙g4 | g1+ ) 47... | h1+ 48.♙g4 | g1+ 49.♙f3 | h1 ] 46.f3 b2 47.e4 | a5 48.♙h4 [Kryvoruchko didn't allow his opponent to bring the rook to g2 . 48.♙g4? | g5+ 49.♙h4 | g2 ] 48... | a2

[ A desire to defend the b2 -pawn as long as possible hurts Black. A simple move 48...f5! led to a draw. 49. | xb2 fxe4 50.fxe4 | e5 51. | e2 The white pieces are passive, and his pawns are weak. ♠g7 52.♠g4 ♠f6 ] **49.♠g4** White's dream became more realistic. ♠g7 **50.f4 ♠g8 51.♠f5 ♠g7 52.e5 ♠g8 53. | b7** [ It is never too late to lose the game. 53.♠f6?? | a6 ] **53...♠g7** [Black correctly calculated that the move e5 - e6 does not cause significant problems. But it was better to keep the king closer to the center. With his king cut off on the g7 - and h7 - squares, the e5 -pawn has more chances to become a queen. Moreover, after 53...♠g7 , White concretely wins on b2 . Kf8! 54.e6 fxe6+ Kf6 ♠g8 ] **54. | b8** White picked up a chance and locked the black king in the corner. A zugzwang forces Black to give up on b2 for free. [ 54.e6? | a5+ 55.♠g4 b1£ 56. | xb1 fxe6 ] **54...b1£+** [ 54...♠h7?? 55.♠f6 ] **55. | xb1 | a6 56. | d1 | b6 57. | a1 ♠f8 58. | a7 ♠g7 59.♠g4** The rooks in the endgame need more space than this poor rook gets. | e6 [ Black missed a perfect chance to bring the king to the central part of the board. 59...♠f8! 60. | a8+ ♠e7 The rook safely defends the h6 -pawn, the f7 - f6 idea to exchange more pawns is near, and the white king can't do much because of side checks. ] **60.♠f3** White is going to play Ke4 and f4 - f5 . [By accident, Black can save the game in the following line. 60. | a8!? | b6 61.f5 | b1! 62.f6+ ♠h7 63.e6 The stalemate idea helps Black. | e1! There are also other moves ( 63...Rf1 , 63...Rg1 , 63...Rb6 ) that save the game, but 63...Re1 speeds up the process of stalemating the black king. 64.e7 ( 64.exf7 | e4+ 65.♠f5 | e5+ ) 64... | e4+ 65.♠f5 | e5+ with a mad rook in both lines. ] **60... | b6 61.f5 | b3+** [Keeping the king in the corner finally kills Black. As I said earlier, the e5 -pawn is more dangerous with the

king on the g7 - and h7 -squares. In many lines, the pawn simply becomes the queen. For this reason, the correct move was 61...♠f8! with relatively simple lines. 62.♠e4 | b1 63.f6 ( 63.e6 fxe6 64.fxe6 | b5 ) 63...♠e8! Of course, away from the corner! 64. | a8+ White begins a typical surrounding maneuver to win the pawn (on f7 ), but the white king can't successfully hide from the rear checks. ♠d7 65. | f8 | e1+ ] **62.♠e4** White is winning. ♠g8 [ With the rook on b3 , Black can't save his pawn on f7 in the following variation. 62...♠f8 63. | a8+ ♠e7 64.f6+ ♠e6 ( 64...♠d7 65. | f8 ) 65. | e8+ ♠d7 66. | e7+ ;As we know from the theoretical part, one must have three files between rook and pawn to use the side checks technique . Here Black has only two files (c and d), which is not enough. 62... | b4+ 63.♠d5 | b5+ 64.♠d6 | b6+ 65.♠c5 ] **63. | a8+ ♠h7** [Black had decent saving chances by playing ...Kg7 . 63...♠g7 64.f6+ ( 64.♠d5 also wins, but the pawn move is more concrete. ) 64...♠h7 65.e6! | b6 The first impression is that Black saved the game. Any e6 -pawn move leads to a position with a mad rook (we already saw this idea in the notes to 60th White's move). But White can defend on e6 by playing **A)** 66.exf7?? | e6+ 67.♠f5 | xf6+ 68.♠xf6 ; **B)** 66.e7?? | e6+ 67.♠d5 ( 67.♠f5 | e5+ ) 67... | d6+ 68.♠c5 | c6+ 69.♠b5 | b6+ 70.♠a5 | b5+ followed by the checks along the b-file. ; **C)** 66. | e8! Black can only wait. | a6 The pawn moves are still missing the win. That's why White pushes the king forward. 67.♠e5! Creating the threat of Re7 and Rxf7 . (White can only repeat the position after 67. | e7 ♠g8 68. | e8+ ♠h7 ) 67... | a5+ 68.♠d6 | a6+ 69.♠c7! The black rook has no waiting moves along the 6th rank. ( 69.♠e7?? | xe6+ 70.♠xf7 | xf6+! 71.♠xf6 Again a stalemate. ) 69... | a7+ ( 69... | xe6 70. | xe6 fxe6

71.♙d6 and the f6 -pawn decides. ) 70.♙b6  
 ♚a2 71.♚e7 winning on f7 and remaining  
 with two passed pawns on the 6th rank. ]  
**64.e6** Both the black king and rook are  
 badly placed to stop the e-pawn march.  
**fxe6 65.fxe6 ♚b4+ 66.♙e5 ♚b3 67.e7**  
 Black resigned. His king has not helped the  
 rook fight against the f- and e-pawns.

□ 5) Endgames With All Pawns on  
 ■ Anna Ushenina vs. Qian Huang

X	I	I	I	I	I	I	I	Y
8-	♖	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5♖	-	+	-	♙	p	+	-	0
4-	+	-	+	-	+	p	+	0
3+	-	+	-	♙	-	P	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

**116. ♚b3** Just here, Ushenina blundered for  
 the first time. This move does not lose yet,  
 but it is the beginning of White's  
 problems. How can Black profit from this  
 blunder? ♚a2 The white king appears cut  
 off along the second rank. **117. ♚b5+ ♙f6**  
**118. ♚b6+ ♙g5** Continued in the next  
 variation.

□ 5) Endgames With All Pawns on  
 ■ Anna Ushenina vs. Qian Huang

(Diagram)

**119. ♚b8** Continuation of the previous  
 variation. Now White loses. ♚g2  
**120. ♚g8+ ♙f6 121. ♚f8+ ♙g6 122. ♙f4**  
 ♚f2+ **123. ♙e5 ♚e2+** Black pushes the

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6-	♖	-	+	-	+	-	+	0
5+	-	+	-	+	p	♙	-	0
4-	+	-	+	-	+	p	+	0
3+	-	+	-	♙	-	P	-	0
2♖	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

opponent's king away from the pawns.  
 Continued in the next variation.

□ 5) Endgames With All Pawns on  
 ■ Anna Ushenina vs. Qian Huang

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	♖	-	+	0
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	k	+	0
5+	-	+	-	♙	p	+	-	0
4-	+	-	+	-	+	p	+	0
3+	-	+	-	+	-	P	-	0
2-	+	-	+	r	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

**124. ♙d4** Continuation of the previous  
 variation. ♚g2 **125. ♙e5 ♚xg3**  
 Precise calculation from Huang Qian.  
**126. ♚xf5 ♚f3** The most elegant way for  
 me. Continued in the next variation.

□ 5) Endgames With All Pawns on  
 ■ Anna Ushenina vs. Qian Huang

**127. ♚f4** Continuation of the previous  
 variation. ♙g5 **128. ♚a4 ♚g3** The black

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	k	0
5	+	-	+	-	<del>k</del>	R	+	0
4	-	+	-	+	-	+	p	0
3	+	-	+	-	+	r	+	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
								y

king is cut off along both file and rank.  
Black easily promotes her pawn.

□ 5) Endgames With All Pawns on  
■ Anna Ushenina vs. Qian Huang, 2018)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	R	+	-	+	-	p	p
6	-	+	-	+	-	p	k	0
5	+	-	+	-	+	-	+	0
4	-	+	-	<del>k</del>	-	+	-	0
3	+	-	+	-	+	-	P	0
2	-	+	-	+	-	+	P	0
1	+	-	+	-	+	r	+	0
x	a	b	c	d	e	f	g	h
								y

In his classical book *Endgame Strategy* Mikhail Shereshevsky dedicated a lot of time to a principle called *Don't hurry up!*. This technique helps in positions where your opponent has no counterplay and has at least two reasons to be recommended. First, you should use all resources to improve your position before moving to active measures. The second is that even if everything is improved, don't hurry up. Move back and forth! Such pointless (at first sight) play can cause an unforced error from your

opponent or exhaust them physically and/or psychologically. In this game, which had enormous importance, the Chinese player made maximum use of this method and finally helped her team to save the match against a team of Ukraine. The starting position is objectively equal. But Black has a free pawn and can push forward very and very slowly. 44.♙e3 ♜h6 45.♙e2 ♜f5 46.h4 The pawn structure h4 , g3 ( f2 ) is optimal for the defending side. Such a structure makes the opponent's advancing more difficult. ♜g6 47.♙a7 ♜b5 48.♙f3 ♜b3+ 49.♙f2 ♜d3 50.♙b7 ♜f5 51.♙g2 ♜e3 52.♙a7 ♜f6 53.♙b7 h6 54.♙a7 ♜d3 55.♙b7 ♜d2+ 56.♙f3 g5 57.hxg5+ hxg5 So far, nothing interesting has happened in the game. The position remains drawn. White keeps a pawn on g3 , the king stands around and defends it, and the rook navigates around and controls the opponent's king. 58.♙e3 ♜d6 59.♙b8 ♜a6 60.♙b5 ♜a3+ 61.♙f2 ♜a2+ 62.♙f1 I want to highlight that the first rank is the best square for the defending king. Once the black rook attacks the g3 -pawn (using the third rank), it goes to g2 or f2 . By the way, the problems for White begin when she throws her king to the center. [ Even an illogical move to f3 would not lose in this position. 62.♙f3 g4+ 63.♙e3 ♜g2 64.♙b3!! ♜g5 (Black can't win the pawn because of a stalemate. 64... ♜xg3+ 65.♙f4 ♜xb3 Stalemate. ) 65.♙d4 It is interesting that we see the position from the comment to 119th (!) white move here. This fact clearly shows how slow the Chinese player was. ] 62... ♜d2 63.♙a5 ♜d4 64.♙f2 ♜e6 65.♙e3 Here and many times after, Ushenina places her king on e3 (instead of the squares on the first rank). It was not a problem for a long time, but finally, Huang traps the opponent. ♜c4 66.♙a8 ♜c3+ 67.♙f2 ♜c2+ 68.♙e3 ♜c3+ 69.♙f2 ♜d3 70.♙e8+ ♜f7 71.♙e5 ♜g6 72.♙a5 ♜d2+ 73.♙f1 ♜f6 74.♙b5

| a2 75.♙g1 | a4 76.♙f2 ♙e6 77.♙e3  
 | c4 78.♙f2 | d4 79.♙e3 | d5 80. | b8  
 | a5 81. | g8 ♙f6 82.♙f2 | a2+ 83.♙f1  
 | d2 84.♙g1 | e2 85.♙f1 | e7 86.♙f2  
 | g7 87. | e8 ♙f7 88. | a8 | g8 89. | a5  
 ♙g6 90.♙f3 | b8 91.♙f2 | b6 92.♙g1  
 | f6 93.♙f2 | f8 94.♙f3 | c8 95.♙f2  
 | d8 96.♙f1 ♙f6 97.♙f2 | d2+ 98.♙e3  
 | c2 99. | a6+ ♙f7 100.♙f3 | d2  
 101.♙e3 | d7 102.♙f3 | e7 103. | b6  
 | e6 104. | b8 | a6 105. | b5 ♙f6  
 106.♙f2 g4 A forced move. The point is  
 that the last capture was on the 57th move.  
 In case of more prolonged back-and-forth  
 maneuvers, Ushenina could claim a draw  
 after move 107. 107.♙f1 ♙e6 108.♙f2  
 | d6 109.♙e3 | d5 110. | b8 | d1  
 111. | b6+ ♙e5 112. | b5+ ♙f6 113. | b6+  
 ♙e5 114. | b5+ | d5 115. | b8 | a5  
 Just here, Ushenina blundered for the first  
 time. 116. | b3 This move does not lose yet,  
 but it is the beginning of White's  
 problems. [A more quiet way was to bring  
 the king back to the first rank. 116.♙f2  
 | a2+ 117.♙f1 Seemingly, Ushenina  
 worried about the march of the  
 opponent's king to the third rank. But  
 the side checks technique would help her to  
 defend well. | d2!? A try to build a cover  
 for the king. ( 117...♙e4 118. | b4+ ♙f3  
 119. | b3+ ) 118. | a8 ♙e4 119. | a5 ♙f3  
 A tricky moment. White should not take on  
 f5. 120. | a3+ ( 120. | xf5+?? ♙xg3  
 Here, none of the defending strategies is  
 available because the black pawn has  
 crossed half of the board and the white king  
 is stuck on the long side (see Kling &  
 Horwitz does not help in the theoretical  
 chapter). ) 120...♙e4 121. | a5 | d3  
 122.♙f2 Black can't make progress. ]  
 116... | a2 The white king appears cut off  
 along the second rank. 117. | b5+ ♙f6  
 118. | b6+ ♙g5 119. | b8 Now White  
 loses. [It is not easy to believe in this, but  
 White was still fine after 119. | b3 | g2  
 120.♙d4 It is enough to move between the

a3 - and b3 -squares. The only possible  
 option for Black is f5 - f4. f4 121. | b5+  
 ♙g6 122.gxf4 ] 119... | g2 120. | g8+ ♙f6  
 121. | f8+ ♙g6 122.♙f4 | f2+ 123.♙e5  
 | e2+ Black pushes the opponent's king  
 away from the pawns. 124.♙d4 [ 124.♙f4  
 | e4# ] 124... | g2 125.♙e5 | xg3  
 Precise calculation from Huang Qian.  
 126. | xf5 | f3 The most elegant way for  
 me. [ 126... | e3+ 127.♙d4 | e1 ;  
 126... | a3 ] 127. | f4 ♙g5 128. | a4 g3  
 The black king is cut off along both file and  
 rank. Black easily promotes her pawn.  
 129. | a8 | e3+ 130.♙d4 | e1 131.♙d3  
 ♙g4 132.♙d2 | e7 133. | g8+ ♙h3  
 134. | h8+ ♙g2 135. | g8 | e5 136. | g7  
 ♙h2 137. | h7+ ♙g1 138. | g7 g2  
 139. | g8 [Blocking the king on the h-file  
 would not help because of the 'bridge'  
 technique (see Lucena position in the  
 theoretical chapter). 139. | h7 ♙f2  
 140. | f7+ ♙g3 141. | g7+ ♙f3 ] 139... | h5  
 140.♙e2 ♙h2 141.♙f2 | f5+ 142.♙e2  
 g1 ♙ 143. | h8+ ♙g2 144. | g8+ ♙h1  
 [ White resigned. 144...♙h1 145. | h8+  
 ♙h2+ ]

## 5) Endgames With All Pawns on Alireza Firouzja vs. Shakhriy

(Diagram)

To become the youngest player to achieve a  
 2800 rating, Alireza Firouzja had to win  
 this rook endgame. White has higher  
 winning chances in this position (in  
 comparison with the Ushenina - Huang  
 game) because he has a passed pawn on the  
 g-file. But with precise play, the game  
 should still end with a draw. 42... | b1+  
 43.♙g2 e4 A position with the same pawn  
 structure arose in the Zecic - Kunin, 30th  
 Schwarzacher Open, 2015. The Croatian  
 player could not set any difficulties for his

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	r	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	+	-	+	-	p	k	+	0
4	R	+	-	+	-	+	-	0
3	+	-	+	-	+	-	P	0
2	-	+	-	+	-	P	-	0
1	+	-	+	-	+	-	K	0
x	a	b	c	d	e	f	g	h
								y

opponent with the king on g2 - and h3 - squares, and the game ended in a draw. The black rook stays on the first rank, cutting the king from the center. If the king goes to h3 , the rook attacks the f2 -pawn from the second rank. Continued in the next variation.

☐ 5) Endgames With All Pawns on  
☒ Alireza Firouzja vs. Shakhriy

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	+	-	+	-	+	k	+	0
4	R	+	-	+	p	+	-	0
3	+	-	+	-	+	-	P	0
2	-	+	-	+	-	P	K	0
1	+	r	+	-	+	-	+	0[
x	a	b	c	d	e	f	g	h
								y

44. | a8 Continuation of the previous variation | c1 45. | f8+ ♖g5 The king should choose the g-file. 46. | f4 | e1 The rook should control the first rank. The position is equal.

☐ 5) Endgames With All Pawns on  
☒ Alireza Firouzja vs. Shakhriy

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	r	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	R	-	+	-	+	k	+	0
4	-	+	-	+	p	+	-	0
3	+	-	+	-	+	-	P	0
2	-	+	-	+	-	P	-	0
1	+	-	+	-	+	-	K	0
x	a	b	c	d	e	f	g	h
								y

43...♙f6 How did Alireza improve his chances here? 44.♙f1 Alireza took his chance to bring the king to the center. | b3 A mistake that leads to a challenging position where only one idea can save Black. 45.♙e2 The white king became a bit more active. Now it's time for the rook to puzzle the opponent's king - it goes to f8 . After that, Black will choose where to place his king. If it goes to the g-file, White plays Rf4 and wins the pawn on e4 . If the king goes to e5 , White directs his king to the kingside (via f1 ).

☐ 5) Endgames With All Pawns on  
☒ Alireza Firouzja vs. Shakhriy

(Diagram)

48...♙d4 Mamedyarov doesn't appear to be ready to find the only concrete defense. 49.♙g2 White is winning because Black can't stop the g-pawn march. | b7 50.♙h3 ♙e5 51.g4 Black resigned. | h7+ 52.♙g3 | g7 53.♙h4 | h7+ 54.♙g5 | g7+ 55.♙h5 | h7+ 56.♙g6 The pawn is unstoppable.

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	<b>R</b>	-	+	0{
7	+	-	+	-	+	-	+	-	0
6	-	+	-	+	-	+	-	+	0
5	+	-	+	-	<b>k</b>	-	+	-	0
4	-	+	-	+	<b>p</b>	+	-	+	0
3	+	<b>r</b>	+	-	+	-	<b>P</b>	-	0
2	-	+	-	+	-	<b>P</b>	-	+	0
1	+	-	+	-	+	<b>K</b>	+	-	0
x	a	b	c	d	e	f	g	h	y

- 5) Endgames With All Pawns on  
 ■ Alireza Firouzja vs. Shakhriy,2021)

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	+	0{
7	+	<b>r</b>	+	-	+	-	+	-	0
6	-	+	-	+	-	+	-	+	0
5	+	-	+	-	<b>p</b>	<b>k</b>	+	-	0
4	<b>R</b>	+	-	+	-	+	-	+	0
3	+	-	+	-	+	-	<b>P</b>	-	0
2	-	+	-	+	-	<b>P</b>	-	+	0
1	+	-	+	-	+	-	<b>k</b>	-	0
x	a	b	c	d	e	f	g	h	y

To become the youngest player to achieve a 2800 rating, Alireza Firouzja had to win this rook endgame. White has higher winning chances in this position (in comparison with the Ushenina - Huang game) because he has a passed pawn on the g-file. But with precise play, the game should still end with a draw. **42...e4**

I would call this move inaccurate because Black didn't use a chance to lock down the white king in the corner. [ 42... | b1+! 43.♠g2 e4 A position with the same pawn structure arose in the Zelcic - Kunin, 30th Schwarzacher Open, 2015. The Croatian player could not set any difficulties for his

opponent with the king on g2 - and h3 - squares, and the game ended in a draw. The black rook stays on the first rank, cutting the king from the center. If the king goes to h3 , the rook attacks the f2 -pawn from the second rank. 44. | a8 ( 44. | a5+ ♠f6 45.♠h3 | b2 ) 44... | c1 45. | f8+ ♠g5! The king should choose the g-file.

( 45...♠e5?? 46.♠h3 In the game, players will reach a similar position, and we will see why Black loses with the king stuck in the center. ) 46. | f4 | e1! The rook should control the first rank. The position is equal. ( 46... | c4?? 47.♠f1 Black can't save the pawn. )] **43. | a5+ ♠f6**

Like in many similar situations, the defending king should not move forward. Being two ranks behind the pawn is safer. [ 43...♠g4? 44. | e5! **A)** 44...♠f3 45. | f5+ ♠e2 ( 45...♠g4 46. | f4+ ) 46.♠g2 The black king is misplaced. White simply pushes his g-pawn forward. ; **B)** 44... | b4 45.♠g2 followed by 46.Rxe4 and 47.f3 with a winning pawn endgame. | a4 46. | xe4+ | xe4 47.f3+ ♠f5 48.fxe4+ ♠xe4 49.♠h3 ♠f5 50.♠h4 ♠g6 51.♠g4 ; **C)** 44...♠h3 45. | h5+ ♠g4 46. | h4+ ♠f5 47. | f4+! ♠e5 48. | f8 White wins, identical to the game text. ]

**44.♠f1** Alireza took his chance to bring the king to the center. | **b3** A mistake that leads to a challenging position where only one idea can save Black. [More accurate was the cutting off of the king on the first rank. 44... | b2 Every black piece has its role. The king takes care of the pawn; the rook controls the opponent's king. ] **45.♠e2** The white king became a bit more active. Now it's time for the rook to puzzle the opponent's king - it goes to f8 . After that, Black will choose where to place his king. If it goes to the g-file, White plays Rf4 and wins the pawn on e4 . If the king goes to e5 , White directs his king to the kingside (via f1 ). | **c3** **46. | a8 | b3** [If Mamedyarov saw the opponent's idea, he would try to

prevent it immediately. 46...♠e5 47.♗f8 ( 47.♠f1 ♗c1+ 48.♠g2 ♠f5 leads to the position from the comment to the 42nd Black's move. ) 47...♗c1 It is not the only idea, but it is the most logical defensive idea for Black. His rook disturbs the opponent's king to return to the kingside; the king defends on e4 . ] **47.♗f8+ ♠e5** [ 47...♠g5? 48.♗f4 ♗b4 49.♠e3 ] **48.♠f1** The last chance for Black to save the game. But after missing a few rock-solid continuations, Mamedyarov doesn't appear ready to find the only concrete defense. **♠d4** [Black loses the pawn endgame in the following line. 48...e3? 49.♗e8+ ♠d4 50.♗xe3 ♗xe3 51.fxe3+ ♠xe3 52.♠g2 ♠e4 53.♠h3 ♠f5 54.♠h4 ;The correct move was 48...♗f3! Psychologically, it is hard to consider the exchange offer moves in the position without a pawn. Often even the grandmasters leave such moves aside. **A)** Black easily holds a draw in the pawn endgame without rooks. 49.♗xf3 exf3 50.♠e1 ( 50.♠g1 ♠f5 51.♠h2 ♠g4 ) 50...♠e4 51.♠d2 ♠d4 52.♠c2 ( 52.g4 ♠e4 53.g5 ♠f5 54.♠e3 ♠xg5 55.♠xf3 ♠f5 ) 52...♠c4 ; **B)** 49.♗e8+! The king's retreat again is not a simple choice. **B1)** 49...♠f5? The most complicated variations in this game's analysis occur after a natural move to f5 . I strongly recommend you train to in finding the win in this position. 50.♠g2 ♗a3 51.♗f8+! White forces the black king to make a choice. ♠g5 ( 51...♠e5 52.♠h3 Again leads to the game text scenario. ) 52.♗f4 e3 ( 52...♗a4 Here, the white king helps the rook to win the pawn. 53.♠f1 ) 53.f3! White can't win the endgame if he allows exchanging one of his pawns. ♗a2+ 54.♠h3! It is almost never advisable to voluntarily put the king under arrest on the first rank. ♗f2! White wins easier if the rook remains on the queenside. Here, White has only one way to avoid the exchange of the e2 - and f3 -pawns. ( 54...e2 55.♗e4 ♠f5 56.g4+

♠g5 57.♠g3 ♗b2 58.f4+ ♠f6 59.♠f3 ) 55.♗f8! e2 56.f4+! ♠g6 57.♗e8 ♠f5 With a series of zugzwangs, White can advance his pawns. 58.♗e5+ ♠g6 59.♠g4! First, White sticks the black rook to f2 . ♠f6 Now, White needs to find a way to advance his f4 -pawn. If Black didn't need to make moves, White could not win here. But the black king has only one perfect square - f6 . All other squares allow White to push forward. ( 59...♗h2 60.♠f3 ) 60.♗e3 ♠g6 ( 60...♠f7 61.f5! with the same lines. ) 61.♗e6+ ♠f7 62.f5 ♠g7 63.♠g5 ♠f7 64.g4 White moved all his construction one rank up. It is time for another zugzwang. Again the black king and rook are placed on the optimal squares. ♠g7 ( 64...♗g2 65.♠f4 ) 65.♗e7+ ♠f8 66.f6 ♗g2 ( 66...♠g8 67.♠g6 ♠f8 68.g5 ) 67.♠f5 ♗f2+ 68.♠g6 ♗g2 69.g5 ♗h2 70.♗e3 ♗f2 White has proceeded one more rank, but even now it is impossible to win without a zugzwang. 71.♗e5 Moves on e4 and e6 are equally good. Now the black rook should allow White either to take on e2 or to play f6 - f7 followed by Re8 checkmate. ; **B2)** 49...♠d4! 50.♠g2 ♗f7! Such a setup allows Black to hold the position. The white king can't move forward because of pressure on the f2 - pawn; the white rook can't seriously help; the pawn on g3 can't go further than g4 without being lost. 51.g4 ♠d5 52.♠g3 ( 52.g5 ♗g7 ) 52...♗f3+ ] **49.♠g2** White is winning because Black can't stop the g-pawn march. ♗b7 **50.♠h3 ♠e5** [Or 50...♗h7+ 51.♠g4 ♠d5 52.♠g5 followed by g3 - g4 and so on. ] **51.g4** [ Black resigned. Here is the possible line that explains this decision. 51.g4 ♗h7+ 52.♠g3 ♗g7 53.♠h4 ♗h7+ 54.♠g5 ♗g7+ 55.♠h5 ♗h7+ 56.♠g6 The pawn is unstoppable. ]



□ 5) Endgames With All Pawns on  
 ■ Robert Rabiega vs. Pentala Ha

```

XI | | | | | | | Y
8- + - + - + - + 0
7+ - + - + - + - 0
6- + - + - ♞pp0
5+ - + K + - + - 0
4R + - + - + - ♟0
3+ - + - + - + - 0
2- + - + - + - + 0
1+ - + - ♞ - + - 0[
x a b c d e f g h y
    
```

Usually, there are few chances to win a rook endgame with two pawns vs. one if there is no passed pawn for the strongest side. But in this case, we can note that the white king is cut off along the file. Of course, this is not enough to automatically win, but this nuance makes the defense more challenging. What is our best defensive move here?

79. ♞f4+ The only correct move that pushes the king back.

□ 5) Endgames With All Pawns on  
 ■ Robert Rabiega vs. Pentala Ha

(Diagram)

80. ♞e4+ Can you show the winning technique in the king and pawn endgame?

♞xe4 81. ♟xe4 ♟e6 82. ♟f4 ♟d5  
 83. ♟f3 ♟e5 84. ♟e3 ♟f5 85. ♟f3

It is time for the waiting move. ♞h5  
 Opposition. The white king should free a way to its colleague. 86. ♟g3 ♟e4

```

XI | | | | | | | Y
8- + - + - + - + 0
7+ - + - ♞ - + - 0
6- + - + - + ♟♟0
5+ - + K + - + - 0
4- + - + - ♞ - ♟0
3+ - + - + - + - 0
2- + - + - + - + 0
1+ - + - ♞ - + - 0[
x a b c d e f g h y
    
```

□ 5) Endgames With All Pawns on  
 ■ Robert Rabiega vs. Pentala Ha

```

XI | | | | | | | Y
8- + - + - + - + 0
7+ - + - + - ♞ - 0
6- + - + - + ♟♟0
5+ - + K + - + - 0
4- + - + - + ♞♟0
3+ - + - ♞ - + - 0
2- + - + - + - + 0
1+ - + - + - + - 0[
x a b c d e f g h y
    
```

83. ♟d4 A try to trap Black to the drawn king and pawn endgame fails in an instructive manner. ♞a3 The Indian player cuts off the white king along the 3rd rank to use the side checks for further progress. The position remains equal, but the white king's position quickly worsens. 84. ♟e4 ♟f6 Black improves his king's position before entering the king and pawn endgame. 85. ♞f4+ ♟e6 86. ♞g4 ♞a4+ 87. ♟f3 ♞xg4 88. ♟xg4 ♟e5

□ 5) Endgames With All Pawns on  
 ■ Robert Rabiega vs. Pentala Ha

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	+	-	♞	- 0
6	-	+	-	+	-	+	♙♙	0
5	+	-	+	-	♞	-	+	- 0
4	-	+	-	+	-	+	R♙	0
3	♞	-	+	-	+	-	+	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h
y								

84... ♖a5+ Rabiega has not realized there was an opportunity for a drawn king and pawn endgame. Can you find it? 85. ♙f4 h5 86. ♖g5 ♗xg5 Here, both captures lead to a draw, but the pawn move is more puzzle-like. 87. ♙xg5

□ 5) Endgames With All Pawns on  
 ■ Robert Rabiega vs. Pentala Ha

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+ 0
7	+	-	+	-	+	-	♞	- 0
6	-	+	-	+	-	+	♙	+ 0
5	+	-	+	-	+	-	♙	0
4	♞	+	-	+	-	♞	-	♙ 0
3	+	-	+	-	+	-	+	- 0
2	-	+	-	+	-	+	R	+ 0
1	+	-	+	-	+	-	+	- 0[
x	a	b	c	d	e	f	g	h
y								

87. ♙g5 The following line is saved especially for lovers of nice variations. How does Black, avoiding all of White's traps, win here? ♖a3 88. ♙f4 ♖h3 89. ♙g5 ♖f3 90. ♖f2 ♖g3+ 91. ♙f4 ♖g4+ This variation once more shows us that

throwing the defending king forward is a bad reflex. It is safer to keep it in the bottom part of the board.

□ 5) Endgames With All Pawns on  
 ■ Robert Rabiega vs. Pentala Ha

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+ 0
7	+	-	+	-	+	-	+	♞ 0
6	-	+	-	+	-	♞	♙	+ 0
5	♞	-	+	-	+	-	+	♙ 0
4	-	+	-	+	-	R	-	♙ 0
3	+	-	+	-	+	-	+	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0[
x	a	b	c	d	e	f	g	h
y								

90. ♙e6 What move gives the best chance to transpose into a winning endgame? ♖g5 Here we come to the critical moment. If White had more time to think about his move, he would easily realize how to make a draw. But on the move 91, we are usually led by the reflexes. And what is the top reflex for all level players? Of course, it is to take the opponent's piece or pawn. 91. ♞xg5 ♙g6 Later in the course, we will see how Magnus Carlsen blundered a similar idea in his game against Fabiano Caruana. The cutting off along the rank is the most effective when you have the h-pawn in the rook endgame. The Indian player gave no chances to his opponent onwards.

□ 5) Endgames With All Pawns on  
 ■ Robert Rabiega vs. Pentala Ha

90... ♖g5 In the rook endgames, we should never forget about the activity level of the kings. White had to use a chance to drive

X	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	+	-	+	0{	
7+	-	+	-	+	-	+	-	k 0	
6-	+	-	+	K	+	p	+	0	
5t	-	+	-	+	-	+	-	p0	
4-	+	-	+	-	R	-	P	0	
3+	-	+	-	+	-	+	-	0	
2-	+	-	+	-	+	-	+	0	
1+	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

the opponent's king to the back rank.

91. | f7+ ♙g8 92. | b7 g4 93. ♙f6

Black can't win this endgame with such a weak king.

#### □ 5) Endgames With All Pawns on ■ Robert Rabiega vs. Pentala Ha, Dresden 2012)

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	+	0
7	+	-	+	-	+	-	+	-	0
6	-	+	-	+	-	k	p	p	0
5	+	-	+	K	+	-	+	-	0
4	R	+	-	+	-	+	-	P	0
3	+	-	+	-	+	-	+	-	0
2	-	+	-	+	-	+	-	+	0
1	+	-	+	-	t	-	+	-	0
x	a	b	c	d	e	f	g	h	y

Usually, there are few chances to win a rook endgame with two pawns vs. one if there is no passed pawn for the strongest side. But in this case, we can note that the white king is cut off along the file. Of course, this is not enough to automatically win, but this nuance makes the defense more challenging. Let's investigate which difficulties White faced in this game and where the final blunder lost the game. First, I offer to think about this endgame to understand which

positions White should aim for and avoid. If Black creates a passed pawn by playing g6 - g5 and the white king remains cut off on the long side, in most cases, it should be possible to win this. White should try to disconnect the black king and pawn (by cutting off the king along the rank) , or use the exchange offer strategy to bring his king closer to the g-pawn. The evaluation of '2 vs. 1' pawn endgames is worth mentioning. Pawns on g6 and h6 win against a pawn on h4 , unless the white king can take the opposition on the f4 - f6 or f3 - f7 squares; pawns on g5 and h6 win against a pawn on h5 ; pawns on g6 and h5 , in most situations, can't win against a pawn on h4 . Let's see how it works in practice. 79. | f4+

The only correct move that pushes the king back. ♙e7 80. | a4 [Let me show you the winning technique in the king and pawn endgame. 80. | e4+? | xe4 81. ♙xe4 ♙e6 82. ♙f4 ♙d5 83. ♙f3 ♙e5 84. ♙e3 ♙f5 85. ♙f3 It is time for the waiting move. h5! Opposition. The white king should free a way to its colleague. 86. ♙g3 ♙e4 ]

80... ♙f6 81. | f4+ ♙g7 82. | g4

It is the most natural move. White physically prevents g6 - g5 . But there was an idea of placing his rook on the 6th rank, which was enough to hold the game.

[ The king move also does not lose, but White will need to find a rook maneuver.

82. ♙d4 g5 83. hxg5 hxg5 84. | e4!

White starts with providing his king with e-file access. ( 84. | f2? ♙g6 Black is

winning here because the white king is cut off on the long side, and there are only two ranks between the pawn and the white rook, which is insufficient for the frontal checks (see the frontal checks position in the theoretical chapter). ) 84... | f1 85. | e6!

Then the rook cuts off the opponent's king.

Black can't win even with the white king on the c-file. | d1+! 86. ♙c3 ♙f7

87. | h6 | d8 88. ♙c2 White is waiting.

Black has nothing to improve. It is time for

the pawn. g4 89. | h4! g3 (The white king comes right on time if Black defends the pawn with the rook. 89... | g8 90. ♖d2 g3 91. | h1 ♜f6 92. ♜e3 ) 90. | f4+!

White loses without this check. ( 90. | g4??

| g8 ) 90... ♜e6 91. | g4 White wins the pawn. ; 82. | a4 g5 83. hxc5 hxc5 84. | a6!

There is an equal position because neither the king nor the rook can help the pawn safely advance. The king can't cross the 6th rank; the rook should guard the white king. g4 85. | a4 | g1 86. ♜e4 ♜g6 87. ♜e3 ] **82... | e3 83. ♜d4 | a3**

The Indian player cuts off the white king along the 3rd rank to use the side checks for further progress. The position remains equal, but the white king's position quickly worsens. **84. ♜e5** [A try to trap Black to the drawn king and pawn endgame fails in an instructive manner. 84. ♜e4? ♜f6! Black improves his king's position before entering the king and pawn endgame.

( 84... | a4+? 85. ♜f3 | xg4 86. ♜xc4 ♜f6 87. ♜f4 Black can't win this. ) 85. | f4+ ♜e6 86. | g4 ( 86. ♜d4 | a4+ 87. ♜e3 | xf4 88. ♜xf4 ♜d5 89. ♜f3 ♜e5 90. ♜e3 ♜f5 91. ♜f3 h5 ) 86... | a4+ 87. ♜f3 | xg4 88. ♜xc4 ♜e5 ] **84... | a5+ 85. ♜e6**

With the king on the 6th rank, White has more challenges to save the game.

[ Rabiega has not realized there was an opportunity for a drawn king and pawn endgame. 85. ♜f4! h5 ( 85... | a4+ 86. ♜g3 | xg4+ 87. ♜xc4 ♜f6 88. ♜f4 ) **A** ) 86. | g2 | a4+ **A1** ) The following line is saved especially for lovers of nice variations.

87. ♜g5? | a3 88. ♜f4 | h3 89. ♜g5 | f3 90. | f2! | g3+ ( 90... | xf2 Stalemate. )

91. ♜f4 | g4+ This variation once more shows us that throwing the defending king forward is a bad reflex. It is safer to keep it in the bottom part of the board. ; **A2** )

87. ♜g3! | g4+ 88. ♜h3 | xg2 89. ♜xc2 ♜f6 90. ♜f2 Taking the opposition and securing a draw. ; **B** ) 86. | g5! | xg5

Here, both captures lead to a draw, but the

pawn move is more puzzle-like. 87. ♜xc5 ] **85...h5 86. | f4 ♜h6 87. ♜f6 | b5**

**88. ♜e6 | a5** [There is a relatively simple draw after 88...g5 89. | f6+ ♜g7 90. hxc5 | xg5 91. | f5 ♜h6 92. | f8 ] **89. ♜f6 ♜h7**

The position is still equal. White must choose whether to allow ... g6 - g5 (after moving the king from f6 ) or ... Rf5 (after moving the rook away from the f-file). Both choices are good enough to make a draw.

But evidently, the drawn line was simpler after the rook move. **90. ♜e6** [ 90. | b4

| f5+ 91. ♜e6 Having the king on e6 is not a problem because the g-pawn advancing is more complicated with the rook on f5 .

♜h6 92. | a4 | f1 93. ♜e5! A necessary move to open the 6th rank for a check in the case of ... g6 - g5 . g5 94. | a6+ ] **90...g5**

Here we come to the critical moment. If White had more time to think about his move, he would easily realize how to make a draw. But on the move 91, we are usually led by the reflexes. And what is the top reflex for all level players? Of course, it is to take the opponent's piece or pawn.

**91. hxc5** [In the rook endgames, we should never forget about the activity level of the kings. White had to use a chance to drive the opponent's king to the back rank.

91. | f7+! ♜g8 ( 91... ♜g6 92. | f6+ ♜g7

93. | f7+ does not change anything. The black king can only hide from the checks on the g8 -square. ) 92. | b7! g4 ( 92...gxh4 93. ♜f6 ) 93. ♜f6 Black can't win this endgame with such a weak king. ;

The pawn endgame with a defended passed pawn on g4 is hopeless for White. 91. | f5?? | xf5 92. ♜xf5 g4 ;Even a passive back move by a rook could help to save the game. 91. | f1 g4 92. ♜f6 The difference between kings again helps White. ]

**91... ♜g6** Later in the course, we will see how Magnus Carlsen blundered a similar idea in his game against Fabiano Caruana. The cutting off along the rank is the most effective when you have the h-pawn in the

rook endgame. The Indian player gave no chances to his opponent onwards. 92. | f1 [ 92. | f8 ♖xg5 93. | g8+ ♜f4! 94. | f8+ ♜g3 95. | g8+ ♜h3 ] 92...h4 93. | g1 h3 94. | h1 | a3 95. ♜e5 ♜xg5 96. ♜e4 ♜g4 97. | g1+ | g3 98. | h1 | g2 99. | f1 h2 100. | f8 | e2+ 101. ♜d3 | e1 102. | g8+ ♜f5

□ 5) Endgames With All Pawns on  
 ■ Boris Gelfand vs. Wang Hao #1

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	k	+	-	+ 0{
7	+	-	R	-	+	-	+	- 0
6	-	+	-	+	p	p	-	+ 0
5	+	-	+	-	+	-	+	- 0
4	-	+	-	P	K	+	-	+ 0
3	+	-	+	-	P	P	+	r 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h y

48... ♜f8 Nothing special happened on the last moves; now the culmination is coming.  
 49.f4 Gelfand wants to play f4 - f5 and create the passed pawn on the d-file. f5+  
 50. ♜e5 | xe3+ 51. ♜f6 It is hard to understand why Wang Hao could desire to come to this position. He probably was under severe time pressure. Continued in Boris Gelfand vs. Wang Hao #3.

□ 5) Endgames With All Pawns on  
 ■ Boris Gelfand vs. Wang Hao #2

(Diagram)

49.f4 Black could prevent both f4 - f5 and the white king from entering. How? | h4  
 50. | c5 ♜e7 51. ♜d3 f5 The maximum

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	k	-	+ 0
7	+	-	R	-	+	-	+	- 0
6	-	+	-	+	p	p	-	+ 0
5	+	-	+	-	+	-	+	- 0
4	-	+	-	P	K	+	-	+ 0
3	+	-	+	-	P	P	+	r 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0[
x	a	b	c	d	e	f	g	h y

White can do is to exchange the d4 - and e6 -pawns (by playing d4 - d5 ) . After that, we get the pawn structure e3 - f4 against f5 , similar to the pawn structure from the Ushenina - Huang game.

□ 5) Endgames With All Pawns on  
 ■ Boris Gelfand vs. Wang Hao #3

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	k	-	+ 0{
7	+	-	R	-	+	-	+	- 0
6	-	+	-	+	p	k	-	+ 0
5	+	-	+	-	+	p	+	- 0
4	-	+	-	P	-	P	-	+ 0
3	+	-	+	-	t	-	+	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h y

51... ♜g8 Continuation of Boris Gelfand vs. Wang Hao #3. Gelfand could not find the winning maneuver. I offer you to find it here. 52. | c8+ ♜h7 53. ♜f7 Black can't cope with both guarding the king against the checkmate along the h-file, and saving his pawns. | e1 54. | c2 | h1 55. ♜xe6

□ 5) Endgames With All Pawns on  
 ■ Boris Gelfand vs. Wang Hao (1, London 2012)

```

X| | | | | | | Y
8- + - + k + - + O{
7R- + - + - + - O
6- + - + p p - + O
5+ - + - + - + - O
4- + - P - K - + O
3+ r + - P - + - O
2- + - + - P - + O
1+ - + - + - + - O
x a b c d e f g h y

```

This game proves that the rook endgames can be so complex that even the top players make mistakes that look 'simple' after the game analysis. The position on the diagram is objectively drawn. White's extra pawn does not help him to organize a passed pawn, and the black pawns safely prevent the opponent king's run forward. 43... | b2 44.f3 | h2 45.♙e4 | h3 46. | b7 ♙f8 47. | d7 ♙e8 48. | c7 ♙f8 Nothing special happened on the last moves; now the culmination is coming. 49.f4

Gelfand wants to play f4 - f5 and create the passed pawn on the d-file. f5+ [ 49... | h5?! is less precise because it does not stop f4 - f5 . 50. | c5 | h4 51.♙d3 A) 51...f5?? You can practice winning the weak pawns here. 52. | e5! ♙f7 ( 52... | h6 53.d5 exd5 54. | xf5+ ) 53.d5! exd5 54. | xf5+ ♙e6 55. | e5+ ♙d6 56.♙d4 ; B) 51...♙e7 52.f5 exf5 53. | xf5 The position is objectively drawn, but compared to the e3 - f4 vs. f5 endgame, this gives White more winning chances thanks to the passed pawn. ; Black could prevent both f4 - f5 and the white king from entering. 49... | h4! 50. | c5 ♙e7 51.♙d3 f5 The maximum White can do is to exchange the d4 - and e6 -pawns (by playing d4 - d5 ). After that, we get the pawn structure e3 - f4 against f5 , similar

to the pawn structure from the Ushenina - Huang game. As you remember, all Black needs to do is not to keep the king behind the pawn ( e6 , f6 , and, if these two are unavailable, the e7 - and f7 -squares). ]

50.♙e5 | xe3+ 51.♙f6 It is hard to understand why Wang Hao could desire to come to this position. He probably was under severe time pressure. ♙g8 Gelfand could not find the winning maneuver. I offer you to find it here. [ Running left also does not help. White wins both of the pawns. 51...♙e8 52. | e7+ ♙d8 53.d5 ( 53. | xe6 also wins. ) ] 52. | g7+ [The correct way was 52. | c8+ ♙h7 53.♙f7! Black can't cope with both guarding the king against the checkmate along the h-file, and saving his pawns. | e1 ( 53...♙h6?? 54. | h8# ) 54. | c2 | h1 55.♙xe6 ] 52...♙f8 53. | h7 ♙g8 54. | h1 White allowed Black to attack the f4 -pawn. The position again becomes equal. [ Gelfand needed to return to the idea from the previous comment. 54. | g7+ ♙f8 55. | a7 ♙g8 56. | a8+ ♙h7 57.♙f7 ] 54... | e4 55. | d1 ♙h7 A super blunder! [ Black could defend this in many ways. I want to mention two of them here. 55... | xf4 56.♙xe6 | e4+ 57.♙xf5 | e2 The black king comes to d8 with a draw. 58.d5 ♙f7 59.d6 ♙e8 ; 55...♙f8 56. | a1 ♙e8 The exchange of all pawns is coming. ] 56.♙f7 Checkmate is inevitable. Black resigned.

□ 5) Endgames With All Pawns on  
 ■ David Shengalia vs. Gawain Jo

(Diagram)

In an earlier part of the game, the opponents had pawns on the h-file. Black played h5 - h4 and exchanged on g3 . Now Black has an opportunity to play f7 - f6 or to stay in pl

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	<del>k</del>	p	+	- 0
6	-	+	-	+	-	+	p	+ 0
5	+	-	+	-	<del>P</del>	-	+	- 0
4	r	+	-	+	-	<del>P</del>	-	+ 0
3	+	-	+	-	+	-	<del>P</del>	K 0
2	-	+	R	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h y

ace. f7 - f6 is a principal continuation that can force new exchanges and make a draw closer. But there is a check from c7 that can destroy Black's plans. What would you do in this position? 44...f6 45. | c7+ ♔d8 46. | g7 fxe5 47.fxe5 | e4 48. | xg6 | xe5 And the black king is coming to the g-file.

☐ 5) Endgames With All Pawns on  
☒ David Shengalia vs. Gawain Jo

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	<del>k</del>	p	+	- 0
6	-	+	-	+	-	+	p	+ 0
5	+	-	+	-	<del>P</del>	-	+	- 0
4	-	+	-	+	-	<del>P</del>	K	+ 0
3	R	-	+	-	+	-	<del>P</del>	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	t	- 0
x	a	b	c	d	e	f	g	h y

54...♔e6 How can White make further progress here? 55. ♔g5 | h1 56. | a6+ ♔e7 57. | a7+ ♔e6 58. | a6+ ♔e7 59.g4 Now it is over. Black can't defend against all the opponent's threats.

☐ 5) Endgames With All Pawns on  
☒ David Shengalia vs. Gawain Jo

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+ 0
7	+	-	+	-	<del>k</del>	p	+	- 0
6	R	+	-	+	-	+	p	+ 0
5	+	-	+	-	<del>P</del>	-	+	- 0
4	-	+	-	+	-	<del>P</del>	K	+ 0
3	+	-	+	-	+	-	<del>P</del>	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	t	- 0[
x	a	b	c	d	e	f	g	h y

54. | a3 After multiple rook moves, Shengalia goes for a last attempt - he defends on g3 and, in such a way, frees the king to go to g5 . What should Black do now? | h1 Moving the rook to the h-file was the simplest defense. White does not have another dangerous idea.

☐ 5) Endgames With All Pawns on  
☒ David Shengalia vs. Gawain Jo, Batumi 2019)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	<del>k</del>	p	+	- 0
6	-	+	-	+	-	+	p	+ 0
5	+	-	+	-	<del>P</del>	-	+	- 0
4	r	+	-	+	-	<del>P</del>	-	+ 0
3	+	-	+	-	+	-	<del>P</del>	K 0
2	-	+	R	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h y

In an earlier part of the game, the opponents had pawns on the h-file. Black played h5 - h4 and exchanged on g3 . Now Black has an opportunity to play f7 - f6 or to stay in place. f7 - f6 is a principal continuation that can force new exchanges and make a draw closer. But there is a check from c7 that can

destroy Black's plans. What would you do in this position? **44... ♖a1** [This move is fine, but the ...f7 - f6 continuation was stronger. **44... f6!** **45. ♖c7+ ♔d8 46. ♖g7 fxe5 47. fxe5 ♖e4 48. ♖xg6 ♖xe5** And the black king is coming to the g-file. ] **45. ♔g4 ♖g1** [The main idea of White in this position to try winning is to advance his king to f6. So, Black should think about preventing this. One idea might be to bring the king to g7, but this way comes with a long concrete line. **45... ♔f8 46. ♖c7 ♖a3 47. ♔g5 ♔g7! 48. e6 e5 - e6** might scare anyone, but Black still has a save. ♖xg3+ **49. ♔h4 ♖e3 50. ♖xf7+ ♔g8** White can't defend on e6 in a good way - the black king always pursues the rook. **51. ♖f6 ♔g7 52. ♖f7+ (52. ♔g5 ♖g3+ 53. ♔h4 ♔xf6 54. ♔xg3 ♔xe6) 52... ♔g8 53. ♖e7 ♔f8 54. ♖f7+ ♔g8** In the game, Black decided to keep the king on e7, which is also enough. ] **46. ♖c7+ ♔e6 47. ♖c6+ ♔e7 48. ♖a6 ♖h1** Black shows that he can prevent Kg5 equally well by placing his rook on the h-file to give a check from h5. **49. ♖a7+ ♔e6 50. ♖a2 ♔e7 51. ♖a6 ♖g1 52. ♖a7+ ♔e6 53. ♖a6+ ♔e7 54. ♖a3** After multiple rook moves, Shengelia goes for a last attempt - he defends on g3 and, in such a way, frees the king to go to g5. What should Black do now? **♔e6** A pseudo-active move. [Moving the rook to the h-file was the simplest defense. **54... ♖h1** White does not have another dangerous idea. The king run to g7 was more stressful. **54... ♔f8 A)** White can also try **55. e6** But the problem is that he does not have a threat, and Black can simply attack the pawn with the rook. ♖e1! (The amount of defensive resources is so large that Black can even take on e6. **55... fxe6 56. ♔g5 ♔f7 57. ♖a7+ ♔g8 58. g4 ♖g2 59. ♖e7 ♖g1 60. ♖xe6 ♔h7** White can't win on g6 without losing on g4. But this is the most stressful way. **61. ♖xg6 ♖xg4+ 62. ♔xg4 ♔xg6) 56. ♖a8+ ♔g7** Forcing the pawn exchange and leading the

game to a typical (and drawn) 2 vs. 1 endgame. ; **B)** **55. ♔g5 ♔g7 56. g4 ♖e1!** The best place for the rook is behind the e5 - pawn. It stops both the e5 - e6 and f4 - f5 breakthroughs. **57. ♖a5 ♖e2 58. f5 gxf5 59. gxf5 ♖xe5! 60. ♖xe5 f6+ 61. ♔f4 fxe5+ 62. ♔xe5 ♔f7 ] 55. ♔g5 ♖h1 56. ♖a6+ ♔e7 57. ♖a7+ ♔e6 58. ♖a6+ ♔e7 59. g4** Now it is over. Black can't defend against all the opponent's threats. **♖b1** [ **59... ♖f1 60. ♖f6! ♖h1 61. e6! fxe6 62. ♔xg6** And the g-pawn decides the game. ] **60. ♖a7+ [ 60. ♖f6** was also good to win the game. ] **60... ♔e8** Here is one of the possible winning lines after . f5+! gxf5 gxf5+ Kxe5 Re7+! Securing the f6 -square for the king. Rxf7?? Rg1+ Kh6 Rf1= Kd6 Kf6+- or Rxf7+- **61. ♔f6** The following lines are relatively easy. **♖b4 [ 61... ♖b6+ 62. ♔g7 ] 62. ♖a8+ ♔d7 63. f5 ♖f4 [ 63... ♖xg4 64. e6+ fxe6 65. fxe6+ ♔d6 66. ♖d8+ ♔c7 67. e7 ] 64. ♖a7+ ♔e8 65. ♖e7+ ♔d8 66. ♖xf7 ♖xg4 67. fxg6 ♔e8 68. ♖e7+ ♔d8 69. ♖a7** Black resigned.

## □ 5) Endgames With All Pawns on ■ Alexandr Predke vs. Daniil Du

(Diagram)

**42. ♔g1** Alexandr Predke didn't dare to place the king on g3 because his king could be under checkmate threats there. But the mating threats were not strong, and h3 - h4 would secure the king's position. How to make use of his mistake? **♔h5 43. ♖c4 f5** With energetic play, Dubov makes use of the opponent's mistake. His idea is to play ... f5 - f4 and to deliver the king on g3. White is losing.



```

X| | | | | | | Y
8- + - + - + - + 0
7+ - + - + - + - 0
6- + - + - p k p 0
5+ - R - + - p - 0
4- + - + - + - + 0
3+ - + - + P + P 0
2- t - + - + K + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

□ 5) Endgames With All Pawns on  
 ■ Alexandr Predke vs. Daniil Du

```

X| | | | | | | Y
8- + - + - + - + 0{
7+ - + - + - + - 0
6- + - + - p - p 0
5+ - + - + - p k 0
4- + R + - + - + 0
3+ - + - + P + P 0
2- t - + - + - + 0
1+ - + - + - k - 0
x a b c d e f g h y

```

43... | a2 White has two defenses against Black's plan. Which move simplifies White's defense? 44.f4 This move frees the 3rd rank for a side defense, simplifying White's play. f5 45. | c5 ♖h4 46.fxg5 As we know from the theory of rook endgames, White can hold the endgame against the f- and h-pawns even without the h3 -pawn.

□ 5) Endgames With All Pawns on  
 ■ Alexandr Predke vs. Daniil Du, Moscow 2017)

```

X| | | | | | | Y
8- + - + - + - + 0
7+ - + - + p k - 0
6R + - + - + - p 0
5+ - + - + - p - 0
4- + - + - t - + 0
3+ - + - + P k - 0
2- + - + - + - P 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

One of the trickiest things in the analysis with the engine is to master the positions with a '0.00' evaluation. For the engine, there is often no difference between many moves; it values them as '0.00'. But for a human, there is a huge difference. After some of them, it is easy to keep the balance. And after some other moves, play might become much more complicated. The next endgame, in my opinion, illustrates this problem well. The starting position does not look problematic. White should easily hold a draw. 38.h3 The engine does not see a problem with this move. But h2 - h3 creates ground for the ensuing difficulties for White. The problem is that White weakened the g3 -square, and from now the black king can hope to reach it, even at the cost of the h-pawn. It would be better to play h2 - h3 only when Black prepares g5 - g4 and fxg4 - hxg4 (to create the passed pawn on the f-file) by playing h6 - h5 . With a pawn on h5 , the black king would be blocked from reaching the h4 - and g3 -squares. | b4 39. | c6 f6 40. | c5 ♖g6 41. ♖g2 | b2+ Where to move the king? 42. ♖g1 [ Alexandr Predke didn't dare to place the king on g3 because his king could be under checkmate threats there. But the mating threats were not strong, and h3 - h4 would

secure the king's position. 42.♔g3! h5 ( 42...f5 43.h4 ) 43.h4 The only option, and enough to save the game. ♖b4 44.hxg5 h4+ 45.♔h3 fxg5 White should be able to easily save this. ] 42...♔h5 43.♖c4 f5 With energetic play, Dubov makes use of the opponent's mistake. His idea is to play ... f5 - f4 and to deliver the king on g3 . White is losing. [It is instructive to see if Black could delay his plan for one move by playing the waiting move. 43...♖a2? White has even two defenses against Black's plan. 44.f4! This move frees the 3rd rank for a side defense, simplifying White's play. ( 44.h4! is less logical but also enough to hold equality. White sacrifices the second pawn to weaken the black pawns and give Black no time to arrange his pieces well. gxh4 45.♖f4 ♔g5 46.♖g4+ ♔h5 47.♖f4 ♖a6 48.♔g2 Black has no plan to succeed. ) 44...f5 45.♖c5! ♔h4 46.fxg5 ♔xg5 As we know from the theory of rook endgames, White can hold the endgame against the f- and h-pawns even without the h3 -pawn. ( 46...hxg5 47.♖xf5 ; 46...♔g3 47.♖c3+ )] 44.h4 [ 44.f4 also does not help due to ♖g4 and Black gets two connected passed pawns with an easy win. ] 44...gxh4 With a pawn on f6 , White would have an idea with Rf4 - g4 . With a pawn on f5 , White is lost. 45.♖d4 ♔g5 46.♖c4 h3 47.♖a4 h5 48.♖c4 f4 49.♖c5+ ♔h4 50.♖f5 ♖g2+ Dubov decided to save all three pawns. 50...Kg3 was also winning. 51.♔h1 ♖f2 52.♔g1 [ 52.♖xf4+ ♔g3 ] 52...♖xf3 The rest is easy. Dubov has not tried to find the shortest way. For this reason the game lasted for 17 more moves. 53.♖f8 ♖g3+ 54.♔h1 ♖g4 55.♔h2 ♖g2+ 56.♔h1 ♖f2 57.♔g1 ♔g3 58.♖g8+ ♔f3 59.♖a8 ♖g2+ 60.♔h1 ♖e2 61.♔g1 ♖g2+ 62.♔h1 ♖d2 63.♔g1 h2+ 64.♔h1 ♔f2 65.♖h8 f3 66.♖xh5 ♔e1 67.♖e5+ ♖e2 68.♖a5 f2 69.♖a1+ ♔d2 White resigned. Here are the lines that prove the correctness

of this decision. 70.♖a2+ [ 70.♔g2 f1♔+ 71.♔xf1 h1♔# ; 70.♖f1 ♖e1 ] 70...♔e3 71.♖a3+ ♔f4 72.♖a4+ ♖e4

□ 5) Endgames With All Pawns on  
 ■ Justin Wang vs. Thomas Rousse

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	♖	-	+	-	0
6-	+	-	+	-	♙	p	+	0
5+	-	+	-	+	p	+	p	0
4-	+	-	+	p	+	-	p	0
3+	R	+	-	+	P	+	-	0
2-	+	-	+	-	♙	P	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

In the next game, White played carelessly and weakened the squares for the opponent's king maneuver. After that, a draw was achievable but already not as simple as before. What was the simplest path to a draw? 78.♔e3 The simplest way was to place the king on e3 and attack the e4 -pawn. If Black takes on f3 , the king takes back. There should be no difficulties in achieving a draw.

□ 5) Endgames With All Pawns on  
 ■ Justin Wang vs. Thomas Rousse

(Diagram)

79.♔e3 This move shows that White does not care about Black's plans. Allowing the black king to come to f5 does not lose yet, but White could prevent even this by placing the rook on g3 . What is Black's plan? ♔f5 Justin thought the opponent wanted to play ... Kg4 and correctly

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	<b>r</b>	-	+	-
6	-	+	-	+	-	<b>k</b>	<b>p</b>	+
5	+	-	+	-	+	-	+	<b>p</b>
4	-	+	-	+	<b>p</b>	+	-	<b>P</b>
3	+	<b>R</b>	+	-	+	-	+	-
2	-	+	-	+	-	<b>k</b>	<b>P</b>	+
1	+	-	+	-	+	-	+	-
x	a	b	c	d	e	f	g	h
y								

evaluated that it was not dangerous for him. Unfortunately, the real intention of the Canadian player was different. 80. | b8 | e6 White has no way to defend from 81... Kg4 . Black wins.

□ 5) Endgames With All Pawns on  
 ■ Justin Wang vs. Thomas Rousse,2021)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	<b>r</b>	-	+	-
6	-	+	-	+	-	<b>k</b>	<b>p</b>	+
5	+	-	+	-	+	<b>p</b>	+	<b>p</b>
4	-	+	-	+	<b>p</b>	+	-	<b>P</b>
3	+	<b>R</b>	+	-	+	<b>P</b>	+	-
2	-	+	-	+	-	<b>k</b>	<b>P</b>	+
1	+	-	+	-	+	-	+	-
x	a	b	c	d	e	f	g	h
y								

In the next game, White played carelessly and weakened the squares for the opponent's king maneuver. After that, a draw was achievable but already not as simple as before. 78.fxe4

A first inaccuracy, which helped Black free the f5 -square for the ... Kf5 - g4 maneuver. [The simplest way was to place the king on e3 and attack the e4 -pawn. If Black takes on f3 , the king takes back. There should be no difficulties in achieving a draw.

78.♙e3 ] 78...fxe4 The engine shows that 18 (!) White's moves hold a draw here. Of course, seeing this, a less experienced player will not see a problem with 78.fxe4 . But the point is that White got an extra idea that Black should first find and then defend against. That's why we should evaluate White's last move as an inaccuracy. 79.♙e3

This move shows that White does not care about Black's plans. Allowing the black king to come to f5 does not lose yet, but White could prevent even this by placing the rook on g3 . [ 79. | g3!? If the black king goes to f5 , White gives a check from g5 ( Kf4 there will be a fatal mistake due to the g2 - g3 checkmate!). At the same time, White wants to play Kf2 - e3 - f4 , Re3 , and to take on e4 . A) 79...♙f5 80. | g5+ ♙f6 ( 80...♙f4?? 81.g3# ) 81.♙e3 ; B)

□ 5) Endgames With All Pawns on  
 ■ Justin Wang vs. Thomas Rousse

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	<b>r</b>	-	+	-
6	-	+	-	+	-	<b>k</b>	<b>p</b>	+
5	+	-	+	-	+	-	+	<b>p</b>
4	-	+	-	+	<b>p</b>	+	-	<b>P</b>
3	+	<b>R</b>	+	-	<b>k</b>	-	+	-
2	-	+	-	+	-	+	<b>P</b>	+
1	+	-	+	-	+	-	+	-
x	a	b	c	d	e	f	g	h
y								

79...♙f5 What does White need to do here?  
 80. | b6 It was best to take the 6th rank under control. | e5 Black secures his king's position before going to side checks.  
 81. | a6 | b5 82. | c6 | b3+ 83.♙e2 | b2+ 84.♙f1 The position remains drawn.

79... | e6 80.♔e3 | e5 ( 80...♔e5 81. | g5+ ♔f6 82. | g3 ) 81.♔f4 ; White can also leave the rook on the queenside. 79. | b5 | e5 80. | b6+ ♔f5 81.♔e3 Black has nothing but to exchange the pawns. ♔g4 82. | xg6+ ♔xh4 Now White can wait. 83. | g7 | g5 The only chance. 84. | xg5 ♔xg5 85.♔xe4 ♔g4 86.♔e5 h4 87.♔f6 ♔g3 88.♔g5 ] **79...♔f5** Justin thought the opponent wanted to play ... Kg4 and correctly evaluated that it was not dangerous for him. Unfortunately, the real intention of the Canadian player was different. **80. | b8** [It was better of all to take the 6th rank under control. Though after that, the position evaluation is not so clear (unless you have the engine turned on) because Black can force the white king to return to the first rank (this is the price of the fxe4 mistake). 80. | b6! | e5! Black secures his king's position before going to side checks. (As we already know, White gets a draw with the waiting moves in the following position. 80...♔g4 81. | xg6+ ♔xh4 82. | g8 ) 81. | a6 | b5 82. | c6 | b3+ 83.♔e2 | b2+ 84.♔f1 The position remains drawn. ] **80... | e6** White has no way to defend from 81... Kg4 . Black wins. 81.♔f2 ♔g4 82. | b4 ♔xh4 83. | b5 ♔g4 84.♔e3 h4 85. | a5 g5 86.♔f2 ♔f4 87.♔g1 g4 88.♔h2 e3 White made 13 more unnecessary moves, though a resignation here would be a good decision.

☐ 6.1) Outside Passed Pawn: f-g  
☒ An Outside Passed Pawn

Rook endgames with an equal number of pawns on one side and an outside passed pawn. Z0

☐ 6.1) Outside Passed Pawn: f-g  
☒ Alexander Grischuk vs. Maxime

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	k	+	0{
7R	-	+	-	+	p	+	-	0
6-	+	-	+	-	+	p	+	0
5+	-	+	-	+	-	+	p	0
4p	+	-	+	-	+	-	P	0
3+	-	+	-	+	K	P	-	0
2r	+	-	+	-	P	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

**34...♔g7** How does White defend here?  
**35. | a6** Now White does not even allow ... Kf6 . **a3 36.♔g2 | a1 37.♔f3 ♔f8**  
**38. | a7** Surely, allowing ... Ke7 would not lead to a losing position, but preventing ... Ke7 is a technical decision that the defending side should not ignore.

☐ 6.1) Outside Passed Pawn: f-g  
☒ Alexander Grischuk vs. Maxime

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	k	+	-	0
6R	+	-	+	-	p	p	+	0
5+	-	+	-	+	-	+	p	0
4-	+	-	+	-	+	-	P	0
3p	-	+	-	+	K	P	-	0
2r	+	-	+	-	P	-	+	0
1+	-	+	-	+	-	+	-	0[
x	a	b	c	d	e	f	g	h
								y

**42.♔e3** As we will see in the next game, it was safer to keep the king on g2 or f3 . **g5** The French player tries the only chance, and suddenly it brings the result. **43.hxg5** This is also not a decisive mistake, but

getting the passed pawn perspective on the kingside significantly increases Black's chances. **fxg5**

□ 6.1) Outside Passed Pawn: f-g  
 ■ Alexander Grischuk vs. Maxime

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	+	k	+	- 0
6	-	+	-	+	-	+	-	0
5	R	-	+	-	+	-	p	p 0
4	-	+	-	+	-	+	-	0
3	p	-	+	-	+	K	P	- 0
2	-	+	-	+	-	P	-	0
1	t	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

**45...g4+** Where does the king go? **46.♠f4**  
 The king stays active. Continued in the next variation.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Alexander Grischuk vs. Maxime

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	+	k	+	- 0
6	-	+	-	+	-	+	-	0
5	R	-	+	-	+	-	p	0
4	-	+	-	+	-	k	p	+ 0
3	p	-	+	-	+	-	P	- 0
2	-	+	-	+	-	P	-	0
1	t	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

**46...a2** Continuation of the previous variation. Black wants to play ... h5 - h4 and ... g4 - g3 (after g3xh4); this sacrifice will allow the rook to give a check and to

play ... a1=Q. At first, it is not obvious what White can offer against this powerful idea, but White has two drawish ideas here, although both require so much time that Grischuk practically had no chance to save this game. **47.♠f5** The first idea was connected with pushing the black king as far as possible from the kingside. After this, White will be able to accept the double pawn sacrifice and get the drawish two pawns vs. rook endgame. But during the game, it is hard to calculate precisely if it will be enough for a draw. This can be only an intuitive decision. **h4 48.gxh4 g3 49.♠a7+** Continued in the next variation.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Alexander Grischuk vs. Maxime

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	R	-	+	-	+	k	+	- 0
6	-	+	-	+	-	+	-	0
5	+	-	+	-	+	K	+	- 0
4	-	+	-	+	-	+	-	P 0
3	+	-	+	-	+	-	p	- 0
2	p	+	-	+	-	P	-	+ 0
1	t	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

**49...♠f8** Continuation of the previous variation. **50.♠f6 ♠e8 51.♠a8+ ♠d7 52.♠a7+ ♠d6 53.♠a6+ ♠d5 54.fxg3 ♠f1+ 55.♠g7** Continued in the next variation.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Alexander Grischuk vs. Maxime

**55...a1E+** Continuation of the previous variation. **56.♠xa1 ♠xa1 57.h5 ♠e6 58.h6 ♠f5 59.h7 ♠a7+** One of the must-

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	-	+	-	+	-	<del>K</del>	-	0
6R	+	-	+	-	+	-	+	0
5+	-	+	K	+	-	+	-	0
4-	+	-	+	-	+	-	<del>P</del>	0
3+	-	+	-	+	-	<del>P</del>	-	0
2p	+	-	+	-	+	-	+	0
1+	-	+	-	+	r	+	-	0
x	a	b	c	d	e	f	g	h
y								

know ideas in the rook vs. pawn endgame.  
**60. ♖h6** [ 60. ♖g8 doesn't work because of ♜g6 with a winning position for Black. ]

□ **6.1) Outside Passed Pawn: f-g**  
 ■ **Alexander Grischuk vs. Maxime**

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	<del>K</del>	p	0
4-	+	-	+	-	+	p	+	0
3+	-	+	-	+	-	<del>P</del>	-	0
2p	R	-	+	-	<del>P</del>	k	+	0
1r	-	+	-	+	-	+	-	0[
x	a	b	c	d	e	f	g	h
y								

**54. ♖c2** What is the only winning continuation? ♖f1 **55. ♙xa2 ♖xf2** **56. ♖a3 ♖f3** **57. ♙a4 ♖xg3** **58. ♜xh5 ♖f5+** **59. ♜g6 ♖b5**

□ **6.1) Outside Passed Pawn: f-g**  
 ■ **Alexander Grischuk vs. Maxime, Chess24.com 2020)**

It is worth mentioning that besides the king's maneuver to the queenside (to support the passed pawn) , the strongest

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	K	+	0{
7R	-	+	-	+	p	+	-	0
6p	+	-	+	-	+	p	+	0
5+	-	+	-	+	-	+	p	0
4-	+	-	+	-	+	-	<del>P</del>	0
3+	-	+	-	+	-	<del>P</del>	-	0
2r	+	-	+	-	<del>P</del>	-	+	0
1+	-	+	-	+	-	<del>K</del>	-	0
x	a	b	c	d	e	f	g	h
y								

side can also try to play g3 - g4 ( g6 - g5 ) to exert some pressure on the kingside. The next two games can teach us what the defending side should do against this plan. But first, we will see an example of a bad defense. Even though it was an online game, it had enormous sporting importance. A draw in this game would guarantee Grischuk a seat in the KO stage of the tournament. At the same time, MVL needed a win to get a chance to qualify. **32...a5** [ An inaccuracy. With a pawn on a6 , Black could first bring the king to e6 by playing **32...♜g7 .** ] **33. ♜g2 a4 34. ♜f3 ♜g7 35. ♖a6** Now White does not even allow ... **Kf6 . a3 36. ♜g2 ♖a1 37. ♜f3 ♜f8 38. ♖a7** Surely, allowing ... **Ke7** would not lead to a losing position, but preventing ... **Ke7** is a technical decision that the defending side should not ignore. **♜e8 39. ♜g2 f6 40. ♖a6 ♜f7 41. ♜f3 ♖a2 42. ♜e3** As we will see in the next game, it was safer to keep the king on g2 or f3 . **g5** The French player tries the only chance, and suddenly it brings the result. **43.hxg5** This is also not a decisive mistake, but getting the passed pawn perspective on the kingside significantly increases Black's chances. [ **43. ♜f3** White's correct strategy was to keep the pawn on h4 to give the opponent no chance to create a passed pawn on the kingside. **g4+ ( 43...gxh4 44.gxh4** This pawn structure is absolutely drawish.

White only needs not to skip the moment to take on h5 . ♖a1 45.♙g2 ♙e7 46.♖a5! ♙d6 47.♖xh5 White can safely capture on h5 if his rook can return to the a-file. ; It would be good for Black to keep the pawn on g5 longer (to have a defense against Ra5xh5 ), but Ra5 will force Black to defend on g5 . 43...♙e7 44.♖a5 ) **A)** 44.♙g2? Of course, all rules have exceptions, but if you have a choice, you should always prefer active play for your pieces! Despite this, I offer you to look at what happens after this move. The winning lines here are instructive. ♖a1 When the first analysis of this endgame was done, I showed this endgame to one of my students. At this moment, I was not satisfied with the 44...Ra1 move because moving the rook from the second rank seems unnecessary. Generally, the a2 -square is the best for the rook for two reasons. Firstly, it attacks on f2 and pins this pawn (it is important if White takes the f- and h-pawns and hopes to create a pair of connected passed pawns with the f2 - f3 exchange). Secondly, in the case of Rxh5 , it is better to play Rb2 and a3 - a2 (to advance the pawn to the second rank) instead of Rb1 and Rb3 (keeping the pawn on the third rank). So, my feeling was that 44...Ra1 delays the win (for two moves Ra2 - a1 - a2 ). But a deeper look at the alternatives helped me to understand that this move is only possible to avoid a quick draw (not counting ... Kf7 - g6 (or - g7 ) - f7 repetition). ( 44...f5? 45.♖h6! ♖b2 46.♖xh5 The white rook successfully returns to the a-file (via f5 , h7 , or h8 ). ; 44...♙e7? 45.♖a5 White wants to take on h5 and return to a5 . ) 45.♙h2 White is waiting. ( 45.♖a5 ♙g6! 46.♙h2 f5 leads to similar variations. ) 45...♙e7 Black can leave the h5 -pawn without a defense because the f2 -pawn is also undefended. **A1)** 46.♖a5 ♙e6 47.♖xh5 ♖f1! 48.♖a5 ♖xf2+ 49.♙g1 ♖f3 50.♙g2 ♖c3 51.♙f2 (The king should move to the

center to avoid being pushed to the back rank. 51.h5? ♖c2+ 52.♙f1 a2 Followed by ... Rc1 and ... a1=Q . ) 51...f5 The bad position of the white king (without the f2 -pawn White should always consider checks on the second rank) makes this position hopeless for White. ; **A2)** 46.♙g2 **A2a)** 46...♙d7? It seems like there is nothing to think about - let's take the pawn and see what it leads to. But such reflexive behavior loses. It is stronger to take on h5 and get the passed pawn faster. **A2a1)** 47.♖xf6? Analysis of this position is an interesting field to practice. Here I mention only the main line in which White almost saves thanks to a fortress (one of the typical saving ideas for the rook endgames). ♖b1! 48.♖a6 ♖b3 49.♖a5 ♙c6 50.♖xh5 Black's task is multifunctional - the king should approach the a-pawn, needs to complicate the white rook's return, and should prevent the f2 -pawn move (in the case of the f2 - and g4 -pawns exchange, White has huge chances to draw the game thanks to a pair of connected pawns). ♖b5! 51.♖h8 ♙b7! 52.♖h7+ ♙a6 53.♖h8 ♖a5! 54.♖a8+ There is no way to reach the a1 -square on time. ♙b5 55.♖b8+ ♙a4! 56.♖b1 ♖d5! (White saves in case of straightforward. 56...a2? 57.♖a1 ♙b3 58.f3 From here, we can understand that Black should prevent f2 - f3 . ; 56...♖c5 (with the idea of ... Rc2 ) was also good. ) 57.♖h1 ( 57.f3 ♖d2+ 58.♙f1 a2 59.♖a1 gxf3 followed by Rd2 - b2 - b1 . ) 57...a2 58.h5 **A2a11)** Black can't delay the transfer to the 'queen vs. rook' endgame because then White will prefer the equal 'rook vs. pawns' endgame. 58...♙b3 59.h6 ♙b2 60.h7 ♖d8 61.♖e1! White waits for a good moment to play f2 - f3 . ( 61.h8E+? ♖xh8 62.♖xh8 a1E As we will see from the main line, this endgame is winning for Black. ) 61...a1E (Black will not even get a chance to play with the rook against the pawns if he tries to take on h7 first. 61...♖h8

62. | e2+! 62.f3 is also fine, but the Vancura technique is more straightforward. ♠b3 63. | e3+ The king can't approach the white rook because of the a2 -pawn loss. ) 62. | xa1 ♠xa1 63.f3 gxf3+ 64.♠xf3 The black king can't help the rook. ♠b2 65.g4 | h8 66.g5 | xh7 67.♠e4 ; **A2a12)** 58... | xh5! 59. | xh5 a1♠ 60. | f5 The position looks drawish, but the endgame tablebase indicates that Black is winning. The plan is to defend on g4 and bring the king to e2 with an idea of ... Qf1 and ... Qxf2 to get the winning king and pawn endgame. Here is the exemplary line. ♠d1 61. | f4+ ♠b3 62. | f8 ♠d5+ 63.♠g1 ♠c3 64. | f4 ♠e6 65.♠g2 ♠d2 66. | b4 ♠f5 67. | f4 ♠d5+ 68.♠g1 ♠e6 69.♠g2 ♠e2 70.♠g1 ♠g6! 71.♠g2 ♠c6+ 72.♠g1 ♠c1+ 73.♠g2 ♠f1+ 74.♠h2 ♠xf2+ 75. | xf2+ ♠xf2 ; **A2a2)** 47. | a5! ♠c6 48. | xh5 ♠b6 49. | h8 The only move to reach the a-file on time. The h-pawn will help to save the game. ; **A2b)** 46...f5! 47. | a5 ♠e6 Now it is Black's turn to show his skills in finding the best moment to give up on f5 . Black can win only when managing to save the h5 -pawn. 48.♠h2 ♠f6 (White has no difficulties in the following line. 48...♠d6 49. | xf5 | b1 50. | a5 | b3 51. | xh5 ) 49.♠g2 | a2! 50.♠g1 ♠e7! **A2b1)** White can't take on f5 with the king on the first rank. 51. | xf5? | b2 52. | a5 ( 52. | xh5 a2 53. | a5 | b1+ ) 52...a2 53.♠g2 ♠d6 ; **A2b2)** 51.♠g2 ♠e6 52.♠g1 With a triangle Kf6 - e7 - e6 , Black can start the king run to the queenside with the white king on the first rank. ♠d6 53.♠g2 ( 53. | xf5?? | b2 54.♠g2 a2 55. | a5 ♠c6 The king simply comes to b1 and Black wins. ) 53...♠c6 54. | xf5 | b2 55. | xh5 | b5 with a transfer to the 46...Kd7 47.Rxf6 line, which ends with the winning 'queen vs. rook' endgame. ; **B)** 44.♠e3! | a1 45.♠f4! The best square for the king. ♠e7 46. | a5 White is ready to take on f5 . The position

is drawish. | f1 ( 46...♠d6 47. | xh5 | f1 48. | a5 | xf2+ 49.♠xg4 a2 50.h5 ) 47.♠e3 | a1 48.♠f4 ] **43...fxg5 44. | a5 | a1** Black defended on g5 . **45.♠f3** [ 45. | xg5?? | e1+ 46.♠d2 a2 ] **45...g4+ 46.♠f4** The king stays active. [ Black instructively wins in case of passive play. 46.♠g2? **A)** There is no plan in case of the careless ...a2 . 46...a2?? 47.♠h2 ; **B)** 46...♠e6? misses a win due to more than one idea. **B1)** Surprisingly, White even has time to pick up both of the black queenside pawns. 47. | xh5 | c1 48. | a5 | c3 49. | a4 ♠f5 (Black has no winning chances after 49...♠d5 50. | xg4 ) 50. | f4+ ♠g5 51. | a4 ; **B2)** 47.f4! White gets counterplay thanks to a passed pawn on the f-file (if Black does not take en-passant) or on the g-file (if Black takes on f3 and later White takes on h5 ). gxf3+ 48.♠xf3 ♠d6 49.♠g2 ♠c6 50. | xh5 Right on time. ; **C)** 46... | a2! The prophylactical decision! Black prevents the f2 -pawn move (creating a passed pawn for White) and prepares Rxh5 - a5 . Black is going to direct the king to the a-pawn. White can try to take on h5 , but it is ineffective here because there is no follow-up after Rxh5 . 47. | xh5 | c2 48. | a5 a2 The black king is coming to the queenside to fix the result, while White can't do anything on the queenside. ; White can't hide the king on the second rank behind the f2 -pawn. Black cleans up the second rank with a double pawn sacrifice. 46.♠e3?? a2 47.♠e2 ( 47.♠d2 | f1 48. | xa2 | xf2+ ) 47...h4! 48.gxh4 g3! 49.fxg3 ( 49.♠f3 gxf2 50.♠xf2 | h1 51. | xa2 | h2+ ) 49... | h1 50. | xa2 | h2+ ] **46...a2** Black wants to play ... h5 - h4 and ... g4 - g3 (after g3xh4 ); this sacrifice will allow the rook to give a check and to play ... a1=Q . At first, it is not obvious what White can offer against this powerful idea, but White has two drawish ideas here, although both require so much time that Grischuk practically had no chance to save this game.



**47. ♖g5** A decisive mistake. Grischuk managed to prevent Black's main idea (after f2xg3 the king will be protected from Rg1 check). But now he can't offer anything against the black king's play. [The first idea was connected with pushing the black king as far as possible from the kingside. After this, White will be able to accept the double pawn sacrifice and get the drawish two pawns vs. rook endgame. But during the game, it is hard to calculate precisely if it will be enough for a draw. This can be only an intuitive decision. 47. ♖f5! h4 ( If there is a chance, White instantly brings his rook to the second rank (the Vancura idea). 47... ♖e7 48. ♖e5+! ♖d6 49. ♖e2! Now White can ignore the second sacrifice. h4 50.gxh4 g3 51.f4 ) 48.gxh4 g3 49. ♖a7+ **A)** Here are some other lines. 49... ♖e8 50. ♖a8+ ♖e7 51. ♖a7+ ♖d8 52. ♖a8+ ♖c7 53.fxg3 ♖f1+ 54. ♖g6 a1♞ 55. ♖xa1 ♖xa1 56.h5 ♖d7 57.h6 ♖e7 ( 57... ♖g1 58.h7 ♖xg3+ 59. ♖f7 ) 58.h7 ♖h1 59. ♖g7 ; **B)** 49... ♖f8 50. ♖f6 ♖e8 51. ♖a8+ ♖d7 52. ♖a7+ ♖d6 53. ♖a6+ ♖d5 54.fxg3 ♖f1+ 55. ♖g7 a1♞+ 56. ♖xa1 ♖xa1 57.h5 ♖e6 58.h6 ♖f5 59.h7 ♖a7+ One of the must-know ideas in the rook vs. pawn endgame. 60. ♖h6 ( 60. ♖g8?? ♖g6! 61.h8♙+ ♖f6 The g3 -pawn does not help White here. 62.g4 ♖d7 63.g5+ ♖xg5 64.♙f7+ ♖f6 65.♙h6 ♖g6 ); 47. ♖f5+! ♖g6 ( The Vancura idea again helps if the black king goes to the e-file. 47... ♖e6 48. ♖e5+! ♖d6 49. ♖e2! h4 50.gxh4 g3 51.f3 ) 48. ♖g5+ ♖h6 49. ♖a5 It looks like White can't do anything against the double pawn sacrifice idea. But the Vancura idea is eligible here as well. h4 **A)** Here, pushing the black king to the queenside does not help. 50. ♖a6+? ♖g7 51. ♖a7+ ♖f6 52. ♖a6+ ♖e7 53. ♖a7+ ♖d6 54. ♖a6+ ♖c7 No more check is available. 55.gxh4 ( 55. ♖a7+ ♖b6 ) 55...g3 56.fxg3 ♖f1+ 57. ♖g5 a1♞ 58. ♖xa1 ♖xa1 Black is on

time to bring the king to f8 and to play ... Rh1 after h6 - h7 . 59.h5 ♖d7 60.h6 ( Another line is 60. ♖g6 ♖e7 61. ♖g7 ♖g1 62.h6 ♖xg3+ 63. ♖h8 ♖f6 64.h7 ♖e3 65. ♖g8 ♖e8# ) 60... ♖e7 61. ♖g6 ♖f8 62.h7 ♖h1 ; **B)** 50. ♖xg4! h3 51.f4!! As we will see, it is important to defend the e5 -square. ( 51.f3?? ♖g6 ) 51... ♖g6 ( 51...h2? A risky move that luckily does not lose. 52. ♖h5+ ♖g6 53. ♖xh2 White can't advance without the exchange of the a2 - and g3 -pawns. ♖f6 54.f5 ♖f7 55. ♖g5 ♖g1! 56. ♖xa2 ♖xg3+ ) 52. ♖g5+ The black king can't avoid the checks without crossing the e-file. ♖f6 53. ♖f5+ ♖e6 54. ♖e5+ The point of 51.f4 . ♖d6 55. ♖e2 Black has no further opportunities to play for a win. ] **47... ♖e6 48. ♖a8** Grischuk made a last try to save the game by using the Vancura idea. But with the king on the g-file, it does not help. The black king will use the e4 -square to crush the defense. If White tries the waiting king's moves (leaving the rook on the 5th rank), White loses to a long surrounding king's maneuver; Black eventually takes the f2 -pawn with a win. [ 48. ♖g6 ♖d6 49. ♖f5 ♖c6 50. ♖f4 ♖b6 51. ♖a8 ♖b5 52. ♖a7 ♖b4 53. ♖a8 ♖b3 54. ♖b8+ ♖c2 55. ♖c8+ ♖d2 56. ♖a8 ♖e2 ] **48... ♖e5 49. ♖e8+ ♖d4 50. ♖e2** If White had time to play Kf4 , it would be a draw. But Grischuk didn't have this tempo. ♖d3 **51. ♖b2 ♖e4 52. ♖e2+ ♖f3 53. ♖b2 ♖g2 54. ♖c2 ♖f1** The only winning continuation. **55. ♖b2** Seemingly a mouse slip. Grischuk immediately resigned, but his position was hopeless anyway. [ 55. ♖xa2 ♖xf2 56. ♖a3 ♖f3 57. ♖a4 ♖xg3 58. ♖xh5 ♖f5+ 59. ♖g6 ♖b5 ]

□ 6.1) Outside Passed Pawn: f-g  
 ■ Alexander Morozevich vs. Vlad

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XI | | | | | | | Y
8R + - + - + - + 0{
7+ - + - ♞ - + - 0
6- + - + - + ♙ ♙ 0
5♙ - + - + - + - 0
4- + - + - + ♖ + 0
3+ - + - + ♖ + - 0
2r + - + - + - + 0
1+ - + - ♞ - + - 0
x a b c d e f g h y

```

White's plan is apparent - the king first goes to b1, then it goes to b5 to free the rook, moves the rook from the a-file, and then pushes the pawn forward. Right now, there is also a concrete threat - to play a5 - a6 - a7 winning the rook (if Black does not move the king to g7 / h7 or hide it from the backrank checks) with the Ra8 - h8 - h7 maneuver. 43... ♖f6 Black needed to focus on the kingside and create counterplay there. 44.a6 ♖g5 45.♖d1 ♖f4

The key point. Black attacks the f3 -pawn, and this forces White to play a6 - a7. After that, the white king will not have the hiding square on a7.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Alexander Morozevich vs. Vlad

(Diagram)

43... ♖f7 [In the game, Artemiev fixed the f3 -pawn with 43...g5? Why did he do so?] 44.a6 ♖g7 45.f4 Followed by a6 - a7, f4 - f5 - f6 - f7. White wins without his king's assistance. Black can not take the pawn either with the king because of Rf8 or with

```

XI | | | | | | | Y
8R + - + - + - + 0{
7+ - + - ♞ - + - 0
6- + - + - + ♙ ♙ 0
5♙ - + - + - + - 0
4- + - + - + ♖ + 0
3+ - + - + ♖ + - 0
2r + - + - + - + 0
1+ - + - ♞ - + - 0
x a b c d e f g h y

```

the rook because of any rook move and a7 - a8=Q.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Alexander Morozevich vs. Vlad

```

XI | | | | | | | Y
8R + - + - + - + 0{
7+ - + - + - + ♞ - 0
6♙ + - + - + - + ♙ 0
5+ - + - + - + ♙ - 0
4- + - + - + ♖ + 0
3♙ - + - + ♖ + - 0
2- ♞ - + - + - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

47... ♙xf3 Black decided to take the pawn, but it no longer makes a difference. White wins in all variations. An important moment - where to place the rook? 48. ♙f2+ 49.♖b3 ♙f3+ 50.♖b4 Black resigned because the king can hide from the checks on b5. ♙f4+ 51.♖b5 ♙f7 52. ♙b7

□ 6.1) Outside Passed Pawn: f-g  
 ■ Alexander Morozevich vs. Vlad, Moscow 2014)

```

X| | | | | | | Y
8R + - + - + - + 0{
7+ - + - Kn - + - 0
6- + - + - + P 0
5P - + - + - + - 0
4- + - + - + P + 0
3+ - + - + P + - 0
2r + - + - + - + 0
1+ - + - Kn - + - 0
x a b c d e f g h y

```

At the beginning of this chapter, I want to show the endgames with only four (2 vs. 2) pawns on the kingside. Of course, the fewer pawns we have, the higher the drawing chances are. But the saving mission was too challenging for young Artemiev. White's plan is apparent - the king first goes to b1, then it goes to b5 to free the rook, moves the rook from the a-file, and then pushes the pawn forward. Right now, there is also a concrete threat - to play a5 - a6 - a7 winning the rook (if Black does not move the king to g7 / h7 or hide it from the backrank checks) with the Ra8 - h8 - h7 maneuver. **43...g5** Artemiev decided to move the king to the corner; for this purpose, he prevents the creation of a passed pawn on the f-file. It appeared hopeless because Black had no counterplay against the opponent's long-term plan. The white pawns on the kingside are placed perfectly - there is no passed pawn for Black when he takes on f3. So, Black needs a lot of tempi to create counterplay. [ Moving the king to the queenside was also a weak decision because Black does not get time to return the king to the kingside on time. 43...Cd7? 44.a6 Cc7 45.a7 Cb7 ( 45...g5 46.g8 xa7 47.g7+ Cb6 48.xa7 Cxa7 49.Ce2 Cb6 50.Ce3

Cc5 51.Ce4 ) 46.g8 a6 47.a8E+ xa8 48.g7+! ( 48.xg6 h8 49.Ce2 is also winning, but after 48.Rg7 ! White wins faster because Black can't defend the h6 -pawn. ) 48...Cc8 49.xg6 ; Black needed to focus on the kingside and create counterplay there. 43...Cf6! 44.a6 Cg5 45.Cd1 Cf4! The key point. Black attacks the f3 -pawn, and this forces White to play a6 - a7 . After that, the white king will not have the hiding square on a7 . But with the pawn on a7 , Black must be careful about the f3 - f4 - f5 idea (trying to open the g-file for Rg8 ). The best defending technique, in this case, is far from obvious. 46.a7 Cg5 **A)** Delaying the f3 - f4 - f5 advancing does not change anything. Black still puts the rook on the 7th rank. 47.Cc1 a5 48.Cc2 c5+ 49.Cd3 c7 50.Ce4 e7+ 51.Cd5 f7 52.Ce6 b7 White can't do anything else to strengthen his idea. 53.f4+ Cxg4 54.f5 Cg5! The black king should stay in touch with the f6 -square. ( 54...g5?? 55.f6 b6+ 56.Ce7 b7+ 57.Ce8 ) 55.f6 ( 55.fxg6 g7 This position would have been drawn even without the h-pawn. See the Vancura Defense position to recall how this works. ) 55...b6+! 56.Ce5 (With the king on g5 , the march of the white king to the 8th rank can become a catastrophe for White. 56.Ce7 b7+ 57.Ce8?? Cxf6 No check from f8 . ) 56...b5+ 57.Cd6 b7 White can't make any progress. ; **B)** 47.f4+ Cxg4 48.f5 This is the moment that could confuse Artemiev. White wins the rook in the case of both captures on f5 . The resulting endgame is hopeless there. How to stop the pawn? a5! Switching to Vancura's idea (see the Vancura Defense position in the theoretical part) right on time. ( 48...Cxf5?? 49.f8+ Ce4 50.a8E+ xa8 51.xa8 ; 48...gxf5?? 49.g8+ Cf3 50.a8E+ xa8 51.xa8 ) 49.fxg6 ( 49.f6 d5+ 50.Cc2 d7 ) 49...d5+ 50.Ce2 d7 The black rook

holds the white pawns in both lines. ; Here is the reason why Artemiev fixed the f3 -pawn. 43...♣f7? 44.a6 ♣g7 ( 44...g5 45.♣d1 transposes to the game text. ) 45.f4! followed by a6 - a7 , f4 - f5 - f6 - f7 . White wins without his king's assistance. Black can not take the pawn either with the king because of Rf8 or with the rook because of any rook move and a7 - a8=Q . ♣a5 46.a7 ♣a4 47.f5 gxf5 48.gxf5 ♣a6 49.f6+ ] **44.a6 ♣f7** If the black king stays on e7 or d7 , White wins the rook by playing Rh8 - Rxa7 ; Rh7 (skewer). **45.♣d1 ♣g7** **46.♣c1 ♣a3 47.♣b2 ♣xf3** Black decided to take the pawn, but it no longer makes a difference. White wins in all variations. An important moment - where to place the rook? [Here is what happens if Black stays passively. 47... ♣a5 48.♣b3 ♣h7 49.♣b4 ♣a1 50.♣b5 The rook is free. ♣b1+ 51.♣c6 ♣c1+ 52.♣b7 ♣b1+ 53.♣a7 h5 54. ♣b8 ♣f1 55.♣b7 ♣b1+ 56.♣a8 ♣a1 57.a7 h4 58.♣b7 ♣b1+ 59.♣c7 ] **48. ♣b8** [Black is fine after the careless 48. ♣c8? ♣f7! 49.♣b3 h5! 50.gxh5 ♣h6 ; The fortress helps Black to save the game in case of direct pawn advancement. 48.a7? ♣f7! **A)** If White hopes to get the better version of the 'queen vs. rook' endgame, Black can even prevent it. 49.♣c3 ♣f6 50.♣d4 h5! 50...Kg7 is also fine. 51.gxh5 Black needs to hide the king behind the g5 - pawn because the black rook can't move with the king on the f-file. ♣f5! 52.h6 ♣g4 The Vancura mechanism works perfectly now. (Black can begin with the check as well. 52... ♣d7+ 53.♣c5 ♣g4 ); **B)** 49. ♣g8+ ♣xg8 50.a8♠+ ♣g7 There is no way to break this through - the black rook has enough safe squares on the f-file to avoid a zugzwang. ] **48... ♣f2+** [ There is a rook exchange after 48... ♣f7 49. ♣b7 ] **49.♣b3 ♣f3+ 50.♣b4** [ Black resigned because the king can hide from the checks on b5 . 50.♣b4 ♣f5+ 51.♣b5 ♣f7 52. ♣b7 ]

## □ 6.1) Outside Passed Pawn: f-g ■ f-g-h Pawns on the Kingside

The endgame books have dedicated many pages to the endgames of this type. In most cases, the weakest side can make a draw. Moreover, the newest engines seriously improved the defending chances by finding new resources. The two next games will prove there is nothing easy about such endgames. In 2013, Magnus Carlsen lost twice in such endgames. So let's figure out what went wrong. Z0

## □ 6.1) Outside Passed Pawn: f-g ■ Magnus Carlsen vs. Wang Hao #

XI								Y	
8-	+	-	+	-	+	-	+	0{	
7+	R	+	-	+	p	+	-	0	
6-	+	-	+	k	+	p	+	0	
5+	-	+	p	+	-	+	p	0	
4r	+	-	+	-	+	-	P	0	
3+	-	+	-	K	-	P	-	0	
2-	+	-	+	-	P	-	+	0	
1+	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

**44... ♣e4+** This position is also drawn. At first, the Chinese player forces the opponent to choose a side for his king. **45.♣d3** A correct choice.

## □ 6.1) Outside Passed Pawn: f-g ■ Magnus Carlsen vs. Wang Hao #

(Diagram)

**48...♣g4** As Wang Hao said at the press conference after the game, Carlsen would not have difficulties defending if Black

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XI | | | | | | | Y
8- + - + - + - + 0{
7+ - - + R+ - + - 0
6- + - + - p p + 0
5+ - + p + k + p 0
4- + - + - + - P 0
3+ - + K + - P - 0
2- + - + - P - + 0
1+ - + - t - + - 0
x a b c d e f g h y

```

threw the king forward. 49. | d6 f5  
50. | xg6+ ♠f3 51. | g5

□ 6.1) Outside Passed Pawn: f-g  
■ Magnus Carlsen vs. Wang Hao #

```

XI | | | | | | | Y
8- + - + - + - + 0{
7+ - - + R+ - + - 0
6- + - + - p p + 0
5+ - + p + k + p 0
4- + - + - + - P 0
3+ - + K + - P - 0
2- + - + - P - + 0
1+ - + - t - + - 0
x a b c d e f g h y

```

48... | e5 What idea, typical for such endgames, did Carlsen employ here? 49.f3  
The white pawns build a wall against the enemy's king. Continued from Black's perspective in the next variation.

□ 6.1) Outside Passed Pawn: f-g  
■ Magnus Carlsen vs. Wang Hao #

49.f3 Continuation of the previous variation. How did Wang Hao keep as much tension as possible? ♠e6 50. | g7 g5

```

XI | | | | | | | Y
8- + - + - + - + 0
7+ - - + R+ - + - 0
6- + - + - p p + 0
5+ - + p t k + p 0
4- + - + - + - P 0
3+ - + K + - P - 0
2- + - + - P - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

Now it is forced. 51. | h7 g4 Black's best chance. Continued from White's perspective in the next variation.

□ 6.1) Outside Passed Pawn: f-g  
■ Magnus Carlsen vs. Wang Hao #

```

XI | | | | | | | Y
8- + - + - + - + 0{
7+ - - + - + - + R 0
6- + - + k p - + 0
5+ - + p t - p p 0
4- + - + - + - P 0
3+ - + K + P P - 0
2- + - + - + - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

51...g4 Continuation of the previous variation. White stands before an important choice - to take or not to take. On the one hand, books teach us that we should aim for exchanges when we are on the defending side. On the other hand, f3 - f4 is a concrete move that can force a draw. I strongly recommend you try solving this problem yourself. And already after that, to continue studying the analysis. 52.f4  
[ In my opinion, 52.f4 is a better move. But before explaining these moments, I want to

share essential thoughts on the decision-making topic. It is a common situation in rook endgames when we have a choice of two or more continuations and, unfortunately, can't calculate them correctly till some clear moment (possible reasons for this are different - time on the clock, tiredness, difficulty of the problem, etc.). All lines end in unclear positions where we don't see the next move. Which puzzle will be easier for us when coming there? How to choose in such situations? The answer: only general principles can help us. The most vital is the activity of our and the opponent's king and rook. If the calculation ends when the opponent's pieces are more active, we probably need to keep seeking for a better option. And when our pieces end up on active squares, it might be a good choice for us. Another general evaluation factor is a pawn structure - the existence of passed pawns, the probability of their advancing, weaknesses that might be attacked, etc. So, if we can't calculate the position till the end, we must compare the static factors. Of course, all I said is equally correct for all positions. If our comparison is accurate, we will have more chances to find the continuation - that we could not see in the starting position - when the critical situation appears on the board. Let's return to the Carlsen - Wang Hao game. As I said above, I consider f4 a stronger move. Talking about pawn structure, we can see that in the case of the g3-pawn win, Black does not get a pair of connected passed pawns (after fxf4, losing g3 is deadly dangerous for White). And second, is that it is easier to keep the white king active after f4 (at least Carlsen could not find a way to keep his king in the center). Let me repeat that for the engine, both moves are fine. I just tried to evaluate which move would lead to a simpler position for White. Now let's see the concrete variations. ] 52... ♖e1 53. ♗xh5

The most straightforward move. ♗g1 54. ♖d4 After the game, Carlsen said that he had not found a satisfactory move after ♗a1. If we evaluate this position from the general point of view, we can notice that White has a more active king, but the rook is not good (if it can't take on d5). 55. ♗h8 Black can't hurt White with a side attack. ♗a3 56. ♗e8+ ♖f5 57. ♗e3

□ 6.1) Outside Passed Pawn: f-g  
 ■ Magnus Carlsen vs. Wang Hao #

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	-	+	-	+	-	+	-	R0
6-	+	-	+	k	p	-	+	0
5+	-	+	p	r	-	+	p	0
4-	+	-	+	-	+	P	P	0
3+	-	+	K	+	-	P	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

52...hxf4 How do we make the black king passive? 53. ♗g7 The only move. ♖f5 54. ♗g6+ ♖f7 55. ♗a6 The black king is cut off along the rank. Continued in the next variation.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Magnus Carlsen vs. Wang Hao #

(Diagram)

55... ♖e1 Continuation of the previous variation. After Black's move there is a problem with the g3 -pawn. White has two saving ideas here, but they appeared too hard to even for Carlsen. But I still offer you to find at least one of them. 56.h5

XI	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	+	-	+	0{	
7+	-	+	-	+	k	+	-	0	
6R	+	-	+	-	+	-	+	0	
5+	-	+	p	t	p	+	-	0	
4-	+	-	+	-	+	p	P	0	
3+	-	+	K	+	-	P	-	0	
2-	+	-	+	-	+	-	+	0	
1+	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

To consider this move seriously, one needs to see that its main idea is the outpost on g6. Otherwise, the pawn move does not make much sense. But even when you see that it helps against ... f5 - f4, you are confused that the black rook can attack both of your pawns. But for these cases, the king on d3 is here to help.  $\downarrow$  h1 57.  $\Phi$  d4  $\downarrow$  xh5 58.  $\Phi$  e5 This is a good illustration of activity in the rook endgame. The black rook and king are too passive to win with two extra pawns.

☐ 6.1) Outside Passed Pawn: f-g  
☒ Magnus Carlsen vs. Wang Hao #

(Diagram)

56.  $\Phi$  d2 With the white king on d2, Black gets a winning position. How to continue?  $\downarrow$  g1 57.  $\downarrow$  a3 d4 Black had to push his king and pawn forward. 58.  $\Phi$  e2  $\Phi$  e6 59.  $\Phi$  f2  $\downarrow$  c1 Preparing the defense from side checks. White is lost.

XI	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	+	-	+	0	
7+	-	+	-	+	k	+	-	0	
6R	+	-	+	-	+	-	+	0	
5+	-	+	p	+	p	+	-	0	
4-	+	-	+	-	+	p	P	0	
3+	-	+	K	+	-	P	-	0	
2-	+	-	+	-	+	-	+	0	
1+	-	+	-	t	-	+	-	0[	
x	a	b	c	d	e	f	g	h	y

☐ 6.1) Outside Passed Pawn: f-g  
☒ Magnus Carlsen vs. Wang Hao #

XI	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	+	-	+	0{	
7+	-	+	-	+	k	+	-	0	
6-	+	-	+	-	+	-	+	0	
5+	-	+	p	+	-	+	-	0	
4-	+	-	k	-	P	-	P	0	
3+	-	+	-	+	-	p	-	0	
2R	+	-	+	-	+	-	+	0	
1+	-	+	-	t	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

58...  $\downarrow$  e4+ This is the critical position for White's save. When you see it on the board, it is easier to consider both Kxd5 and Kd3. But when you face this position while calculating (together with many other positions), you will probably only calculate the capture. Which move is best? 59.  $\Phi$  d3

☐ 6.1) Outside Passed Pawn: f-g  
☒ Magnus Carlsen vs. Wang Hao #

60...  $\Phi$  e5 How did Carlsen start counterplay here? 61. h5  $\downarrow$  h2 62. h6 d4 63.  $\Phi$  g1

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	+	-	+	0
6	R	+	-	+	-	<del>k</del>	-	0
5	+	-	+	p	+	p	+	0
4	-	+	-	+	-	+	p	P0
3	+	-	+	-	+	-	<del>P</del>	0
2	-	+	r	+	-	+	-	0
1	+	-	+	-	+	K	+	0
	x	a	b	c	d	e	f	g
								h
								y

Forcing the rook to go to the passive square.

- 6.1) Outside Passed Pawn: f-g  
 ■ Magnus Carlsen vs. Wang Hao (,2013)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	R	+	-	+	p	+	0
6	-	+	-	+	k	+	p	0
5	+	-	+	p	+	-	+	p0
4	r	+	-	+	-	+	-	P0
3	+	-	+	-	<del>k</del>	-	<del>P</del>	0
2	-	+	-	+	-	<del>P</del>	-	0
1	+	-	+	-	+	-	+	0
	x	a	b	c	d	e	f	g
								h
								y

This position is also drawn. At first, the Chinese player forces the opponent to choose a side for his king. 44... | e4+ 45.♠d3 [A correct choice. The reason is that after 45.♠f3?! Black can defend the rook with the pawn f5! and cut off the king along the e-file. Of course, stopping the d-pawn with just the rook is much harder. Though, a deep analysis does not help to find a clear winning way for Black, even with the white king on the kingside. ] 45... | e1 46. | b6+ ♠f5 47. | b7 f6 48. | d7 | e5 [As Wang Hao said at the

press conference after the game, Carlsen would not have difficulties defending if Black threw the king forward. 48...♠g4 **A)** 49. | xd5?? | d1+ 50.♠c4 | xd5 51.♠xd5 ♠f3 52.♠e6 ♠xf2 53.♠xf6 ♠xg3 54.♠xg6 ( 54.♠g5 ♠h3 ) 54...♠xh4 ; **B)** 49. | d6 the pawn's capture leads to a losing pawn endgame. f5 50. | xg6+ ♠f3 51. | g5 ] **49.f3** [This is a typical idea for such endgames. The white pawns build a wall against the enemy's king. There is no need to calculate if White can save the game if he ignores the ...Kg4 idea by playing 49. | d8 . ] **49...♠e6** [Wang Hao keeps as much tension as possible. He correctly estimated that there was no need to play ...g6-g5 . 49...g5 50.hxg5 fxg5 51.♠d4 ] **50. | g7 g5** Now it is forced. [ There is a repetition if Black defends on g6 with the king. 50...♠f5 51. | d7 ] **51. | h7** [Similar endgames might arise after both 51.f4 and 51.Kd4 . 51.f4?! gxf4 52.gxf4 | e4 53. | h7 | xf4 54. | xh5 ; 51.♠d4 g4! 52.fxg4 | e4+ 53.♠d3 | xg4 54. | h7 | xg3+ 55.♠e2 Black has an extra pawn and two passed pawns. It looks dangerous for White, even though the endgame tablebase says it is a draw. ] **51...g4** Black's best chance. White stands before an important choice - to take or not to take. On the one hand, books teach us that we should aim for exchanges when we are on the defending side. On the other hand, f3 - f4 is a concrete move that can force a draw. I strongly recommend you try solving this problem yourself. And already after that, to continue studying the analysis. **52.fxg4** [In my opinion, 52.f4 is a better move. But before explaining these moments, I want to share essential thoughts on the decision-making topic. It is a common situation in rook endgames when we have a choice of two or more continuations and, unfortunately, can't calculate them correctly till some clear moment (possible reasons for this are different - time on the clock, tir



edness, difficulty of the problem, etc.). All lines end in unclear positions where we don't see the next move. Which puzzle will be easier for us when coming there? How to choose in such situations? The answer: only general principles can help us. The most vital is the activity of our and the opponent's king and rook. If the calculation ends when the opponent's pieces are more active, we probably need to keep seeking for a better option. And when our pieces end up on active squares, it might be a good choice for us. Another general evaluation factor is a pawn structure - the existence of passed pawns, the probability of their advancing, weaknesses that might be attacked, etc. So, if we can't calculate the position till the end, we must compare the static factors. Of course, all I said is equally correct for all positions. If our comparison is accurate, we will have more chances to find the continuation - that we could not see in the starting position - when the critical situation appears on the board. Let's return to the Carlsen - Wang Hao game. As I said above, I consider 52.f4 a stronger move. Talking about pawn structure, we can see that in the case of the g3 -pawn win, Black does not get a pair of connected passed pawns (after fxc4, losing g3 is deadly dangerous for White). And second, is that it is easier to keep the white king active after 52.f4 (at least Carlsen could not find a way to keep his king in the center). Let me repeat that for the engine, both moves are fine. I just tried to evaluate which move would lead to a simpler position for White. Now let's see the concrete variations. f4 e1 53. xh5 The most straightforward move. g1 54. d4 After the game, Carlsen said that he had not found a satisfactory move after **A)** A check from d1 was also tricky. 54... d1+!? **A1)** Black is winning in case of the more natural 55. e3?? d4+ **A1a)** 56. e2 g1 57. d3 ( 57. f2

Everything looks defended, but there is no way to stop the d-pawn after d3 ) 57... xg3+ 58. d4 The weakness of the f4 -pawn decides the game. f3! After calling the white king on e4, Black will have the ... f6 - f5 (check!) threat. 59. e4 a3 The white pieces are horribly placed and can't save the f4 -pawn. 60. f5+ ( 60. b5 f5+ 61. d4 a4+ 62. e3 e4+ ) 60... d6 White has no defense against the ... Ra4, ... Ke5 idea. ; **A1b)** 56. f2 d2+! 57. f1 The location of the h5 -rook does not leave hope for White; the d3 -pawn is unstoppable. ( 57. e1 g2 ) 57...f5! 58. h8 ( 58. g5 d3 59. g8 d5 60. e8 d4 ) 58...d5! 59. e8 d3 60. e7 ( 60. h5 h2 ) 60...d4 61. e8 h2 62. e1 g2 ; **A2)** 55. c3 ; **B)** 54... xg3 55. xd5 Is the simplest way. d3+ 56. d3 d5 57. h5 e6 58. h6 f7 59. f5! f8 60. e4 h7 61. f4 xh6 62. xg4 ; **C)** 54... a1 If we evaluate this position from the general point of view, we can notice that White has a more active king, but the rook is not good (if it can't take on d5 ). 55. h8! Black can't hurt White with a side attack. a3 ( 55... a4+ 56. e3 a3+ 57. f2 In this variation, the white king is back to the second rank (passive), but the opponent's king is also not active. That's why the position is equal. ) 56. e8+! ( 56. d8 is also fine. ) 56...f5 57. e3 ] **52...hxg4 53. g7** The only move. [ 53. h5?? f5 ] **53...f5** [Black's pieces are paralyzed after 53...f5 54. d7 ; After 53... e4 White can push his passed pawn forward. 54. h5 ] **54. g6+ f7 55. a6** The black king is cut off along the rank (passive). But after Black's next move, there is a problem with the g3 -pawn. e1 White has two saving ideas here, but they appeared too hard to even for Carlsen. But I still offer you to find at least one of them. **56. d2** With the white king on d2, Black gets a winning position, but it is not the

end of the adventures in this game. Carlsen will have another saving chance. [ 56.h5! To consider this move seriously, one needs to see that its main idea is the outpost on g6 . Otherwise, the pawn move does not make much sense. But even when you see that it helps against ... f5 - f4 , you are confused that the black rook can attack both of your pawns. But for these cases, the king on d3 is here to help. **A)** 56...f4 57.gxf4 g3 58. | g6 | g1 59.♣e2 ; **B)** 56... | h1 57.♣d4 | xh5 **B1)** 58.♣xd5 also saves the game. f4+ 59.♣e4 fxxg3 ( 59...f3 60.♣f4 | h1 61. | a2 ) 60. | a1 ; **B2)** 58.♣e5 This is a good illustration of activity in the rook endgame. The black rook and king are too passive to win with two extra pawns. ; **C)** 56... | g1 57.♣d4! | xg3 58.♣e5! White combines threats to the opponent's king with an attack on his pawns. | f3 59. | a7+ ♣g8 60.h6 ( 60.♣f6 is also fine. ) 60...g3 61.♣f6 g2 62. | g7+ ♣h8 63. | xg2 ; 56.♣d4! f4! ( 56... | g1 57.♣e5 ) 57.gxf4 g3 58. | a2 | e4+ This is the critical position for White's save. When you see it on the board, it is easier to consider both Kxd5 and Kd3 . But when you face this position while calculating (together with many other positions), you will probably only calculate the capture. **A)** The reflexive capture leaves White no saving chances. 59.♣xd5? | xf4 White can't cope with the ... Rg4 , ... Kg6 - h5xh4 plan. **A1)** 60.♣e5 | g4 61. | g2 ( 61.♣f5 g2 ) 61...♣g6 ; **A2)** 60. | g2 | g4 61.♣e5 ♣g6 ; **B)** 59.♣d3! | xf4 60.♣e3 60.Rg2 is less concrete but also fine to make a draw. | xh4 61.♣f3! The white king is on time to take on g3 and return to the d-pawn. ♣e6 ( 61... | h3 62.♣g4 | h2 63. | a7+ ♣e6 64.♣xg3 ) 62.♣xg3 | e4 63.♣f3 ♣e5 64. | a1 White is ready for the frontal checks described in the theoretical part of this course. ] **56... | g1 57. | a3 | g2+** What can be more natural than to give such a check that forces the king to go

to the first rank? But it appears to be such an unobvious mistake that players still couldn't realize it right after the game. Forcing the king to come closer to his rook, Wang Hao lost an essential tempo. Instead, Black had to push his king and pawn forward. [ 57...d4 58.♣e2 ♣e6 **A)** 59.h5 | g2+ 60.♣f1 | h2 61.h6 ♣e5 ( 61... | xh6?? 62. | a6+ ♣d5 63. | xh6 ); **B)** 59.♣f2 | c1 Preparing the defense from side checks. White is lost. ; 57...♣f6 58.♣e2 d4 59.♣f2 | c1 ; 57...♣e6 is also good. ] **58.♣e1 ♣f6 59.♣f1 | c2 60. | a6+ ♣e5 61.h5** Carlsen begins his only possible counterplay. | h2 **62.h6 d4 63.♣g1** Forcing the rook to go to the passive square. | h3 **64.♣g2** Carlsens paid back his opponent's mistake. Like Wang Hao made a mistake with a natural move (57... Rg2 ), and Carlsen made the instinctive move that locked down the opponent's rook. Sometimes, the reflexive moves are not good. It is interesting that Wang Hao has not even paid attention to this moment during his press conference. The core of the mistake is that both the f2 - and g2 -squares were good for the king to keep the rook arrested in the corner. With the king on f2 , the rook moves to h1 or h2 do not help the rook to get out because of the king moves (to g2 or g1 correspondingly). If the above-mentioned is correct, the f2 -square is way more advantageous because the king can help his rook fight against the d-pawn by controlling the e3 -square. [To prove the evaluation of the position, I show you only the most challenging line. 64.♣f2! d3 65. | a5+ ♣d4! 66. | a4+ The black king should go to the b-file since the e3 -square is under attack. ( 66. | xf5?? | xh6 ) 66...♣c3 67. | a3+ ♣c2 68. | a2+ ♣b3 69. | a6 d2 70.♣e2 | h2+ 71.♣d1 ♣c3 72. | a3+ ♣d4 Now it is time for the h-pawn to play its role. 73.h7! ♣e4 74.h8♠ | xh8 75.♣xd2 As we already saw in this course,

the rook endgames with two pawns against one pawn with a similar pawn structure are drawn, but the white king is far from his pawn, and the game continues. f4! Here is one of my favorite positions in this course. White has the only saving move here. Can you find it? **A)** To understand why 76.Ke1 helps White to save the game, we need to see how 76.♙e2? loses. f3+! 77.♙f2 ♖h2+ 78.♙f1 ♗g2 The black king escapes from the checks. 79.♖a4+ ♙f5 80.♖a5+ ♙e6 81.♖a6+ ♙d5 82.♖a5+ ♙c6 83.♖a6+ ♙b5 Two extra pawns guarantee Black a win. ; **B)** 76.♖a4+? ♙f3 77.♖xf4+ ♙xg3 The defending side can't hope for a save if the knight's pawn has gone over the middle of the board, and the king is not in the corner. ; **C)** 76.gxf4? The trickiest false line is here. ♖h3! This move is easy to blunder. (The white king is on time after 76...♙xf4? 77.♙e2 ♖h2+ 78.♙f1) 77.♖a4+ ♙f3 The f4 -pawn does not help in fighting against the g-pawn. 78.f5 g3 79.f6 ♖h5 ; **D)** 76.♙e1!! **D1)** The black king can't leave the g-pawn alone in case of 76...f3 77.♖a4+ ♙f5 78.♖a5+ ♙e6 (78...♙f6 79.♖a6+ ♙f7 80.♖a7+ ) 79.♖g5 ♖h1+ 80.♙f2 ♖h2+ 81.♙f1 ; **D2)** 76...fxg3 77.♖xg3 ♙f4 **D2a)** The awkward rook's position helps Black to win in case of careless 78.♙f2?? ♖h2+ 79.♖g2 ♖h1 80.♖g3 (80.♙e2 g3) 80...♖f1+ ; **D2b)** 78.♖a3 ; **D3)** 76...♖h3 77.♙f2 ] **64...d3** Having the e3 -square vacant, the black king can effectively help the pawn. **65.♖a5+ ♙d4 66.♖a4+ [ 66.♖xf5 ♖xh6 ] 66...♙c3 67.♖a6 [ 67.♖a3+ ♙c2 68.♖a2+ ♙b3 69.♖a6 d2 leads to similar positions. ] 67...d2 68.♖c6+ ♙d3 69.♖d6+ ♙c2 70.♖c6+ ♙d1 71.♖d6** It is the moment for some final precise calculation. Find the win! **f4** The mechanism that allows Black to bring his rook to the play. The engine shows that the other moves are also winning. But they

all only work if Black uses this idea at the end. **72.gxf4 ♙e2 73.♖e6+ ♖e3 74.♖xe3+ ♙xe3** White can promote his pawn, but it no longer matters. **75.h7 d1♙ 76.h8♙ ♙f3+ 77.♙g1 ♙f2+ 78.♙h1 ♙f1+ 79.♙h2 g3+** The final touch. White resigned because he loses his queen. [ 79...g3+ 80.♙xg3 ♙g1+ 81.♙h4 ♙h2+ 82.♙g5 ♙xh8 ]

□ **6.1) Outside Passed Pawn: f-g**  
 ■ **Magnus Carlsen vs. Fabiano Ca**

X	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	+	k	+	0	
7+	-	+	-	+	p	p	-	0	
6-	p	-	+	-	+	-	p	0	
5+	-	+	R	+	-	+	-	0	
4-	t	-	+	-	+	-	+	0	
3+	-	+	-	+	-	P	-	0	
2-	+	-	+	-	P	K	P	0	
1+	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

In the comments to this game, I specially mentioned the players' comments from the press conference to show you what they considered and explain why Magnus Carlsen made his mistakes. But of course, this should not be seen as me criticizing the players. I completely understand how difficult to play the game without seeing the engine's evaluations and, the opposite, how easy to give advice when you see the lines. The evaluation of the starting position is a draw. But one thing is to know the estimation; another is to prove it. **33.h4** Everyone should know how to build their pawn structure when defending (!) in similar endgames. Your pawns should be on the f2 , g3 , and h4 -squares (f7, g6 , and h5 if you are Black). Such a setup helps to fight against the opponent's pawns

advancing in the best way. ♖f8 34. ♗d7  
Carlsen leaves the opponent's king passive.  
In this position, Caruana had a choice of  
how to defend his b-pawn - along the file or  
the rank. He decided to bring his rook to the  
6th rank because, in the first case, the  
white pieces were perfectly placed to  
defend.

- 6.1) Outside Passed Pawn: f-g  
■ Magnus Carlsen vs. Fabiano Ca

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	♞	-	+	0
7	+	-	+	R	+	p	p	-	0
6	-	p	-	+	-	+	-	p	0
5	+	-	+	-	+	-	+	-	0
4	-	+	-	+	r	+	-	P	0
3	+	-	+	-	+	-	P	-	0
2	-	+	-	+	-	P	K	+	0
1	+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h	y

35. ♗b7 What is Black's plan? ♗e6  
Black wants to play ... Rf6 and march with  
the king to c8 to push the rook away from  
b7. White had many defending ideas.  
Carlsen decided to prepare g4 - g5 and  
prevent the opponent's rook from staying on  
f6 (the perfect square where it defends both  
the b6 - and f7 -pawns). 36.g4 g5  
Caruana secures the f6 -square for his rook  
and frees the way for his king to the  
kingside.

- 6.1) Outside Passed Pawn: f-g  
■ Magnus Carlsen vs. Fabiano Ca

40. ♖xf4 What did Caruana play here? ♞h5  
Saving the pawn on h4 will help Caruana to  
win the game. But objectively, the position  
remains drawish.

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	♞	-	+	0
7	+	R	+	-	+	p	+	-	0
6	-	p	r	+	-	+	-	p	0
5	+	-	+	-	+	-	P	-	0
4	-	+	-	+	-	p	-	P	0
3	+	-	+	-	+	K	+	-	0
2	-	+	-	+	-	+	-	+	0
1	+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h	y

- 6.1) Outside Passed Pawn: f-g  
■ Magnus Carlsen vs. Fabiano Ca

X	I	I	I	I	I	I	I	Y	
8	-	R	-	+	-	+	-	+	0
7	+	-	+	-	+	p	♞	-	0
6	-	p	-	+	-	+	-	+	0
5	+	-	+	-	+	-	P	p	0
4	-	r	-	+	-	♞	-	P	0
3	+	-	+	-	+	-	+	-	0
2	-	+	-	+	-	+	-	+	0
1	+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h	y

47. ♖e5 How did Caruana make progress in  
this position? ♖g6 [Caruana uses a  
triangulation to lose a tempo and to get a  
'zugzwang' position (after the moves Kf5  
47... ♗b1) with White to move. ] 48. ♗g8+  
♖h7 49. ♗f8 ♗xh4 50. ♗xf7+ ♖g6  
51. ♗f6+ ♖xg5 52. ♗xb6 ♗a4 The cut-off  
of the white king along the rank makes this  
endgame winning for Black. Though, a few  
more master decisions were required from  
Caruana to win.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Magnus Carlsen vs. Fabiano Ca

X	I	I	I	I	I	I	I	Y		
8	-	+	-	+	-	R	-	+	0	
7	+	-	+	-	+	-	+	-	0	
6	-	+	-	+	-	+	-	+	0	
5	+	-	+	-	K	-	+	p	0	
4	r	+	-	+	-	+	-	+	0	
3	+	-	+	-	+	-	K	-	0	
2	-	+	-	+	-	+	-	+	0	
1	+	-	+	-	+	-	+	-	0	
	x	a	b	c	d	e	f	g	h	y

56. | g8+ What is the only winning move here? ♔h2 The first hard decision. Only this move wins the game.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Magnus Carlsen vs. Fabiano Ca, Moscow 2013)

X	I	I	I	I	I	I	I	Y		
8	-	+	-	+	-	+	k	+	0	
7	+	-	+	-	+	p	p	-	0	
6	-	p	-	+	-	+	-	p	0	
5	+	-	+	R	+	-	+	-	0	
4	-	r	-	+	-	+	-	+	0	
3	+	-	+	-	+	-	P	-	0	
2	-	+	-	+	-	P	K	P	0	
1	+	-	+	-	+	-	+	-	0	
	x	a	b	c	d	e	f	g	h	y

In the comments to this game, I specially mentioned the players' comments from the press conference to show you what they considered and explain why Magnus Carlsen made his mistakes. But of course, this should not be seen as me criticizing the players. I completely understand how difficult to play the game without seeing the engine's evaluations and, the opposite,

how easy to give advice when you see the lines. The evaluation of the starting position is a draw. But one thing is to know the estimation; another is to prove it. **33.h4** Everyone should know how to build their pawn structure when defending (!) in similar endgames. Your pawns should be on the f2 , g3 , and h4 -squares ( f7 , g6 , and d h5 if you are Black). Such a setup helps to fight against the opponent's pawns advancing in the best way. [It was equally good to play h2 - h4 after the check. 33. | d8+ ♔h7 34.h4 (If White does not play h2 - h4 , Black should automatically play g7 - g5 . 34. | b8? g5 In such a way, Black creates an additional weakness on h2 . Even if White manages to play h2 - h4 , after g5xh4 - g3xh4 , there will be a weak pawn on h4 . )] **33... ♔f8 34. | d7** Carlsen leaves the opponent's king passive. In this position, Caruana had a choice of how to defend his b-pawn - along the file or the rank. He decided to bring his rook to the 6th rank because, in the first case, the white pieces were perfectly placed to defend. Here I will tell a bit about positions of such a type (three pawns against three pawns on the kingside and the passed pawn on the b-file). The endgame is drawn. In my opinion, the simplest defending technique is to keep the king near the center ( e3 for White and e6 for Black) to be ready to block the opponent king's run to the b-pawn (in this endgame, it might be ... Kf8 - g7 - f6 - e6 with an idea of ... Kd5 ) by a move Ke3 - d4 or Ke6 - d5 correspondingly. Even if the strongest side takes on f2 ( f7 ), the defending side can take a passed pawn and successfully return to the kingside to hold the draw. Such a defense is possible only with the pawn on the b-file! | e4 [ 34...b5 35. | b7 g6 36. ♔f3 h5 37. ♔e3 ] **35. | b7** | e6 Black wants to play ... Rf6 and march with the king to c8 to push the rook away from b7 . White had many defending ideas. Carlsen decided to prepare g4 - g5 and

prevent the opponent's rook from staying on f6 (the perfect square where it defends both the b6 - and f7 -pawns). **36.g4**

[ Amongst other defending ideas, I would highlight one where White fixes the kingside pawns of the opponent. 36.h5! | f6 37.g4 ♠e8 This is the only possible try for Black. 38.♠g3 ♠d8 39.f4 ♠c8 40.|e7 Black can't simultaneously advance his b-pawn and cope with the opponent's play on the kingside. b5 41.g5 hxg5 42.fxg5 | f1 43.|e5 b4 44.|b5 |b1 45.h6 ] **36...g5** Caruana secures the f6 - square for his rook and frees the way for his king to the kingside. **37.f4**

[ Carlsen couldn't explain why he had refused the idea of the pawn exchange. 37.hxg5 hxg5 38.f4 **A)** There is also nothing for Black after 38...f6 39.♠f3 ♠e8 **A1)** 40.fxg5? Is an inaccuracy that will force White to seek the only defense later. fxg5 41.♠f2 ( 41.|g??? |e5 The rook on g5 and pawn on e5 perfectly isolates the white king. The black king goes to support the b-pawn and Black wins. ) 41...♠d8 42.♠f3! ♠c8 Black wants to play ... Re5 followed by ... b6 - b5 , but White has a save. 43.|f7! |e5 44.|f5 ; **A2)** 40.|g7! |e7 41.|g8+ ♠f7 42.|b8 |e6 43.|b7+ ♠f8 ( 43...♠g6?? 44.f5+ ) 44.|b8+ with a simple draw. ; **B)** 38...gxf4 39.♠f3 |f6 White can just wait after ( 39...♠g7 40.♠xf4 ♠g6 41.♠f3 Black can put his rook ahead of the pawn and bring his king closer to the b-pawn. But counterplay against the f-pawn guarantees White a comfortable draw without serious risk. |c6 42.♠f4 |c4+ 43.♠f3 |b4 44.♠g3 ♠f6 45.♠f3 ♠e6 46.♠g3 f6 47.♠f3 |b1 48.♠f4 b5 49.|b6+ ♠e7 50.♠f5 ) 40.g5 |c6 41.♠xf4 ♠g7 Having the white pawn more advanced (on g5 compared to g4 in the previous sideline) does not give Black decent additional chances. The position remains drawn. ] **37...gxf4 38.♠f3 |f6 39.g5 |c6**

[ 39...hxg5 40.hxg5 |c6 41.♠xf4 ♠g7 We have already seen this position in the notes to White's 37th move. ] **40.♠xf4**

[ After the game, Caruana noted that White could take on h6 and play h4 - h5 (to prepare a capture on f4 ). But both opponents failed to find the key defending idea against Black's plan of playing ...Rf6 , followed by a march of his king to h6 . 40.gxh6 |xh6 41.h5 (Black is winning in the following line. 41.♠xf4? |xh4+ 42.♠g5 |b4 43.♠f6 ♠e8 44.|e7+ ♠d8 White needs to make one more move to take on f7 because, at the moment, both of the captures instantly lose to f4 . ; It was also possible to make the waiting moves with the king. 41.♠g4 ♠g7 42.♠f3 |f6 Now it is time for the key idea. 43.|d7! ♠g6 44.|d5 The rook will be perfect on b5 . Black, of course, can try to bring the king back to c6 (via f8 ), but the white rook will return to the 7th rank at the right moment. ) 41...|f6 ( 41...|xh5 42.|xb6 ) 42.|d7! ♠g7 ( 42...|f5 43.h6 ♠g8 44.|d6 b5 45.|b6 ) 43.|d5! ♠h6 44.|b5 ] **40...h5** Saving the pawn on h4 will help Caruana to win the game. But objectively, the position remains drawish. **41.♠f5 ♠g7 42.|b8 |c5+** The rook goes in front of the pawn. From there, it can attack the king, the pawn on h4 , and support the b-pawn advancing. **43.♠f4 |b5 44.♠e4** White keeps waiting. |b1 **45.♠f5 |b2 46.♠f4 |b4+** [ 46...♠g6 made no sense because of the check. 47.|g8+ ♠h7 48.|b8 ♠g7 49.♠f5 ] **47.♠e5** [After the game, both players thought that White would have trouble in the following line. 47.♠f5 |b1 Carlsen later made his decisive mistake after being scared by this 'zugzwang' position. The engine does not have emotions or fears and quietly holds the position. The best Black can pretend for (with more of White's assistance) is the drawish endgame with the h- and f-pawns. Of course, the fight would last for longer

there. But White can hold the position without that theoretical f+h-test. 48.♔f4 (48.♖b7 ♖b5+! 49.♔f4 ♔g6 The black king advances (no check from g8), but it appears insufficient. 50.♖b8 ♖b4+ 51.♔g3 ♔f5 52.♖f8 ♖g4+ 53.♔h3 ♔e6 54.♖h8 The rook has enough time to take on h5 and return to the b-file. b5 55.♖xh5) 48...b5 49.♖b6 **A)** 49...b4 Now, even a careless move to g3 (that allows the Rg1 - g4 maneuver) does not help Black to win the game. 50.♔g3 (50.♔f3) 50...♖g1+ 51.♔h3 ♖g4 52.♖d6 ♔f8 What else? 53.♖h6 ♖c4 54.♖xh5 ; **B)** 49...♖b3 Black wants to play ... b5 - b4 and ... Rb3 to win on h4 (using a skewer along the 4th rank). But White has two ideas to defend. The first is to keep the king on the 5th rank. The second is to pin the f7 -pawn and prepare g5 - g6 . 50.♖b7 b4 51.♔f5 ♖f3+ 52.♔e5 (52.♔e4 ♖h3 53.♔f5 ♖xh4 54.g6) 52...b3 53.♔e4 ♖h3 54.♔f5 ] **47...♔g6** [Caruana uses a triangulation to lose a tempo and to get a 'zugzwang' position (after the moves Kf5 47...♖b1) with White to move. ] **48.♖g8+ ♔h7** **49.♖f8** [As we know, Caruana's plan was safe for Carlsen, but even the best players sometimes get scared by pseudo-threats. 49.♖b8! ♔g7 50.♔f5 ♖b1 51.♔f4 ] **49...♖xh4** **50.♖xf7+** Unexpectedly, this capture was not the only possible move for White. Moreover, that second alternative move could still save the game. This saving trick can occasionally be called upon because no one plays Rg8 - f8 (to give up the pawn) to play Rf8 - b8 on the next move. In fact, White lost the game on the previous move. [ 50.♖b8! With the black king on h7, White manages to get enough counterplay. b5 The best chance. (50...♖b4 51.♔f6 ♖f4+ 52.♔e5 ; 50...♔g6 51.♖g8+) 51.♖xb5 ♔g6 52.♖b8 ♔xg5 53.♖g8+ ♔h6 54.♔f5 The horrible rook's position and the difference between the kings determine the result. ♖h1 55.♖h8+

♔g7 56.♖a8 f6 57.♖a7+ ♔h6 58.♔xf6 ♖f1+ 59.♔e5 ] **50...♔g6** **51.♖f6+ ♔xg5** **52.♖xb6 ♖a4** The cut-off of the white king along the rank makes this endgame winning for Black. Though, a few more master decisions were required from Caruana to win. **53.♖b8 ♔g4** The king goes forward to support the pawn. **54.♖g8+ ♔f3** **55.♖f8+ ♔g3** [Here is one of the lines that Carlsen hoped for. 55...♔e3? 56.♖b8 ♖a5+ The white king gets pushed back even further, but the black king is also too far from the h-pawn. The latter fact is more crucial. 57.♔f6 h4 58.♖b4! ♖h5 59.♔g6 ♖h8 60.♔g7 The h-file is too short for the rook. ] **56.♖g8+ ♔h2** The first hard decision. Only this move wins the game. [ 56...♔h3? 57.♔f5 h4 58.♖b8 There is no satisfactory defense from the side checks. ; 56...♖g4? 57.♖a8 ♖f4! This position also wasn't correctly evaluated at the press conference by the players. The black rook technically defends the king from both sides. If Black plays ... h5 - h4, he wins. White needs to hurry. (57...h4?! 58.♖a3+ ♔g2 59.♔f5 ♖g3 60.♖a2+ ♔h3 61.♔f4) 58.♖a1! (58.♖g8+? ♔f3) 58...♖f2! The rook again organizes a block from both sides. (58...h4 59.♖g1+ ♔f2 60.♔xf4 ♔xg1 61.♔g4) 59.♖a8! This back-and-forth movement saves the game. (59.♖g1+? ♖g2 ; 59.♖a3+? ♖f3 ; 59.♔e4? h4 60.♔e3 h3) 59...h4 60.♖g8+ **A)** 60...♔f3 61.♖f8+ ♔g2 62.♖g8+ ♔h2 (62...♔f1 63.♖h8) 63.♔e4 h3 64.♔e3 ; **B)** 60...♔h2 61.♔e4 h3 62.♔e3 ] **57.♔f5 h4** **58.♖b8** White hopes for the side checks. **h3** This move advanced the pawn one square closer to the promotion and prepared a hiding square for the king. **59.♔g5** Carlsen blocks the h4 -square and prepares the side checks. The last crucial moment in the game! How does Black win? [ Another defending try was connected with the side checks. 59.♖b2+ ♔g3 60.♖b3+

♖h4! 61. ♖b2 ♖a1! Defending the 1st rank and preparing the Kg3 - g2 - g1 maneuver.  
 62. ♖f4 ( 62. ♖b4+ ♖g3 63. ♖b3+ ♖g2 64. ♖b2+ ♖g1 ) 62... ♖f1+ 63. ♖e3 ♖g3 ]  
**59... ♖e4** Black does not allow the opponent's king to approach the pawn and prepares a cover for the king. [The most natural move was 59... ♖a2 But, White has a nice response here. 60. ♖h4! He attacks the pawn and frees the g-file for the check. ♖g2? ( 60... ♖a4+! Returning to the game position is required. ) 61. ♖g8+ ♖h1 This is a nice tactical opportunity, but White is not forced to take the pawn. 62. ♖g3 ( 62. ♖xh3?? ♖h2+ 63. ♖g4 ♖g2+ 64. ♖f5 ♖xg8 ) 62... h2 63. ♖h3 This is a draw. ♖a8 64. ♖b3 ♖h8+ 65. ♖g3 ♖g8+ 66. ♖f2 ; 59... ♖a1? was not enough because of 60. ♖g4! ♖g1+ 61. ♖f3 ]  
**60. ♖f5** [The waiting strategy does not bring the desired effect. 60. ♖a8 ♖g1 61. ♖a1+ ♖f2 62. ♖a2+ ♖e2 ;The side checks also does not help. 60. ♖b2+ ♖g1 61. ♖b1+ ♖f2 62. ♖b2+ ♖e2 ] **60... ♖e2**  
 The 4th rank is finally opened, but it is too late for a draw. **61. ♖g8** [Other lines are relatively easy - White can't stop the pawn. 61. ♖f4 ♖g2 62. ♖g8+ ♖f1 63. ♖f3 ( 63. ♖h8 h2 64. ♖g3 ♖g1 ) 63... h2 64. ♖h8 ♖f2+ 65. ♖e3 ( 65. ♖g3 ♖g1 ) 65... ♖g1 ] **61... ♖g2 62. ♖d8 ♖f2+**  
 [ White resigned because of 62... ♖f2+ 63. ♖e4 ( 63. ♖g4 ♖g2 ) 63... ♖g1 64. ♖g8+ ( 64. ♖d1+ ♖f1 ) 64... ♖g2 ]

□ **6.1) Outside Passed Pawn: f-g**  
 ■ **Viswanathan Anand vs. Magnus**

(Diagram)

Now let's study how confidently Anand defended the same position in the classical game against Carlsen. **48. ♖c6** The same as Grischuk, Anand first prevents ... Kf6 . ♖a2

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	p	k	-	0
6p	+	-	+	-	+	p	+	0
5r	-	+	-	+	-	+	p	0
4-	+	R	+	-	+	-	P	0
3+	-	+	-	+	-	P	-	0
2-	+	-	+	-	P	K	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

**49. ♖f3 a5 50. ♖a6 a4 51. ♖e3 a3**  
**52. ♖f3** Just waiting. Continued in the next variation.

□ **6.1) Outside Passed Pawn: f-g**  
 ■ **Viswanathan Anand vs. Magnus**

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	-	+	-	+	p	k	-	0
6R	+	-	+	-	+	p	+	0
5+	-	+	-	+	-	+	p	0
4-	+	-	+	-	+	-	P	0
3p	-	+	-	+	K	P	-	0
2r	+	-	+	-	P	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

**52...f6** Continuation of the previous variation. Black can't avoid this move if he wants to win. **53. ♖a7+ ♖f8 54. ♖g2**  
 Here is the crucial difference between this and the previous game. Anand leaves his king in the corner, which helps him to avoid any difficulties after ... g6 - g5 (the move that Black will play anyway).



□ 6.1) Outside Passed Pawn: f-g  
 ■ Viswanathan Anand vs. Magnus

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	0{	
7	+	-	+	-	+	k	+	- 0	
6	R	+	-	+	-	p	p	+	0
5	+	-	+	-	+	-	+	p	0
4	-	+	-	+	-	+	-	P	0
3	p	-	+	-	+	-	P	-	0
2	r	+	-	+	-	P	K	+	0
1	+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h	y

59...g5 What does White need to prevent?  
 60.g4 As we know from the analysis of the previous game, Black is winning if he manages to play ... g5 - g4 and the white king remains in the corner.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Viswanathan Anand vs. Magnus

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	k 0{	
7	R	-	+	-	+	-	+	- 0	
6	-	+	-	+	-	p	-	P 0	
5	+	-	+	-	+	-	+	- 0	
4	-	+	-	+	-	+	-	p 0	
3	p	-	+	-	+	-	+	- 0	
2	-	+	-	+	-	P	-	K 0	
1	t	-	+	-	+	-	+	- 0	
x	a	b	c	d	e	f	g	h	y

64...f5 Carlsen wants to move his pawn to f3 , to play ... a2 and use a zugzwang (the white king will be stuck to h2 due to ... Rh1 and ... a1=Q ; the rook will be stuck to a7 to stop the pawn and to prevent ... Kh7 ). But Anand does not allow him to complete

even the first part of this plan. 65.f4 a2 66.♣g2 The opponents agreed to a draw.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Viswanathan Anand vs. Magnus, Saint Louis 2017)

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	0	
7	+	-	+	-	+	p	k	- 0	
6	p	+	-	+	-	+	p	+	0
5	t	-	+	-	+	-	+	p	0
4	-	+	R	+	-	+	-	P	0
3	+	-	+	-	+	-	P	-	0
2	-	+	-	+	-	P	K	+	0
1	+	-	+	-	+	-	+	-	0[
x	a	b	c	d	e	f	g	h	y

Now let's study how confidently Anand defended the same position in the classical game against Carlsen. 48. ♣c6 The same as Grischuk, Anand first prevents ... Kf6 . ♣a2 49.♣f3 a5 50. ♣a6 a4 51.♣e3 a3 52.♣f3 Just waiting. f6 Black can't avoid this move if he wants to win. 53. ♣a7+ ♣f8 54.♣g2 Here is the crucial difference between this and the previous game. Anand leaves his king in the corner, which helps him to avoid any difficulties after ... g6 - g5 (the move that Black will play anyway). ♣a1 55.♣f3 ♣e8 56. ♣a6 ♣e7 57.♣g2 ♣f7 58.♣f3 ♣a2 59.♣g2 Not much has changed compared to the previous diagram. Carlsen tries the last chance. g5 60.g4 As we know from the analysis of the previous game, Black is winning if he manages to play ... g5 - g4 and the white king remains in the corner. But instead of a passive defense, Anand organizes a passed pawn on the h-file, which secures a quiet draw. gxf4 [There is no any winning idea after 60...hxf4 61.hxf5 fxf5 White can take on g4 , but even without this, the position is drawish. 62. ♣a4 ♣a1 63. ♣xf4 ]

61.gxh5 | a1 62. | a7+ ♠g8 63.h6 ♠h8  
64.♠h2 f5 Carlsen wants to move his  
pawn to f3 , to play ... a2 and use a  
zugzwang (the white king will be stuck to  
h2 due to ... Rh1 and ... a1=Q ; the rook  
will be stuck to a7 to stop the pawn and to  
prevent ... Kh7 ). But Anand does not allow  
him to complete even the first part of this  
plan. 65.f4 a2 66.♠g2 The opponents  
agreed to a draw.

### □ 6.1) Outside Passed Pawn: f-g ■ David Navara vs. Nikolai Kaba

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	k	+	p	+	p0
6	-	+	-	+	-	+	p	+0
5	+	-	P	-	R	-	+	-0
4	-	+	r	+	-	+	-	P0
3	+	-	+	-	+	-	P	-0
2	-	+	-	K	-	P	-	+0
1	+	-	+	-	+	-	+	-0
x	a	b	c	d	e	f	g	h
y								

What might be more natural than to play h7 -  
h5 ? In this course, you can find an  
explanation of why the f7 - g6 - h5 pawn  
structure is considered the best for the  
defending side (see the Carlsen - Caruana  
notes to move 33.h4 ). But by coincidence,  
here, this rule does not work. By playing ...  
h5 , Kabanov has created an extra problem  
for himself. What is a better option here?  
45...f5 It was better to move the f7 -pawn  
forward. The pawn on h7 would be less of a  
weakness (compared to the g6 -pawn if  
Black plays both h7 - h5 and f7 - f5 ). h4 -  
h5 - h6 might be an issue, with the idea to  
take on h7 and promote the pawn, but  
Black is on time to stop this and take the  
white h-pawn with ... Rh1 and ... Rxh6 .  
The king stays on d7 to prevent c5 - c6 and

cover the e6 , e7 , and e8 -squares; the rook  
controls the 4th rank. 46.h5 | g4 47.♠d3  
| a4 48.h6 | a1

### □ 6.1) Outside Passed Pawn: f-g ■ David Navara vs. Nikolai Kaba

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	k	+	p	+	-0
6	-	+	-	+	-	+	p	+0
5	+	-	P	-	R	-	+	p0
4	-	+	r	+	-	+	-	P0
3	+	-	+	K	+	-	P	-0
2	-	+	-	+	-	P	-	+0
1	+	-	+	-	+	-	+	-0
x	a	b	c	d	e	f	g	h
y								

46... | c1 The black king and rook do the  
same job - stop the c5 -pawn. 47.♠d4  
Black can't simultaneously cope with both  
f2 - f4 - f5 advancing and the c5 -pawn  
advancing. | d1+ 48.♠e4 | c1 49. | d5+  
Again, we see the idea of a check that  
determines the position of the opponent's  
king. After that, White chooses the opposite  
side to play on.

### □ 6.1) Outside Passed Pawn: f-g ■ David Navara vs. Nikolai Kaba

(Diagram)

55...♠e6 The win is very instructive in this  
position. I offer you to train in finding it.  
56.♠f8 ♠f6 Black can't move the f7 -  
pawn because of Kg7xg6 . 57.f3 ♠e6  
58.g4 hxg4 59.fxg4 ♠f6 60.♠g8  
The simplest. White plays h4 - h5 against  
any move.

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	0{	
7	+	-	+	-	+	<del>p</del> <b>K</b>	-	0	
6	-	+	-	+	-	<del>p</del> <b>P</b>	+	0	
5	+	-	+	-	+	<b>k</b>	+	<del>p</del> <b>0</b>	
4	-	+	-	+	-	+	-	<del>P</del> <b>0</b>	
3	+	-	+	-	+	-	+	<del>P</del> <b>0</b>	
2	-	+	-	+	-	<del>P</del> <b>P</b>	-	+	0
1	+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h	y

- 6.1) Outside Passed Pawn: f-g  
 ■ David Navara vs. Nikolai Kaba

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	0{	
7	+	-	+	-	<del>k</del> <b>p</b>	+	-	0	
6	-	+	-	+	-	+	<del>p</del> <b>P</b>	0	
5	+	-	<del>P</del> <b>R</b>	+	-	+	<del>p</del> <b>0</b>		
4	-	+	-	<del>k</del> <b>K</b>	-	+	-	<del>P</del> <b>0</b>	
3	+	-	+	-	+	-	+	<del>P</del> <b>0</b>	
2	-	+	-	+	-	<del>P</del> <b>P</b>	-	+	0
1	+	-	<del>t</del> <b>t</b>	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h	y

50... | c2 How does White prevent Black's counterplay? 51.f4 The passed pawn and the f4 - f5 idea guarantee White a win. f6 52.f5 g5 53.hxg5 fxg5 Black hoped to create a passed pawn, but White left him no chance. 54. | d6

- 6.1) Outside Passed Pawn: f-g  
 ■ David Navara vs. Nikolai Kaba

57... | g2 How does White make progress towards promotion? 58. | e6+ A technical moment. Navara kicked the black king away from the d-file; then he moved his

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	0{	
7	+	-	+	-	<del>k</del> <b>K</b>	-	+	-	0
6	-	+	<del>K</del> <b>R</b>	-	+	-	+	0	
5	+	-	<del>P</del> <b>P</b>	-	+	<del>P</del> <b>P</b>	<del>p</del> <b>p</b>	0	
4	-	+	-	+	-	+	-	+	0
3	+	-	+	-	+	-	+	<del>P</del> <b>P</b>	0
2	-	+	-	<del>t</del> <b>t</b>	-	+	-	+	0
1	+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h	y

king to d7 , and his rook provided the king with a cover from d6 . ♔f7 59.♔d7 | xg3 60.c6 | d3+ 61. | d6 | c3 62.c7 Black resigned.

- 6.1) Outside Passed Pawn: f-g  
 ■ David Navara vs. Nikolai Kaba, Khar'yan Vasyuk 201

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	0{	
7	+	-	+	<del>k</del> <b>K</b>	+	<del>p</del> <b>p</b>	+	<del>p</del> <b>p</b>	0
6	-	+	-	+	-	+	<del>p</del> <b>P</b>	+	0
5	+	-	<del>P</del> <b>P</b>	-	<del>R</del> <b>R</b>	-	+	-	0
4	-	+	<del>r</del> <b>r</b>	+	-	+	-	<del>P</del> <b>P</b>	0
3	+	-	+	-	+	-	+	<del>P</del> <b>P</b>	0
2	-	+	-	<del>k</del> <b>K</b>	-	<del>P</del> <b>P</b>	-	+	0
1	+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h	y

What might be more natural than to play h7 - h5 ? In this course, you can find an explanation of why the f7 - g6 - h5 pawn structure is considered the best for the defending side (see the Carlsen - Caruana notes to move 33.h4 ). But by coincidence, here, this rule does not work. By playing ... h5 , Kabanov has created an extra problem for himself. Already, on the next move, he failed to solve it and got a losing position. 45...h5 It was better to move the f7 -pawn

forward. The pawn on h7 would be less of a weakness (compared to the g6 -pawn if Black plays both h7 - h5 and f7 - f5 ). h4 - h5 - h6 might be an issue, with the idea to take on h7 and promote the pawn, but Black is on time to stop this and take the white h-pawn with ... Rh1 and ... Rxh6 . The king stays on d7 to prevent c5 - c6 and cover the e6 , e7 , and e8 -squares; the rook controls the 4th rank. [ 45...f5! 46.h5 | g4 47.♠d3 ( 47.h6 | g5 ) 47...| a4 48.h6 | a1 ] **46.♠d3 | c1** The black king and rook do the same job - stop the c5 -pawn. Instead, the rook's mission was to control the 4th rank. [ 46...| b4! The engine indicates that White is slightly better but shows no real plan for improvement. 47.| e4 | b2 48.| f4 f5 49.♠d4 ♠c6 50.♠e5 ♠xc5 51.♠f6 | b6+ ] **47.♠d4** Black can't simultaneously cope with both f2 - f4 - f5 advancing and the c5 -pawn advancing. | **d1+** **48.♠e4 | c1** [ Black missed a chance to offer the most resistance. 48...| e1+ 49.♠f4 **A** ) White is steadily improving the position in the following line. 49...| f1 50.| e2 f6 **A1** 51.c6+?? was a false way. ♠d6! ( 51...♠xc6?? 52.| e6+ ) 52.| c2 ( 52.c7 ♠xc7 53.| e6 | xf2+ 54.♠e3 | f5 ) 52...♠c7 ; **A2** ) 51.| d2+ ♠e7 ( 51...♠c6 52.| d6+ ♠xc5 53.| xf6 | xf2+ 54.♠g5 | g2 55.| f3 | d2 56.♠xg6 | d5 57.| f5 ) 52.♠e4 ♠e6 53.f4 | g1 54.| d6+ ♠e7 55.| d3 ♠e6 56.| c3 ♠d7 57.c6+ ♠c7 58.♠d5 | e1 59.| a3 ♠b6 60.♠d6 ; **B** ) 49...| c1 50.♠g5! | c2 Here is the puzzle! White has the only winning move. Can you find it? 51.| e4!! A fantastic move! Besides leaving the f2 -pawn, White additionally offers Black to take the c5 -pawn. The main goal is to organize the attack on the weakest black pawn ( f7 ). For this, White needs to have Rf4 in the pocket. ( 51.f4? | c3 ; 51.f3? | c3 ) **B1** ) 51...| xf2 52.| f4! Here is the point of the previous move. | g2 (White wins all the pawns in the pawn

endgame. 52...| xf4 53.gxf4 ♠e6 54.c6 ♠d6 55.♠f6 ) 53.| xf7+ ♠e6 54.| f3 ; **B2** ) 51...| xc5+ 52.♠h6! Black can't save the f7 -pawn. ( 52.♠f6? | f5+ 53.♠g7 | xf2 ) 52...| f5 **B2a** ) Even the king and pawn endgame is winning for White after 53.| f4! **B2a1** ) After 53...| xf4 54.gxf4 Black has no defense against the Kg5 , f4 - f5 plan. ♠e6 ( 54...♠e7 55.♠g5 ♠e6 56.f3 ♠e7 57.f5 gxf5 58.♠xf5 ) 55.♠g5 ♠e7 56.f5 gxf5 57.♠xf5 f6 58.♠g6 ; **B2a2** ) 53...♠e6 54.| xf5 ♠xf5 55.♠g7 ♠e6 The win is very instructive in this position. I offer you to train in finding it. ( 55...f6 56.♠h6 ) 56.♠f8! ♠f6 Black can't move the f7 -pawn because of Kg7xg6 . 57.f3 ♠e6 58.g4 **B2a21** ) 58...♠f6 59.g5+ ♠e6 60.f4 ♠f5 ( 60...f6 61.♠g7 ) 61.♠xf7 ♠xf4 62.♠xg6 ; **B2a22** ) 58...hxg4 59.fxg4 ♠f6 60.♠g8! The simplest. White plays h4 - h5 against any move. ♠e7 ( 60...♠e6 61.h5 ; 60...g5 61.h5 ) 61.h5 ; **B2b** ) 53.f4! ♠d6 ( 53...| a5 54.| e3! The precise move that stops ... Ra3 . White's next moves are Kg7 , Kf8 (if Black plays ... Rf5 ), and Re3 - e7xf7 . ) 54.♠g7 ♠d7 55.♠f8! This is the point; Black can't defend against Re7xf7 . ♠d6 56.| e7 f6 57.♠f7 ] **49.| d5+** Again, we see the idea of a check that determines the position of the opponent's king. After that, White chooses the opposite side to play on. ♠e7 [ 49...♠c6 50.| d6+ ♠xc5 51.| f6 | e1+ 52.♠f4 | e7 53.♠g5 ; 49...♠c7 **A** ) 50.f4? f5+! 51.♠e5 ( 51.♠d4 | g1 ) 51...| c3 52.♠f6 | xg3 ; **B** ) 50.♠d4 Moving away from the ... f7 - f5 check and defending the c3 -square (to prevent ... Rc3 ). ] **50.♠d4 | c2** **51.f4** The passed pawn and the f4 - f5 idea guarantee White a win. **f6** [Other continuations also do not help Black. 51...| c1 52.f5 gxf5 53.| xf5 | g1 54.| f3 The rook goes to c3 to support the passed pawn, and the king goes to the kingside. ; 51...f5 52.| d6 | d2+ 53.♠e5 | e2+ 54.♠d5 ] **52.f5 g5** **53.hxg5 fxg5**

Black hoped to create a passed pawn, but White left him no chance. 54. | d6 | d2+ 55. ♖e5 | e2+ 56. ♙d5 | d2+ [ 56...h4 57.gxh4 gxh4 58. | h6 | d2+ 59. ♙c6 | d4 60. ♙c7 Black can't cope with the c-pawn advancing. ] 57. ♙c6 | g2 58. | e6+ A technical moment. Navara kicked the black king away from the d-file; then he moved his king to d7 , and his rook provided the king with a cover from d6 . ♙f7 59. ♙d7 | xg3 60.c6 | d3+ 61. | d6 | c3 62.c7 Black resigned.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Arkadij Naiditsch vs. Erwin L

X	I	I	I	I	I	I	I	Y		
8	-	t	-	+	-	+	-	+	O	
7	+	-	+	-	+	-	+	-	O	
6	-	+	-	+	-	+	-	+	O	
5	+	-	+	-	+	-	+	-	O	
4	-	P	K	+	-	+	-	+	O	
3	+	-	+	-	+	-	p	-	O	
2	-	R	-	+	-	+	P	m	O	
1	+	-	+	-	+	-	+	-	O	
	x	a	b	c	d	e	f	g	h	y

55.b5 Here, we face a moment where the players usually fail to find the best continuation. Black can't ignore the b-pawn pushing. The only possible counterplay is to move the rook to f2 . The only question - at which moment to do this? | b6 56. ♙c5 | f6 Now it is fine. 57.b6 | f2

□ 6.1) Outside Passed Pawn: f-g  
 ■ Arkadij Naiditsch vs. Erwin L

40... ♙h6 What did Naiditsch play here?  
 41.b3 Of course, White advanced his pawn one square up. ♙g5 42. ♙f2 ♙f4 43. | b2 White defends the g2 -pawn by the rook

X	I	I	I	I	I	I	I	Y		
8	-	+	-	+	-	+	-	+	O	
7	+	-	+	-	+	p	+	k	O	
6	-	+	-	+	-	+	p	+	O	
5	+	-	+	-	+	-	+	p	O	
4	-	t	-	+	-	+	-	+	O	
3	+	-	+	-	+	P	+	P	O	
2	-	P	-	+	-	+	P	+	O	
1	+	R	+	-	+	-	k	-	O	
	x	a	b	c	d	e	f	g	h	y

and frees the king for the run to the queenside. Black should find the only idea to save the game.

□ 6.1) Outside Passed Pawn: f-g  
 ■ Arkadij Naiditsch vs. Erwin L

X	I	I	I	I	I	I	I	Y		
8	-	+	-	+	-	+	-	+	O	
7	+	-	+	-	+	p	+	-	O	
6	-	+	-	+	-	+	-	+	O	
5	+	-	+	-	k	-	p	p	O	
4	-	t	-	+	-	+	-	+	O	
3	+	P	+	-	+	P	+	P	O	
2	-	R	-	+	K	+	P	+	O	
1	+	-	+	-	+	-	+	-	O	
	x	a	b	c	d	e	f	g	h	y

45. ♙d3 What does Black need to do here?  
 g4 Black needed to exchange the pawns on the kingside. 46. ♙c3 | f4 47.fxg4 hxg4 48.hxg4 ♙d5 It was a hard move to foresee. The black king is in time to migrate to the queenside.

□ 6.1) Outside Passed Pawn: f-g

■ Arkadij Naiditsch vs. Erwin L

```

Xl | | | | | | | Y
8- + - + - + - + 0{
7+ - + - + p + - 0
6- + - + - + - + 0
5+ - + k + - p p 0
4- + - + - t - + 0
3+ P k - + P + P 0
2R + - + - + P + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

47...♠c6 Now White is winning because Black can't organize counterplay on the kingside. 48.♖a4 ♖f5 49.♖c4+

An important check which forces the black king to determine which part of the board it stays at. If it moves to the center, White advances the pawn. If the king stays on the queenside, the white king goes to the kingside to weaken and then win the black pawns.

□ 6.1) Outside Passed Pawn: f-g

■ Arkadij Naiditsch vs. Erwin L, 2011)

(Diagram)

The next example shows us the tricks of the situation when the rook of the strongest side is behind the passed pawn, but the pawn is blocked in the initial position by the rook. Black was in front with a difficult choice - to block the pawn but lose time for the king's centralization or to advance the king towards the center but allow the white pawn to move one rank up. As already seen in the previous variations, both ways were drawish. The main question is where finding the draw in future critical moments

```

Xl | | | | | | | Y
8- + - + - + - + 0{
7+ - + - + p + k 0
6- + - + - + p + 0
5+ - + - + - + p 0
4- t - + - + - + 0
3+ - + - + P + P 0
2- P - + - + P + 0
1+ R + - + - k - 0
x a b c d e f g h y

```

will be simpler. 40...♠h6 [The Dutch player decided to move the king. In my opinion, it would be easier to hold the position after 40...♖b3! 41.♠f2 ♠h6 42.♠e2 (There is no use in stopping ...Kg5 . ) ( 42.h4 g5 ) 42...♠g5 43.♠d2 ♠f4 44.♠c2 ♖b8 45.♖e1! White solidly defends his kingside pawns, but the b-pawn advancing after that is almost impossible. ( White can even lose if he plays straightforwardly. 45.b4 ♠g3 46.b5? ♠xg2 ) 45...♠g3 46.♖e2 In this position, Black has at least two ways to defend well. One (harder) is the same as could happen in the game; another (simpler) is to use the frontal checks technique (see the theoretical chapter if you don't remember how this works). It should not be difficult to defend, considering Black has five ranks between his rook and pawn. A) 46...g5 47.♠c3 f5 48.b4 g4 49.hxg4 hxg4 50.fxg4 fxg4 51.♠c4 ♖c8+ 52.♠b3 ♖b8 53.♖b2! White defends on b4 and prepares the king's run forward. ♠h2 54.♠c4 g3 55.b5 Here, we face a moment where the players usually fail to find the best continuation. Black can't ignore the b-pawn pushing. The only possible counterplay is to move the rook to f2 . The only question - at which moment to do this? ♖b6! ( The straightforward 55...♖f8?? loses to an unexpected back move. 56.b6 ♖f2 57.♠c3 Black should wait for Kc5 . )

56.♠c5 ♖f6! Now it is fine. 57.b6 ♖f2!  
 58.♖b1 ♠xg2 59.b7 ♖f8 60.b8♞ ♖xb8  
 61.♖xb8 ♠f2 ; **B)** 46...♖c8+ 47.♠d3 ♖b8  
 Black should always prevent the b2 -pawn  
 from advancing. 48.♠c4 ♖c8+ 49.♠d5  
 ♖b8 50.♠c5 ♖c8+ 51.♠d6 ♖b8 52.♠e7  
 ( 52.♠c7 ♖b3 ) 52...♖b7+ 53.♠f6 ♠f4  
 followed by Kg3 . It is not clear how White  
 can make progress. ] **41.b3** Of course,  
 White advanced his pawn one square up.  
 ♠g5 **42.♠f2 ♠f4 43.♖b2** White defends  
 the g2 -pawn by the rook and frees the king  
 for the run to the queenside. Black should  
 find the only idea to save the game. **g5**  
**44.♠e2** There is a crucial position on the  
 board. Of course, Black can only play only  
 with the king and pawns because if the rook  
 moves, the b3 -pawn continues forward.  
 The king can try to create a counterplay  
 with Kg3 . But one needs to calculate a  
 long line to determine if this works. L'Ami  
 couldn't see it and preferred to move his  
 king to the center. But the latter appeared  
 not so good. ♠e5 [ 44...♠g3! 45.♠d3 ♖f5  
 46.♠c3 Here, I offer you a quote from  
 Nunn's Chess Endings (Volume 2, page  
 49): 'One of the most common errors in  
 rook endings with few pawns involves the  
 concept of checking distance. In many  
 positions, it is important to have your rook  
 positioned at the maximum possible  
 distance from the enemy king. The reason  
 is that a comment method of stopping a  
 barrage of rook checks is for the king to  
 approach the rook. It follows that when you  
 are checking from the opposite side of the  
 board, the king has to go a long way to stop  
 the checks. Thus in many positions, having  
 the maximum possible checking distance is  
 an advantage. This applies especially in  
 positions of rook and pawn vs. rook, which  
 many textbooks examine quite carefully.  
 The idea of securing the maximum  
 checking distance occurs so often that it  
 becomes a reflex to move the rook as far  
 away from the enemy king as possible. The

trouble is that in endings where both sides  
 have pawns, there may be reasons why the  
 rook shouldn't go to the far edge of the  
 board, and in this case, the reflex action  
 can be wrong.' Going back to the game  
 position, the reflexive move would be ...  
 Rb8 (to play the rook as distant as possible)  
 followed by ... g5 - g4 , ... Kh2 , ... g4 - g3  
 , and ... Rb8 - f8 - f2 . But if Black plays ..  
 . Rb8 , White can advance his pawn too far  
 to disable the ... Rf8 - f2 maneuver. Black  
 should choose from other squares on the b-  
 file to get enough time for the ... Rf2 idea.  
**A)** 46...♖b8? 47.b4 g4 48.hxg4 hxg4  
 49.fxg4 fxg4 50.b5 ♠h2 51.b6 g3 52.b7  
 And Black doesn't get an opportunity to  
 play ... Rf8 - f2 . **A1)** 52...♖f8 53.b8♞  
 ♖xb8 54.♖xb8 ♠xg2 55.♠d2!  
 Don't forget to control the e1 -square!  
 ( 55.♠d3?? ♠f2 56.♖f8+ ♠e1 ) 55...♠h2  
 56.♖h8+ ♠g1 57.♠e2 g2 58.♖g8 ♠h2  
 59.♠f2 ; **A2)** 52...♠g1 53.♠d4 ♠h2  
 54.♠d5 ♖xb7 ( 54...♠g1 55.♠c6  
 Black can't even take the g2 -pawn. )  
 55.♖xb7 ♠xg2 56.♠e4 ; **B)** 46...♖b7?  
 is also not enough 47.b4 g4 48.hxg4 hxg4  
 49.fxg4 fxg4 50.b5 ♠h2 51.b6 g3  
 52.♠d4 ♖f7 53.b7 ; **C)** 46...♖b6!! 47.b4  
 g4 48.hxg4 hxg4 49.fxg4 fxg4 50.b5  
 ♠h2 51.♠d4 g3 52.♠c5 ♖f6!  
 Right on time! 53.b6 ♖f2 54.♖b1 ♠xg2  
 55.b7 ♖f8 56.b8♞ ♖xb8 57.♖xb8 ♠f2 ;  
 44...f5 with the same idea leads to a move  
 transposition. ] **45.♠d3 ♠d5** This is a  
 decisive mistake. Black needed to exchange  
 the pawns on the kingside. [ 45...g4!  
 46.♠c3 ♖f4! 47.fxg4 hxg4 48.hxg4  
 ( White loses the h-pawn if he decides to  
 move it forward. 48.h4 g3 49.h5 ♖h4 ) **A)**  
 The reflexive capture loses to a cut-off  
 move. 48...♖xg4?? 49.♖d2! ♖g8 50.b4  
 ♖b8 Black is in time to stop the pawn on  
 the 4th rank, so White can't advance the b4 -  
 pawn without the rook's assistance. But  
 luckily for White, the rook can help. The  
 best square for this purpose is f4 . From

there, the rook will defend both pawns and attack the f7 -pawn. 51.♙c4 ♖c8+ 52.♙b3 White will be forced to bring the king back if he tries to move it forward. ( 52.♙b5 ♖b8+ 53.♙c5 ♖c8+ 54.♙b6 ♖b8+ ) 52... ♖b8 53.g4 ♙e6 54.♙f2 ♖g8 55.♙f4 ♖b8 56.♙a4 ♖a8+ 57.♙b5 Black can't stop the b-pawn. ; **B**) 48...♙d5!

It was a hard move to foresee. The black king is in time to migrate to the queenside. 49.b4 ♖xg4 ] 46.♙c3 ♖f4 47.♙a2 Now White is winning because Black can't organize counterplay on the kingside. ♙c6 48.♙a4 ♖f5 49.♙c4+ An important check which forces the black king to determine which part of the board it stays at. If it moves to the center, White advances the pawn. If the king stays on the queenside, the white king goes to the kingside to weaken and then win the black pawns. ♙b5 [ 49...♙d5 50.b4 ♙d6 51.♙b3 ] 50.♙d3 **f6** 51.b4 It was possible to win without this improvement, but Naiditsch preferred to place his pawn on b4 and rook on d4 . ♙d5+ 52.♙d4 ♖e5 53.♙e4

[ An immediate 53.f4 was also winning, but it is more technical first to bring the king closer to the pawns. gxf4 54.♙xf4 ♖g5 55.g4 ] 53... ♖d5+ 54.♙e3 ♖d1 55.♙d4 [ 55.f4! was winning as well. ] 55... ♖b1 [ 55... ♖e1+ 56.♙f2 ♖e8 Here, both underminings win the game. 57.f4 ( 57.h4 ) ] 56.♙e4 ♖b2 57.g4 Black can't keep the balance on the kingside. ♖h2 58.♙d6 ♖xh3 59.♙xf6 ♙xb4 60.♙f5 One pawn is enough to win the game because of the disadvantageous king's position. hxg4 61.fxg4 ♖g3 62.♙xg5 ♖g1 63.♙f3 ♙c4 64.♙a5 ♙d4 65.g5 Black resigned because he had nothing to do against Kf3 - f4 - f5 , followed by a pawn march.

## □ 6.2) Outside Passed Pawn: Oth ■ Other Pawn Structures on the

When chess authors actively investigate the typical "three vs. three + a passed pawn on the queenside" (with pawns on f-, g-, and h-files) , similar endgames with other pawn structures on the kingside remain with less attention. But they can also provide us with a lot of excitement. To illustrate what I mean, let me show you the next game. Z0

## □ 6.2) Outside Passed Pawn: Oth ■ Anton Filippov vs. J. Gonzale

XI	I	I	I	I	I	I	I	Y
8R	+	-	+	-	+	-	+	0
7P	-	+	-	+	p	+	-	0
6-	+	p	+	-	<del>k</del>	p	+	0
5+	-	+	p	+	-	+	p	0
4-	+	-	<del>p</del>	-	+	-	<del>P</del>	0
3t	-	+	-	<del>P</del>	-	+	-	0
2-	+	-	+	-	<del>P</del>	P	+	0
1+	-	+	-	+	-	<del>k</del>	-	0
x	a	b	c	d	e	f	g	h
								y

41.exd4 Kf5?? This move is so natural that seeing '??' near it looks like a joke. How can it be true? How can White get the dream pawn structure on the kingside when both f2 - f3 and g2 - g3 weaken some square for the black king? All of this is correct, but Anton Filippov found an amazing study-like way to make the dream comes true. Test yourself! ♙a1+ Was the correct defense. 42.♙h2 ♖a2 White can't play g2 - g3 because of Rxf2 (check).



□ 6.2) Outside Passed Pawn: Oth  
 ■ Anton Filippov vs. J. Gonzale

```

XI | | | | | | | Y
8R + - + - + - + 0{
7P - + - + p + - 0
6- + p + - k p + 0
5+ - + p + - + p 0
4- + - P - + - P 0
3t - + - + - + - 0
2- + - + - P P + 0
1+ - + - + - K - 0
x a b c d e f g h y

```

41...♙f5 How does White make progress here? 42.g3 White threatens to play f2 - f3 , followed by the king run to the queenside. Black should try to prevent this. ♚a1+ 43.♙h2 Dribbling! All is decided by a zugzwang that arises with the king on g2 and the rook on a2 . If it is White's turn, Black is fine. But if it is Black's turn, White wins. After 43.Kh2 !! White again threatens to play f2 - f3 and is ready to play Kg2 after Ra2 . Black can't prevent f2 - f3 , but White must find one more super move for this! ♚a2 44.♙g2 Zugzwang! Continued in the next variation.

□ 6.2) Outside Passed Pawn: Oth  
 ■ Anton Filippov vs. J. Gonzale

(Diagram)

44...f6 Continuation of the previous variation. The Mexican player decided to freeze his king (now it can't go to e6 because of Re8 and a7 - a8=Q ), planning to disable the f2 - f3 advance. But the king's following maneuver crushes his hopes. 45.♙h3 Only the rook can move. ♚a3 46.♙h2 Going around the last trap. If Black

```

XI | | | | | | | Y
8R + - + - + - + 0{
7P - + - + p + - 0
6- + p + - + p + 0
5+ - + p + k + p 0
4- + - P - + - P 0
3+ - + - + - P - 0
2r + - + - P K + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

wants to stop f2 - f3 , he has nothing but to pin the f2 -pawn. ♚a2 After any other rook move, White plays f2 - f3 . 47.♙g2 The last zugzwang! Black can't prevent f2 - f3 anymore. ♚a3 48.f3 The mission on the kingside is completed - the black king is paralyzed. Now it is time for the king to walk to the queenside.

□ 6.2) Outside Passed Pawn: Oth  
 ■ Anton Filippov vs. J. Gonzale

```

XI | | | | | | | Y
8R + - + - + - + 0{
7P - + - + - + - 0
6- + p + - p p + 0
5+ - + p + k + p 0
4- + - P - + - P 0
3t - + - + P P - 0
2- + - K - + - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

51... ♚a5 Black tried the last chance, but Filippov is careful till the end. Though, as I said earlier, with the pawn on f6 , the Vancura idea does not work well. Let's see why. 52.♙d3 The rook is forced to leave the 5th rank. After this, the win is simple. ♚a3+ 53.♙c2 ♚a5 54.♙b3

Black resigned because he had no response to the white king run.

□ 6.2) Outside Passed Pawn: Oth  
 ■ Anton Filippov vs. J. Gonzale, Istanbul 2012)

```

X I | | | | | | | Y
8 R + - + - + - + 0 {
7 + - + - + p + - 0
6 P + p + p k p + 0
5 + - + p + - + p 0
4 - + - P - + - P 0
3 r - + - P - + - 0
2 - + - + - P P + 0
1 + - + - + - K - 0
x a b c d e f g h y

```

The following example is unique. Anton Filippov demonstrated a fantastic intuition for his king's options and managed to outplay the opponent with Messi-like dribbling. It is hard to imagine, but the next two moves will already decide the game. Let's try to understand the core of the position. Compared to 'classical' situations (when both sides have three pawns on the kingside, and the strongest side has a passed pawn on the queenside), we see five more pawns in the center. At first glance, Black's task should be simple because of a material balance. But everything is far from being so simple. Black can passively defend when there are no pawns in the center (only three vs. three on the kingside) and the opponent's pawn reaches the 7th rank. Then, all he should do is give checks when the king approaches the passed pawn. But thanks to the pawn in the center, White can play a6 - a7 with a plan to deliver the king to the queenside and take the black pawns in the center (the passive play makes no sense here because the d4 -pawn will become a passed pawn). But what will

White do with his kingside pawns if that happens? Of course, the black rook will be unable to take anything because it allows the white rook to get out of the pawns path to promotion. But the black king can do whatever if it is safe from the back-rank checks. The last statement can help us to see the correct pawn structure for White - the pawns on h4, g3, f3, and d4 will not allow the black king to come closer. If White sets this up, plays a6 - a7, and throws the king to the queenside, Black will have nothing to respond to. The next few moves should decide whether this plan will have a chance. **39...e5 40.a7** This move seems to be the best practical chance. **exd4** [ 40...e4 was good enough because the black king would always have the path to attack the queenside pawns (see the plan we described in the previous comment - no f3 - g3 - h4 structure available). But the Mexican player naturally wants to leave fewer pawns on the board. ] **41.exd4 ♠f5** This move is so natural that seeing '??' near it looks like a joke. How can it be true? How can White get the dream pawn structure on the kingside when both f2 - f3 and g2 - g3 weaken some square for the black king? All of this is correct, but Anton Filippov found an amazing study-like way to make the dream come true. Test yourself! [The correct defense was 41... ♠a1+! 42. ♠h2 ♠a2 White can't play g2 - g3 because of Rxf2 (check). **A)** 43. ♠g3 This also does not help White. ♠f5 44. ♠f3 ♠a3+ 45. ♠e2 ♠g4 46. ♠d2 ( After 46.g3 ♠h3 Already White needs to find the only move. 47. ♠c8 ♠xa7 48. ♠xc6 ) 46... ♠xh4 47. ♠c2 Black creates a passed pawn on the h-file. ♠g4 48. ♠b2 ♠a6 49. ♠b3 g5 50. ♠b4 h4 51. ♠c5 ♠f4 52. ♠d6 g4 53. ♠c7 ♠a2! (Remember: the defending side should be ready for the check when the king approaches the passed pawn. 53...h3?? 54.gxh3 gxh3 55. ♠b7 ♠a2 56. ♠h8 ) 54. ♠b7 ♠b2+ 55. ♠xc6

| a2 ; **B)** 43.f3 ♖f5 44.♙g3 | a3 45.♙f2 | a2+ 46.♙e3 | a3+ 47.♙e2 ♖f4 ] **42.g3** White threatens to play f2 - f3 , followed by the king run to the queenside. Black should try to prevent this. | **a1+** [The following line proves we should never forget about the king's safety. 42...♙g4 43.♙g2 | a2 44.♙e8! | xa7 45.♙e5 White checkmates in 1. ] **43.♙h2** Dribbling! All is decided by a zugzwang that arises with the king on g2 and the rook on a2 . If it is White's turn, Black is fine. But if it is Black's turn, White wins. After 43.Kh2 !! White again threatens to play f2 - f3 and is ready to play Kg2 after Ra2 . Black can't prevent f2 - f3 , but White must find one more super move for this! [Here is what happens after the natural king move. 43.♙g2? | a2 White can't advance the f2 -pawn. 44.♙h3 The pawn is unpinned and ready to advance one square forward, but with the rook on a2 , the white king can't get out from the h3 -square. (White can only lose if allowing the black king to invade on g4 . 44.♙f3 | a3+ 45.♙e2 ♖g4 46.♙c8! | xa7 47.♙xc6 ;White should repeat moves after 44.♙g1 ♖g4! 45.♙g2 ♖f5 ) 44...♙f6! 45.f3 ( 45.♙g2 ♖f5 It is a repetition. ) 45...♙f5 46.g4+ ♖f4 47.gxh5 gxh5 48.♙c8 The game should end peacefully. ] **43... | a2** [ 43... | a3 44.f3 Later, we will see how White wins when f2 - f3 is finally played. ;We have already seen the mating motif with the king on g4 . 43...♙g4 44.♙g2 | a2 45.♙e8! | xa7 46.♙e5 ] **44.♙g2** Zugzwang! **f6** The Mexican player decided to freeze his king (now it can't go to e6 because of Re8 and a7 - a8=Q ), planning to disable the f2 - f3 advance. But the king's following maneuver crushes his hopes. [White gets time to play Kf1 and f2 - f3 if the black king moves back. 44...♙f6 45.♙f1! ♖f5 Checks don't play any role here. 46.f3! ♖f6 Now the king goes to the queenside. 47.♙e1 | a4 48.♙e2 ( Of course, White should not give up the

d4 -pawn. 48.♙d2?? | xd4+ 49.♙c3 | a4 ) 48...♙f5 49.♙d3 | a5! We will see this motif in the game, but with the pawn on f7 it is even more dangerous for White. **A)** The Vancura idea helps Black in case of the straightforward 50.♙c3? c5! 51.dxc5 | xc5+ 52.♙b4 | c7! Surprisingly, White can't win here. 53.♙b5 | e7 54.♙b6 | e6+ 55.♙c5 | e7 56.♙xd5 ♖f6 The only reasonable chance is to restrict the black king with the g-pawn. But the black rook has enough space to avoid a zugzwang. 57.g4 | c7 58.♙d6 | b7 White can't reach this position if it is Black to move. 59.♙c6 | e7 60.♙d5 **A1)** 60... | b7?? 61.♙d6 Black is left without good moves. | b6+ ( 61... | e7 62.g5+ ) 62.♙c7 | a6 63.♙b7 | a1 64.♙b8 | b1+ 65.♙c6 and a7 - a8=Q is guaranteed. ; **A2)** 60... | e5+ is also good. 61.♙d6 | e6+ 62.♙d7 | e7+ 63.♙d8 | b7 ; **A3)** 60... | c7 61.♙d6 | b7 ; **B)** 50.♙d2! One more zugzwang in this fantastic endgame. The rook should be on the 5th rank to prepare the ... c6 - c5 idea, and the king can't go to the 7th rank because, after that, the Vancura idea does not work (due to the rook sacrifice followed by the pawn promotion). ♖f6 ( 50... | a3 51.♙c2 ) 51.g4! ♖g7 52.g5! The king is trapped on the 7th rank, and nothing can now stop the white king. (White should be careful not to miss the pawn breakthrough. 52.♙c3? g5! 53.hxg5 h4 ) 52...♙h7 53.♙c3 c5 54.dxc5 | xc5+ 55.♙b4 | c7 56.♙h8+ ; 44...♙g4? 45.♙e8! | xa7 46.♙e5 ] **45.♙h3** Only the rook can move. [ We know White can't allow the black king to enter on g4 . 45.♙f1 | a1+ 46.♙e2? ♖g4 ; 45.♙g1 ♖g4 46.♙f8 | xa7 47.♙xf6 ♙h3! Black is out of danger. ] **45... | a3** **46.♙h2** Going around the last trap. If Black wants to stop f2 - f3 , he has nothing but to pin the f2 -pawn. [White can't leave the king on h3 . 46.f3?? | a2! 47.g4+ ♖f4 48.♙f8 hxg4+ 49.fxg4 | a3+! A technical decision to drive the white king away

before taking on a7 . 50.♙g2 ♖xa7 ]  
**46...** ♖a2 After any other rook move, White plays f2 - f3 . **47.♙g2** The last zugzwang! Black can't prevent f2 - f3 anymore. ♖a3 [ The king gets checkmated after 47...♙g4? 48.♖f8! ♖xa7 49.♖xf6 ] **48.f3** The mission on the kingside is completed - the black king is paralyzed. Now it is time for the king to walk to the queenside. ♖a2+ **49.♙f1 ♖a4 50.♙e2 ♖a3 51.♙d2 ♖a5** Black tried the last chance, but Filippov is careful till the end. Though, as I said earlier , with the pawn on f6 , the Vancura idea does not work well. Let's see why. **52.♙d3** The rook is forced to leave the 5th rank. After this, the win is simple. [ 52.♙c3 c5 53.dxc5 ♖xc5+ 54.♙b4 ♖c7 At first, White wins the d5 -pawn. 55.♙b5 ♖e7 56.♙b6! ♖e6+ With the king on b6 , Black should give this check. 57.♙c5 **A** ) The run to the h6 -square wins the game if Black decides to keep the rook on the a-file. 57... ♖a6 58.♙xd5 ♖a1 59.♙d6 ♖a6+ 60.♙e7 ♖a3 61.♙f7 ♖a4 (Black can't stop the Rf8 check in the following line. 61...g5 62.hxg5 fxc5 63.♙g7 ) 62.♙g7 ♖a3 (At this moment, ...g6 - g5 also does not help. 62...g5 63.hxg5 ♙xc5 64.♙f7 ♙f5 65.g4+! A typical tactical motif with the pawn on the 7th rank. Black has very limited resources due to the rook check idea. hxg4 66.fxc4+ ♙f4 67.♙xf6 ) 63.♙h6! ♖a4 64.♖b8! White gives up his passed pawn to win the kingside pawns. 64. Rc8 is also good. ♖xa7 65.♖b5+ ♙e6 66.♙xg6 ♖a3 67.♖f5 ; **B**) 57... ♖e7 58.♙xd5 ♖f7 59.♙d6 g5 The only move to avoid the checkmate. ( 59... ♖g7 60.♖b8! ♖xa7 61.♖b5# A nice picture. ) 60.hxg5 fxc5 And here is the challenge for White as there is only one winning move. It is easy to find out that the black rook can't move because of Rf8 +. But Black's problem is that his king also can't move back to f6 because of g3 - g4 . So, White should wait for a move. Kc6 seems fitting for this

purpose, but in this case, Black plays ... h5 - h4 , g3 - g4 , and Kf4 with a counterplay. So, the first move should be near the e6 -square. 61.♙d5! ( 61.♙c6? h4! 62.g4+ ♙f4 63.♙b6 ♖f6+ ) **B1**) 61...h4 62.g4+ ♙f4 ( 62...♙f6 63.♙c6! Black has no ... Rf6 with check. h3 64.♙b6 h2 65.♖h8 Right on time! ) 63.♙e6 ; **B2**) 61... ♖d7+ 62.♙c6 ♖f7 The rook should cover the f-file (to prevent Rf8 ). 63.♙d6! Here is a zugzwang! **B2a**) 63...g4 64.fxc4+ hxg4 65.♙c5! This is the shortest winning way; the king goes to b6 , avoiding the ... Rf6 check. ♙f6 ( 65... ♖c7+ 66.♙b6 ) 66.♙b6 ; **B2b**) 63...h4 64.g4+ ♙f4 ( 64...♙f6 65.♙c6 ) 65.♙e6 ; **B2c**) 63...♙f6 64.g4! h4 65.♙c6 Black can't stop Kb6 , followed by a rook move. h3 66.♙b6 h2 67.♖h8 I hope that, after seeing all of this, you agree that 52.Kd3 deserves a '!' mark. ] **52...** ♖a3+ **53.♙c2 ♖a5 54.♙b3** [ Black resigned because he had no response to the white king run. 54.♙b3 ♖b5+ 55.♙a4 ♖b7 56.♙a5 ]

□ 6.2) Outside Passed Pawn: Oth  
 ■ Vassily Ivanchuk vs. Laurent, Beijing

XI	I	I	I	I	I	I	I	Y
8R	+	-	+	-	+	-	+	0{
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5P	-	+	-	+	-	+	-	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2r	+	-	+	-	+	-	+	0
1	+	-	+	-	+	-	+	0
xa	b	c	d	e	f	g	h	y

Laurent Fressinet didn't feel the nuances of the atypical pawn formation on the kingside. It is helpful to see others' mistakes to play better. Here is such a mistake.

How should Black play in this position?

**44...♣h7** One mistake is enough to lose this endgame. [Black should have locked down the white king on the kingside. **44...♭a1!** The only thing White can do is to play f2 - f3 and throw the king to the queenside. **45.a6 ♣f7 46.f3** Nothing else to do. **♭a2+ 47.♣g3 ♭a3!** Compared to the **47...exf3** line, Black forces the white pawn's advancement to e4. **48.fxe4 ♭xe3+ 49.♣f2 ♭a3 50.♣e2 ♣g7 51.♣d2 ♭a4 52.♣c3** Earlier or later, White will be forced to sacrifice the e4 -pawn. **♭xe4 53.♭b8 ♭a4 54.♭b6 f5!** Delaying this breakthrough for a while is possible, but there is no reason to do so. **55.gxf5 g4** It is obvious that Black has enough counterplay for a draw. The whole line I mention here is not forced, and Black doesn't need to see all of this when deciding to play **44...Ra1 !** ] **45.♣f1** The king supports the pawn, and Black can't do anything against this. The main problem is the pawn structure on the kingside. When the white king begins its run to the queenside, and Black takes on f2, it is still far from real counterplay on the kingside. **♣g7** [Here is what can happen if Black dared to take on f2. **45...♭a1+ 46.♣e2 ♭a2+ 47.♣e1 ♭a1+ 48.♣d2 ♭a2+ 49.♣c3 ♭xf2** White has many winning ways in this position. I like the one with the rook on the 5th rank to defend on a5 and control the ... f6 - f5 breakthrough. **50.♭d8 ♭a2** (Black can't stop the a-pawn if he decides to take on e3. **50...♭e2 51.a6 ♭xe3+ 52.♣b4** ) **51.♭d5 ♭a3+ ( 51...♣g6 52.♣b4 ) 52.♣b4 ♭xe3 53.a6 ♭e1 54.♭a5! ♭b1+ 55.♣c4 ♭b8 56.a7 ♭a8 57.♣d4** White first takes on e4, and then takes both black pawns or brings the king to b7 to win the rook. ] **46.a6 ♣h7 47.a7** Often such an advance leads to a draw because the lone king (the rook can't actively participate in the game) can't do enough for a win. But here, Black loses due

to a weakness of the 7th rank. It is enough to bring the king to c6 or d6 and to play **Rd8**, followed by **Rd7** with the rook exchange. The weakness on e4 makes this king and pawn endgame hopeless for Black. **♣g7 48.♣e1 ♭a6 49.♣d2 ♭d6+ 50.♣c3 ♭d7** The French player tried the Vancura idea (to attack the pawn along the rank), but this is also not enough for a draw because of the same rook exchange idea on the 7th rank. [Here is what might happen in the case of passive Black's play. **50...♭a6 51.♣d4 ♭a4+ 52.♣d5 ♣h7 53.♣c6 ♭a1 54.♭d8 ♭xa7 55.♭d7+ ♭xd7 56.♣xd7 ♣g6 57.♣e6 ♣g7 58.♣f5** ] **51.♣c4** [Black resigned. Here is how the game could be continued. **51.♣c4 ♭f7 52.♣d5 ♭e7 53.♣d6 ♭f7 54.♭e8 ♭xa7 55.♭e7+ ♭xe7 56.♣xe7** ]

## □ 6.2) Outside Passed Pawn: Oth ■ Bogdan Bilovil vs. Christian

XI								Y
8R	+	-	+	-	+	-	+	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	+	-	+	-	+	-	+	0
4P	+	-	+	-	+	-	+	0
3	+	-	+	-	+	-	+	0
2r	+	-	+	-	+	-	+	0
1	+	-	+	-	+	-	+	0
xa	b	c	d	e	f	g	h	y

**44.a5** The drawish lines are simpler if White decides to push the pawn. **e4 45.♣f1 ♭a3 46.a6 ♭xh3 47.♭b8 ♭a3 48.♭b6 e3** The simplest. Black immediately removes the odd pawns. **49.f3 ♭a2**

□ 6.2) Outside Passed Pawn: Oth  
 ■ Bogdan Bilovil vs. Christian

```

XI | | | | | | | Y
8R + - + - + - + 0
7+ - + - + - ♔ - 0
6- + - + - + - ♙ 0
5+ - + - ♙ - ♙ - 0
4P + - + K + P + 0
3+ - + - + - + r 0
2- + - + - ♟ - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

46.a5 What was the correct defensive idea?

| a3 47. ♖xe5 | f3 48.a6 | xf2 49. | b8  
 | a2 50. | b6 ♖h7 Black prepares the pawn  
 sacrifice ... h6 - h5 . For this purpose, the k  
 ing is better placed on the h-file (no Rg6  
 check).

□ 6.2) Outside Passed Pawn: Oth  
 ■ Bogdan Bilovil vs. Christian

```

XI | | | | | | | Y
8R + - + - + - + 0
7+ - + - + - ♔ - 0
6- + - + - + - ♙ 0
5+ - + - ♙ - ♙ - 0
4P + - + K + P + 0
3+ - + - + - + r 0
2- + - + - ♟ - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

46.f3 Why does isolating the black rook  
 fail? h5 The idea to isolate the black rook  
 does not work because of ... h6 - h5 ,  
 followed by the exchange of all white  
 pawns on the kingside. 47.gxh5 | xh5  
 48. ♖f5 | h4 49. ♖xg5 | f4

□ 6.2) Outside Passed Pawn: Oth  
 ■ Bogdan Bilovil vs. Christian, 2022)

```

XI | | | | | | | Y
8- + - + - + - + 0
7+ - + - + - ♔ - 0
6R + - + ♙ + - ♙ 0
5+ - + - + - ♙ - 0
4P + - + - + P + 0
3+ - + - + - + P 0
2r + - + - ♟ K + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

In the next game, Black could use the same  
 mechanism of locking down the white king  
 on the kingside. But compared to the  
 Ivanchuk - Fressinet game, both opponents  
 should have considered many other nuances  
 of the position. Compared to a normal pawn  
 structure, Black has two disadvantages. The  
 first is that his king has no cover against sid  
 e checks, and it will often be possible to  
 push it to the back rank. The second is the  
 isolated e6 -pawn. Shouldn't these factors  
 give White an easy win? It looks so, but the  
 analysis shows that everything is far from  
 simple. I invite you to try finding the  
 winning way yourself. But be careful with  
 Black's counterplay! 43. | a8

[ To understand the following lines better,  
 we need to understand the plans of both  
 sides. If Black plays passively, White plays  
 Ra8 , pushes the pawn up to a7 , and then  
 brings the king to the 6th rank to play Rd8  
 or Re8 and to exchange the rook after Rxa7  
 - Rd7 ( Re7 ) with a winning king and pawn  
 endgame. What can Black offer against  
 this? The 'weak' e6 -pawn assists him well  
 here, because Black has two defensive ideas  
 connected with this pawn. First, Black can  
 push the pawn to e3 and exchange the f2 -  
 pawn. It does not guarantee a draw, and in  
 some positions White will still be able to

win, but generally, it seriously increases the saving chances. The second idea is to play ...e5 - e4 and ...Ra1 to lock down the white king on the kingside. Surprisingly 43. ♖a8 is already a serious blunder that could lead to a draw. White had to foresee that e5 was coming and be ready to throw the king forward (via f3 and e4 ). Considering the following forcing lines ( 44. ♖f3 ♖a3+ 45. ♖e4 ♖xh3 and ... h6 - h5 ), it was important to advance the pawn to a5 (right away or after the Ra7 check that does not influence the variation seriously). White wins with a pawn on a5 , but with a pawn on a4 , it will be drawn! Of course, intuitively, it was possible to feel that a4 - a5 is more useful than Ra8 . But I'm pretty sure most players could not find a difference between these two moves in the following lines. ; 43.a5 As I mentioned previously, 43.Ra7 was also satisfying, but it makes the win two moves longer. e5 ( There is no use in delaying the ...e6 - e5 move. 43...♖f7 44. ♖a7+ ♖f6 45.a6 e5 46. ♖a8 e4 47.a7 ♖g7 48.♖f1 The king gets out from the corner. The winning plan is described in the first comment to this game. ) 44. ♖f3 ( Black has one more unusual blocking idea if White pays no attention to his king. 44. ♖a7+ ♖g6 45.a6? 45.Kf3 or 45.Ra6 wins similarly to the lines mentioned above. ♖a1! First, the rook cuts off the white king along the first rank. 46. ♖f3 ♖e1! The next move is ... e5 - e4 . White can't free the king. 47. ♖e7 ♖f6! 48. ♖h7 e4+ 49.♖g2 ♖g6 50. ♖c7 ♖a1 51.a7 ♖f6 ) 44... ♖a3+ Black's only chance is to take on h3 and exchange the g4 -pawn. 45. ♖e4 ♖xh3 Here, White has more than one winning way. 46. ♖b6 ♖a3 ( 46...h5 47.gxh5 ♖xh5 48.a6 ♖h1 49.♖xe5 ) 47.a6 ♖a4+ The only tricky moment in this variation. **A)** 48.♖f5? ♖f4+ 49.♖xe5 ♖xg4 **A1)** Moving the pawn to the 7th rank liberates the black king. 50.a7 ♖a4

51. ♖b7+ ♖g6 52.♖d6 h5 53.♖c7 h4 54.♖b8 ♖f5 ( 54...g4?? 55. ♖b5 See the rook stops the pawn position from the theoretical part. ) 55.a8♞ ♖xa8+ 56. ♖xa8 g4 Black wins the rook back. ; **A2)** 50.♖d6 ♖a4 51.♖c6 ♖a2! Black takes all white pawns. 52.♖b7 ♖xf2 53.a7 ♖f7+ 54.♖a6 ♖xa7+ 55.♖xa7 g4 The white king is too far from the pawns. ; **B)** 48.♖xe5? ♖xg4 leads to the 48.Kf5 line. ; **C)** 48.♖d5! The king should hurry to help the a-pawn. ♖xg4 49.♖c6 ♖a4 ( There is no time to take the f2 -pawn. 49... ♖f4 50.a7 ) 50.♖b7 With the king cut off along the 6th rank, the passed h-pawn can't become the game's hero. h5 51.a7 ♖xa7+ 52.♖xa7 h4 53.♖b7 White can allow the black pawn to come even to h2 and then play Rb1 - h1xh2 . ] **43...e5** **44. ♖f3** [The drawish lines are simpler if White decides to push the pawn now. 44.a5 e4 45.♖f1 ♖a3! 46.a6 ♖xh3 47. ♖b8 ♖a3 48. ♖b6 e3! The simplest. Black immediately removes the odd pawns. 49.fxe3 ( 49.f3 ♖a2 ) 49... ♖xe3 50.a7 ♖a3 51. ♖b7+ ♖g6 ] **44... ♖a3+ 45. ♖e4 ♖xh3** **46.a5** [The idea to isolate the black rook does not work because of ...h6 - h5 , followed by the exchange of all white pawns on the kingside. 46.f3 **A)** White's trick behind the f2 - f3 advance is to prepare cover from the checks for the king on f5 . 46... ♖h2? 47.a5 ♖a2 ( 47...♖f6 48. ♖a6+ ♖f7 49.♖f5 ) 48.♖f5 White plays Ra7 and a5 - a6 . After that, the black rook will no longer be able to move from the a-file because of Rb7 , a6 - a7 , Rb8 (check!), and a7 - a8=Q . This nuance will help the white king to take all pawns on the kingside. ; **B)** 46...h5! 47.gxh5 ♖xh5 48.♖f5 ( 48.a5 ♖h4+ 49.♖xe5 ♖f4 ) 48... ♖h4! 49.♖xg5 ( 49.♖xe5 ♖f4 ) 49... ♖f4 50. ♖a7+ ♖f8 51.a5 ♖xf3 52.a6 ♖a3 53.♖f6 ♖e8 ] **46... ♖h2** Seemingly, Black hoped to exchange f2 - and e5 - pawns, but White is not forced to take on e5

. Instead, the Ukrainian player used the idea of creating a cover for his king from the Rf2 check.

[ The correct defending idea was 46... a3! Not Kf5 because of ... Rf3 ! **A)** 47. f5 f3+ 48. ex5 xf2 leads to the same position with an extra move for Black. ; **B)** Black has enough defending reserve in the case of a5 - a6 . 47. a6 a4+ ( After grabbing the f2 -pawn, Black will have the idea of ...h6 - h5 to get a passed pawn on the g-file. 47... a2 48. ex5 xf2 49. d6 a2 50. c6 h5 51. gxh5 g4 ) 48. d5 xg4 49. c6 a4 50. b6 h5 51. c8 h4 52. a7 g6 53. a8 e xa8 54. xa8 f5 55. c5 Black has only one move to save the game. Can you find it? e4 Of course! Pushing the white king by a shoulder. ; **C)** 47. ex5 f3 48. a6 xf2 49. b8 a2 50. b6 h7! Black prepares the pawn sacrifice ... h6 - h5 . For this purpose, the king is better placed on the h-file (no Rg6 check). 51. d5 (White can't push the black king to the back rank because of the check along the f-file. 51. f6 f2+!) 51...h5 52. gxh5 g4 53. c6 g3 54. b7 g2 55. g6 b2+ 56. a8 h8 No one can achieve progress. ] 47. f3 e2+ [ 47... a2 48. f5 with the same ideas. ] 48. f5 e3 49. a7+ f8 50. a6 xf3+ 51. ex5 Black won the pawn back, but the position of his king leaves him no chance to defend well. f4 [ 51... a3 Stops Rb7 , a6 - a7 play but does not draw the game. 52. f6 f3+ 53. g6 a3 54. f7+ e8 55. a7 a6+ 56. g7 ] 52. b7 Black resigned because he had nothing against a6 - a7 , Rb8 , and a7 - a8=Q .

□ 6.2) Outside Passed Pawn: Oth  
 ■ G.N. Gopal vs. Artyom Timofeev

61. h4 How does Black win here? b5  
 62. b1+ c5 63. c1+ b6 64. b1

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	p	+	r	+	p	+	p0
6	-	+	-	+	-	+	p	0
5	+	-	+	-	P	-	+	0
4	-	k	-	+	K	+	-	0
3	+	-	+	-	+	-	+	P0
2	-	+	-	+	-	+	P	0
1	+	-	R	-	+	-	+	0
	x	a	b	c	d	e	f	g
								h
								y

b7 65. d5 c7 The pawn moves forward and distracts the white king. After that, the black king goes to take the white pawns.

□ 6.2) Outside Passed Pawn: Oth  
 ■ G.N. Gopal vs. Artyom Timofeev

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	p	+	r	+	p	+	p0
6	-	+	-	+	-	+	p	0
5	+	-	+	-	P	-	+	0
4	-	+	-	+	K	+	-	0
3	+	-	k	-	+	-	+	P0
2	-	+	-	+	-	+	P	0
1	+	R	+	-	+	-	+	0
	x	a	b	c	d	e	f	g
								h
								y

65...h5 White should calculate a straightforward line to exchange a pair of pawns. 66. g4 h4 [ 66...hxg4 is welcome since fewer pawns remain on the board. ] 67. c4 According to the engine, this idea is not the only good in this position, but I think it is the clearest for a human. White creates counterplay by creating the passed pawn on the h-file.



□ 6.2) Outside Passed Pawn: Oth  
 ■ G.N. Gopal vs. Artyom Timofeev

```

Xl | | | | | | | Y
8- + - + - + - + 0{
7+ p + r + p + - 0
6- + - + - + p + 0
5+ - + - P - + p 0
4- + - + K + - P 0
3+ k + - + - P - 0
2- + - + - + - + 0
1+ R + - + - + - 0
x a b c d e f g h y

```

71...♙c3 The decisive phase of the game begins. White should find a defensive arrangement. The Indian GM brought his rook to b6, which is not bad, but after that, he didn't see the proper follow-up. Instead, the active continuation could have guaranteed him enough counterplay to save the game. I again want to focus your attention on the fact that active moves work better! For this purpose, you can even give up the second pawn, as in this example.

72.e6 ♜e7 Black has nothing special after the immediate capture. 73.♙f4 [ 73.♙d5 is also good, but intuitively it is safer to keep the king near the pawns. ]

□ 6.2) Outside Passed Pawn: Oth  
 ■ G.N. Gopal vs. Artyom Timofeev

(Diagram)

76...♙a5 The position of the black king has worsened, but the ... b7 - b5 advance is ready. White has the last chance to save the game. Can you find it? 77.♜d8 b5 78.♙d5 The black rook finds itself strongly restricted.

```

Xl | | | | | | | Y
8- + - + - + - + 0{
7+ p + - t p + - 0
6- + - + - + p + 0
5+ - + - P - + p 0
4k + - RK + - P 0
3+ - + - + - P - 0
2- + - + - + - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

□ 6.2) Outside Passed Pawn: Oth  
 ■ G.N. Gopal vs. Artyom Timofeev, (Budapest 2019)

```

Xl | | | | | | | Y
8- + - + - k - + 0
7+ p + r + p + p 0
6- + - + - + p + 0
5+ R + - + - + - 0
4- + - + P + - + 0
3+ - + - K - + P 0
2- + - + - + P + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

Artyom Timofeev had an extra tough challenge in his game vs. Gopal from India; his rook was passive, and the only piece which could have helped the pawn was his king. The mission seemed near impossible, but he still out-tricked his experienced opponent. 53.e5 It does not look like an important moment. White could have just as easily left the pawn on e4. The most crucial things will happen later. ♙e7 The black king runs to help the passed pawn. 54.♙e4 ♙d8 55.♜b1 The rook is ready for the frontal checks (see the frontal checks (Cheron) in the theoretical part of the course to recall how this defending

technique works). ♖c7 56. ♖c1+ ♖b8 57. ♖b1 ♖a7 58. ♖a1+ ♖b6 59. ♖b1+ The king should run forward to see what happens. ♖c5 60. ♖c1+ ♖b4 61. ♖b1+ White can't allow Black to play ... b7 - b5 . Once the pawn reaches the 5th rank, White is losing. [This is an example of how Black wins here. 61.h4?? b5 62. ♖b1+ ♖c5 63. ♖c1+ ♖b6 64. ♖b1 ♖b7 65. ♖d5 ♖c7 The pawn moves forward and distracts the white king. After that, the black king goes to take the white pawns. ] 61... ♖c4 62. ♖c1+ ♖b3 63. ♖b1+ ♖c2 It took a while for the Russian grandmaster to figure out that the best square for the king was c3 . 64. ♖b6 ♖c3 Black threatens to play ... Kc4 and then ... Kc5 to guarantee the ... b7 - b5 move. For this reason, the rook goes back to the first rank. 65. ♖b1 h5 66.h4 This move is an inaccuracy because it leaves more pawns on the board. Instead, White should have calculated the following straightforward line to exchange one pair. [ 66.g4!? h4 66...hxg4 is welcome since fewer pawns remain on the board. 67. ♖f4 According to the engine, this idea is not the only good in this position, but I think it is the clearest for a human. White creates counterplay by creating the passed pawn on the h-file. ♖c4 Black should implement his plan - to promote the b-pawn. 68. ♖g5 b5 69. ♖xh4 b4 70. ♖g5 b3 71.h4 ♖c3 72.h5 gxh5 73.gxh5 b2 74. ♖f6 ♖c2 75. ♖xb2+ ♖xb2 76.h6 The h-pawn has advanced far enough to secure a draw. ] 66... ♖c4 67. ♖c1+ ♖b3 68. ♖b1+ ♖c3 Again, we see the king on c3 , and White needs to find the best out of the bad. 69.g3 The last waiting move. Black repeats a zugzwang position. ♖c4 70. ♖c1+ ♖b3 71. ♖b1+ ♖c3 The decisive phase of the game begins. White should find a defensive arrangement. The Indian GM brought his rook to b6 , which is not bad, but after that, he didn't see the proper follow-up. Instead, the active continuation could have

guaranteed him enough counterplay to save the game. I again want to focus your attention on the fact that active moves work better! For this purpose, you can even give up the second pawn, as in this example. 72. ♖b6 [ 72.e6! ♖e7 Black has nothing special after the immediate capture. ( 72...fxe6 73. ♖e5 ) 73. ♖f4! 73.Kd5 is also good, but intuitively it is safer to keep the king near the pawns. fxe6 74. ♖e5 Black has two extra pawns, but White keeps equality thanks to the black rook's passive position. ♖c4 75. ♖f6 ♖e8 76. ♖xb7 e5 77. ♖xg6 77.Kf7 driving the rook away from the perfect place behind the pawn is more technical, but White makes a draw even without this. e4 78. ♖xh5 e3 79. ♖g6 e2 80. ♖b1 e1 81. ♖xe1 ♖xe1 82.h5 ] 72... ♖c4 73. ♖d6 [Again, the e5 - e6 sacrifice was strong, but with the rook on b6 , it looks weird because, in this variation, White loses two moves (compared to the 72.e6 line) by playing Rb1 - b6 - b1 . 73.e6! ♖e7 74. ♖f4! fxe6 75. ♖e5 ♖c5 76. ♖b1 b5 77. ♖c1+ ♖b6 78. ♖f6 ] 73... ♖e7 74. ♖d4+ Giving the side checks helps White to push the black king to the a-file. ♖b5 75. ♖d5+ ♖a4 76. ♖d4+ ♖a5 The position of the black king has worsened, but the ... b7 - b5 advance is ready. White has the last chance to save the game. Can you find it? 77. ♖d5+ This check is pointless. White should have moved his rook to the 8th rank and invaded with the king. [ 77. ♖d8! b5 78. ♖d5 The black rook finds itself strongly restricted. b4 ( 78... ♖b7 79. ♖c6 ♖b6+ 80. ♖c5 b4 81. ♖a8+ ♖a6 82. ♖xa6+ ♖xa6 83. ♖xb4 ) 79. ♖b8! ♖a4 80. ♖a8+ ♖b3 81. ♖d6 ♖e6+ ( 81... ♖b7 82. ♖c6 ♖e7 83. ♖d6 It is a repetition. ) 82. ♖d5 Here, Black can lose if he keeps playing for a win. ♖c3 ( 82... ♖b2?? 83. ♖a7 ) 83. ♖c8+ ♖d3 84. ♖b8 ♖c3 ] 77...b5 All types of counterplay are late now. The game is over. 78. ♖d3 ♖c7 A technical decision to cut off

the king along the c-file. **79.e6**

A desperate attempt to save the game does not work because White has lost too many tempos. **fxe6 80. | g5 e5** [Black could have moved his pawn forward without any preparational actions. **80... ♠a4 81. | xg6 b4 82. | xe6 b3 ] 81. | xg6 b4 82. | g8 b3 83. | a8+ ♠b4 84. | b8+ ♠a3 85. | a8+ ♠b2 86. | a5 | e7 87. | b5 | d7+**

It is the final countdown. Black confidently promotes the b-pawn. **88. ♠e3 ♠c3 89. | c5+ [ 89. | xe5 b2 90. | b5 | d1 ] 89... ♠b4 90. | c8 b2 91. | b8+ ♠c3 92. | c8+ ♠b3 93. | b8+ ♠c2 94. | c8+ ♠b1 95.g4 hxg4 96.h5 | h7 97. | c4 ♠a2** With the rook on the 4th rank, the black king can organize the pawn promotion without the rook's assistance. White resigned. Very well done by Timofeev!

□ 6.2) Outside Passed Pawn: Oth

■ Magnus Carlsen vs. Viswanatha

X	I	I	I	I	I	I	I	Y
8	R	+	-	+	-	+	-	0
7	+	-	+	-	+	p	+	0
6	P	+	-	+	-	<del>k</del>	p	0
5	+	-	+	p	+	-	+	0
4	-	+	-	+	-	+	-	0
3	t	-	+	-	<del>P</del>	-	+	0
2	-	+	-	+	-	<del>P</del>	<del>P</del>	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

**39...h5** What did Carlsen play here? **40.a7** In this position, many players might fall for a possible mistake. Many of us play moves like h3 - h4 without much thinking, but at this moment, this would allow Black to exchange the d5 -pawn with a drawn endgame. That's why Carlsen moved his

pawn to a7 . He is ready to direct his king to the queenside to win the d5 -pawn.

□ 6.2) Outside Passed Pawn: Oth

■ Magnus Carlsen vs. Viswanatha

X	I	I	I	I	I	I	I	Y
8	R	+	-	+	-	+	-	0
7	+	-	+	-	+	p	+	0
6	P	+	-	+	-	<del>k</del>	p	0
5	+	-	+	p	+	-	+	0
4	-	+	-	+	-	+	-	0
3	t	-	+	-	<del>P</del>	-	+	0
2	-	+	-	+	-	<del>P</del>	<del>P</del>	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

**40.h4** How can Black move into a drawn endgame here? **| a4 41.g3 d4** This pawn exchange leads to the typical '3 vs. 3 + a-pawn' endgame, where Black has everything settled to achieve a well-known draw from the endgame manuals.

□ 6.2) Outside Passed Pawn: Oth

■ Magnus Carlsen vs. Viswanatha

(Diagram)

**41... ♠f5** How do we keep the black king out and win the game? **42.f3** Similar to the previous game, the king on f5 is getting frozen. **| a1 43.g3** Here, I believe Anand shocked many watchers with his resignation. But the analysis shows that there would be nothing difficult for Carlsen to win this endgame. First, he wins the d5 - pawn, and then can advance the kingside pawns to create the second passed pawn. **| a2+ 44. ♠g1**

XI	I	I	I	I	I	I	I	Y
8R	+	-	+	-	+	-	+	0{
7P	-	+	-	+	p	+	-	0
6-	+	-	+	-	<del>k</del> p	+	0	
5+	-	+	p	+	-	+	p	0
4-	+	-	+	-	+	-	<del>P</del>	0
3+	-	+	-	<del>P</del>	-	+	-	0
2r	+	-	+	-	<del>P</del> P	<del>k</del>	0	
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

- 6.2) Outside Passed Pawn: Oth  
 ■ Magnus Carlsen vs. Viswanatha

XI	I	I	I	I	I	I	I	Y
8R	+	-	+	-	+	-	+	0{
7P	-	+	K	+	p	+	-	0
6r	+	-	+	-	<del>k</del> p	+	0	
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	<del>P</del> P	0	
3+	-	+	-	<del>P</del>	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

58... | a3 How does White force the promotion? 59.h5 gxh5 60.gxh5 ♠g7 61.h6+ ♠xh6 62. | h8+

- 6.2) Outside Passed Pawn: Oth  
 ■ Magnus Carlsen vs. Viswanatha, Shamkir 2019)

(Diagram)

Viswanathan Anand lost his game vs. Magnus Carlsen in Shamkir 2019, but this resignation showed his high-level endgame technique. There are not a lot of players in

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7R	-	+	-	+	p	<del>k</del>	-	0
6P	+	-	+	-	+	p	p	0
5r	-	+	p	+	-	+	-	0
4-	+	-	+	-	+	-	+	0
3+	-	+	-	<del>P</del>	-	<del>k</del> P	0	
2-	+	-	+	-	<del>P</del> P	+	0	
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

the world who would resign so fast. So, his decision required a detailed explanation. As we have already investigated, having extra pawns compared to the 'classical' endgame (three vs. three + a passed pawn on the queenside) enormously lowers the saving chances of the defending side. This example is not an exception. 37... ♠f6 38. | a8 | a3 The threat of ... d5 - d4 forces the white king to return to h2, but it does not affect the position's evaluation. 39. ♠h2 h5 40.a7 [In this position, many players might fall for a possible mistake. Many of us play moves like h3 - h4 without much thinking, but at this moment, this would allow Black to exchange the d5 -pawn with a drawn endgame. That's why Carlsen moved his pawn to a7. He is ready to direct his king to the queenside to win the d5 - pawn. 40.h4? | a4 41.g3 d4 This pawn exchange leads to the typical '3 vs. 3 + a-pawn' endgame, where Black has everything settled to achieve a well-known draw from the endgame manuals. ] 40... | a2 41.h4 ♠f5 42.f3 Similar to the previous game, the king on f5 is getting frozen. | a1 43.g3 [Here, I believe Anand shocked many watchers with his resignation. But the analysis shows that there would be nothing difficult for Carlsen to win this endgame. First, he wins the d5 -pawn, and then can advance the kingside pawns to create the second passed pawn. 43.g3 | a2+ 44. ♠g1

♖f6 45.♖f1 ♖f5 46.♖e1 ♖f6 47.♖d1  
 ♖f5 48.♖c1 ♖f6 49.♖b1 |a6 50.♖b2  
 ♖g7 51.♖b3 ♖f6 52.♖b4 |a1 53.♖c5  
 |a2 ( 53...|a5+ 54.♖b6 ) 54.♖xd5 |a3  
 55.g4 |a5+ 56.♖d6 |a6+ 57.♖d7 **A)**  
 57...|a3 58.g5+ ♖f5 (The stalemate idea  
 also does not help because the white king  
 can interfere between Ra8 and the h8 -  
 square.) ( 58...♖g7 59.f4 |a4 60.e4 |a3  
 61.f5 |a6 62.f6+ ♖h7 63.♖e8 |e6+  
 64.♖xf7 |e7+ 65.♖f8 |f7+ 66.♖e8 )  
 59.♖e7 |xe3+ 60.♖xf7 |a3 61.♖g7  
 Rf8 wins the rook. ; **B)** 57...hxcg4 58.fxcg4  
 |a3 59.h5 gxh5 60.gxh5 ♖g7 61.h6+  
 ♖h7 ( 61...♖xh6 62.|h8+ ) 62.e4 |a4  
 63.e5 |a5 64.♖d6 A zugzwang - Black  
 can't save the f7 -pawn. ( 64.♖e7?? |xe5+  
 65.♖xf7 |a5 These two pawns can't win  
 the game. ))

## ☐ 7.1) Endgames without Passed ☒ Many Pawns,Material Balance

Rook endgames with many pawns but no  
 passed pawns (with a material balance). Z0

## ☐ 7.1) Endgames without Passed ☒ Vojtech Plat vs. Alexander Do

(Diagram)

What was White's best defence? 37. | e3  
 White sacrifices the c2 -pawn to activate  
 the rook. [ 37. | d2? Maybe the biggest  
 number of mistakes in rook endgames  
 refers to positions where a player misses a  
 chance to activate the king or rook. Of  
 course, experienced players understand the  
 importance of the active pieces, but often  
 the correct lines, in which the pieces  
 become stronger, appear too hard to find or  
 calculate. This is what seemingly happened  
 in this situation. Rd2 looks so natural. ]

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	p	+	-	k	-	+	-	0
6p	+	-	+	p	+	p	+	0
5+	-	t	-	+	p	+	-	0
4P	+	-	+	-	+	-	p	0
3+	-	+	-	+	K	+	P	0
2-	P	P	+	R	P	P	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

37...|xc2 38.|b3 |c7 39.|b6

White's rook is extremely active on b6 . It  
 protects the b2 -pawn and attacks e6 and b7  
 . As a result, White can't remove his rook  
 from the 7th rank nor activate his king.  
 [ For example, Kf6 b4 g5 39.a5 Ke5 b5  
 axb5 40.|xb5 . Besides giving the side  
 checks, White can also play g2 - g4 at the  
 proper moment to improve the situation on  
 the kingside (after ... h4xcg3 , Kxcg3 , White  
 will have the h3 - h4 idea). The game  
 should end with a draw. ]

## ☐ 7.1) Endgames without Passed ☒ Vojtech Plat vs. Alexander Do

(Diagram)

37. | d2 Maybe the biggest number of  
 mistakes in rook endgames refers to  
 positions where a player misses a chance to  
 activate the king or rook. Of course,  
 experienced players understand the  
 importance of the active pieces, but often  
 the correct lines, in which the pieces  
 become stronger, appear too hard to find or  
 calculate. This is what seemingly happened  
 in this situation. e5 From here on, the  
 white position became critical. Black  
 advances the e- and f-pawns and, at the  
 same time, scares White with the rook

```

XI | | | | | | | Y
8- + - + - + - + 0
7+ p + - k - + - 0
6p + - + p + p + 0
5+ - t - + p + - 0
4P + - + - + - p 0
3+ - + - + K + P 0
2- P P + R P P + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

exchange idea. But White's position is not hopeless yet. 38.♙e2 ♙e6 39.b3 b5 40.axb5 axb5 Now we have the critical position, where only one move keeps White in the game. But to find it, White had to correctly evaluate if they can save in the case of passive play. 41.♙e1 e4 Now Black wins.

Generally speaking, the rook endgame with four pawns vs. three pawns on one side is considered very bad for the defending side if the h-pawn achieves the h4 - (for Black) or h5 - (for White) square. But if White can play f2 - f3 and doesn't allow the opponent's king to enter the f4 -square, he gets good saving chances. ♙xc4 43.f3 ♙f6 44.♙d5 [Black can't move his king to g5 and f4 because e5 is hanging. The only way for Black to make progress would be to play ... e4 , but after the pawns are exchanged on e4 , the black king is cut off along the 5th rank. For example, 44.♙c2 Kf1 e4 45.fxe4 fxe4 Ra5 e3 Ra3 e2+ 46.♙e1 ♙f5 Re3 Kf4 47.♙e2 Rxe2+ Kxe2 Kg3 Kf1= . ] 44... ♙c2+ 45.♙f1 The position is drawn because the black king can't move forward. Without seeing this line, it was hard for White to guess that 41.c4 was correct.

□ 7.1) Endgames without Passed  
 ■ Vojtech Plat vs. Alexander Do

```

XI | | | | | | | Y
8- + - + - + - + 0{
7+ - + - + - + - 0
6p + - + k + p + 0
5+ P t - p p + - 0
4- + - + - + - p 0
3+ P + - + - + P 0
2- + P R K P P + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

40...axb5 Now we have the critical position, where only one move keeps White in the game. But to find it, White had to correctly evaluate if they can save in the case of passive play. 41.c4 White should have sacrificed the pawn to avoid further restricting his pieces. bxc4 42.bxc4

□ 7.1) Endgames without Passed  
 ■ Vojtech Plat vs. Alexander Do

```

XI | | | | | | | Y
8- + - + - + - + 0
7+ - + - + - + - 0
6- + - + k + p + 0
5+ p t - + p + - 0
4- + - + p + - p 0
3+ P + - + - + P 0
2- + P R - P P + 0
1+ - + - k - + - 0[
x a b c d e f g h y

```

42.♙d1 Should Black exchange rooks with ... Rd5 ? b4 [With the c2 -pawn not blocked, it was too early to transfer to the pawn endgame. 42... ♙d5? 43.♙xd5 ♙xd5 44.c3 ] 43.♙e1 [White was hopeless in the pawn endgame after 43.♙d8 ♙d5+ 44.♙xd5 ♙xd5 45.♙e2 ♙d4 46.♙d2 f4 ;

There is no surprise that it was too late for White to think about creating a passed pawn on the queenside. 43.♠c1 ♔d5 44.♗e2 ♠e5 45.♠b2 g5 46.c3 g4 47.cxb4 ♠f4 ] 43...♠e5 [ 43...♗d5 was okay, but Black didn't need to immediately play this move - first, Donchenko improves the kingside pawns. ] 44.♗e2 f4 45.♗d2 ♔d5 46.♗e2 g5 [ White is stalemated. Plat resigned because there was no possibility of staying in the game. Here are the possible lines of how the game could have continued. 46...g5 47.♗d2 ( 47.♠f1 ♔d1+ 48.♗e1 ♗xe1+ 49.♠xe1 ♠d4 50.♠d2 g4 51.hxg4 f3 ) 47...♗xd2 48.♠xd2 ♠d4 49.♠e2 ♠c3 50.♠d1 f3 ]

## □ 7.1) Endgames without Passed

■ Vojtech Plat vs. Alexander Do, Polanica Zdroj 2022

```

X| | | | | | | Y
8- + - + - + - + 0{
7+ p + - k p + - 0
6p + - + p + p + 0
5+ - + r + - + - 0
4P + - + K + - p 0
3+ - + - + - + P 0
2- P P + R P P + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

The last two games in this section of the course are similar. There is a typical pawn structure - Black has a majority on the kingside (4 vs. 3) , while White has three pawns against two pawns on the queenside. The only pawn structure difference is that the Black had a- and b-pawns in the first case, while in the second game, they were on the a and c-files. To evaluate this position, we must compare at least three aspects: the activity of the pieces, the

nuances in pawn structure, and the perspectives in the possible pawn endgame (after the rook exchange). Black holds the advantage in the first component - his rook controls the only open file. Talking about the pawn structure, it is worth mentioning that the pawn majority on the kingside is more massive - when the black pawns begin moving, it is hard to find good squares, even for a small number of the pieces. The possible moving of the white queenside pawns does not create a similar effect because they have less contact with the central squares. The evaluation of the possible pawn endgame almost fully depends on the starting positions of both kings. The one who occupies the center with the king is often closer to the win. All we said here does not impress strongly, and the general feeling is that White should be able to hold the position. Let's see how the game continued. 35...f5+ 36.♠f3

[ It was rational for White not to calculate the pawn endgame that might happen after 36.♠e3 ♗e5+ . ] 36...♗c5

[ Another promising direction for Black was to put the rook on the 4th rank.

36...♗d4!? 37.b3 ♠f6 White should decide which piece to place on e3 . 38.♠e3

A committal decision because White should be ready for the pawn endgame. Not sure if some player in the world might be confident that White does not lose here.

(For your information: the engine says it is a draw). Moreover, with the rooks on the

board, playing with the rook on e2 behind the king is also not so pleasant. ( 38.♗e3

This attempt to activate the rook is the most logical continuation, but it also does not

solve all Black's problems. ♗d1 39.♗c3 ♗e1 Suddenly, the white king is under a checkmate threat ( ...e6 - e5 - e4 ). 40.g3 hxg3 41.fxg3 e5 Black has got a passed pawn, which determines his advantage. )

38...e5 ( 38...♗e4+ 39.♠d2 ♗xe2+

40.♠xe2 e5 The analysis of this position

without the engine might take many evenings. But even with the engine, it is not easy to understand where the red line is that White should not cross. From seeing the engine's lines, I can say it seems impossible to save this without g2 - g3 . After that, the most challenging part begins with multiple passed pawns here and there. ) 39.f3 White needs some air for the king because Black wanted to play ... f5 - f4 , Kf5 , and ... e5 - e4 . ( 39. | d2 | xd2 40. ♣xd2 e4 ) 39... | d1 40.c3 The position of White is passive but far from lost. ]

**37. | d2** [Maybe the biggest number of mistakes in rook endgames refers to positions where a player misses a chance to activate the king or rook. Of course, experienced players understand the importance of the active pieces, but often the correct lines, in which the pieces become stronger, appear too hard to find or calculate. This is what seemingly happened in this situation. 37. | d2 looks so natural. ; 37. | e3! | xc2 38. | b3 | c7 39. | b6 ♣f6 40.b4 g5 41.a5 ♣e5 42.b5 axb5 43. | xb5+ Besides giving the side checks, White can also play g2 - g4 at the proper moment to improve the situation on the kingside (after h4xg3 , Kxg3 , White will have the h3 - h4 idea). The game should end with a draw. ] **37...e5** From here on, the white position became critical. Black advances the e- and f-pawns and, at the same time, scares White with the rook exchange idea. But White's position is not hopeless yet. **38. ♣e2 ♣e6 39.b3 b5** Black played the most natural move - he planned to fix the queenside with ... b5 - b4 . Objectively, this move gave White a real chance to save the game. If Donchenko saw the escaping idea, he would probably play ... Rc3 to block the c2 -pawn. [Understanding why the natural central pushing wasn't good was important. 39...e4? 40.c4! | c6 ( 40... ♣e5 41. | d7 b5 42.cxb5 axb5 43.a5 ) 41.f3 White has counterplay in both

variations. ; 39... | c3!? 40. ♣d1 White has no other idea than to free the rook. | c6! ( 40...b5? This move is now safe for White because the rook can finally leave its passive position. 41.axb5 axb5 42. | d8 ; The pawn pushing looks dangerous, but White can handle it. 40...f4 41.f3! e4 42.fxe4 ♣e5 43. | d3 ) 41.f3 (White can't be satisfied with repetition because the e5 - e4 move is more effective with the rook on c6 . 41. ♣e2? e4! 42.c4 | b6! 43. | b2 a5! 44.f3 ♣e5 45.fxe4 ♣xe4 Black wins. ) 41... | d6! (The white rook gets active in case of ...e5 - e4 .) ( 41...e4? 42.fxe4 fxe4 43. | f2 ) 42. | xd6+ ♣xd6 Objectively, the pawn endgame is drawn, but the saving idea there deserves at least a separate article . Let me share with you the main motif that makes a draw possible. 43. ♣e2!! a5 44.c3 ♣c5 45. ♣d3! ( 45. ♣e3? ♣d5 46. ♣d3 e4+ 47.fxe4+ fxe4+ 48. ♣e3 ♣e5 ) 45... ♣d5 46. ♣e3 This is the key position of a mutual zugzwang. If it is White's turn here, he loses. And if it's Black to move, White makes a draw. Strangely, 43.Ke2 !! was the only move to achieve this purpose. I offer you to double-check this conclusion and to become more skillful in the practical pawn endgames. ; Running ahead, I can say that the position after b3 is not yet lost for White, but in the conditions of the real game, the saving ideas were hard to find after both 39...b5 and . ] **40.axb5 axb5** Now we have the critical position, where only one move keeps White in the game. But to find it, White had to correctly evaluate if they can save in the case of passive play. **41. ♣e1** [White should have sacrificed the pawn to avoid further restricting his pieces. 41.c4! bxc4 42.bxc4 Generally speaking, the rook endgame with four pawns vs. three pawns on one side is considered very bad for the defending side if the h-pawn achieves the h4 - (for Black) or h5 - (for White) square. But if White can play f2 - f3 and doesn't allow the



opponent's king to enter the f4 -square, he gets good saving chances. **A)** White can even defend the c4 -pawn if Black decides to move the e5 -pawn first. 42...e4 43. | c2 ♖e5 44.f3 It is safer to weaken the e4 -pawn. ♕d4 45.fxe4 fxe4 46. | d2+! ♕xc4 ( 46...♕e5 47. | c2 ) 47.♕e3 ; **B)** 42... | xc4 43.f3! ( 43. | a2? A fatal loss of time. ♕f6 44. | a6+ ♕g5 45.f3 | c2+ 46.♕f1 e4 47.fxe4 fxe4 White can't prevent the opponent from advancing. 48. | e6 ♕f5 49. | a6 g5 ) 43...♕f6 44. | d5! | c2+ 45.♕f1 The position is drawn because the black king can't move forward. Without seeing this line, it was hard for White to guess that 41. c4 was correct. ] **41...e4** Now Black wins. **42.♕d1** [ 42.c4 Now it is too late. bxc4 43.bxc4 | xc4 44.♕e2 ♕e5 Here you can see what happens if the defending side can't place pawns on h4 , g3 , and f2 for White (or h5 , g6 , and f7 for Black). The pawns demolish everything in their path. ] **42...b4** [ With the c2 -pawn not blocked, it was too early to transfer to the pawn endgame. 42... | d5? 43. | xd5 ♕xd5 44.c3 ] **43.♕e1** [ White was hopeless in the pawn endgame after 43. | d8 | d5+ 44. | xd5 ♕xd5 45.♕e2 ♕d4 46.♕d2 f4 ; There is no surprise that it was too late for White to think about creating a passed pawn on the queenside. 43.♕c1 | d5 44. | e2 ♕e5 45.♕b2 g5 46.c3 g4 47.cxb4 ♕f4 ] **43...♕e5** [ 43... | d5 was okay, but Black didn't need to immediately play this move - first, Donchenko improves the kingside pawns. ] **44. | e2 f4 45. | d2 | d5 46. | e2 g5** [White is stalemated. Plat resigned because there was no possibility of staying in the game. Here are the possible lines of how the game could have continued. 46...g5 47. | d2 ( 47.♕f1 | d1+ 48. | e1 | xe1+ 49.♕xe1 ♕d4 50.♕d2 g4 51.hxg4 f3 ) 47... | xd2 48.♕xd2 ♕d4 49.♕e2 ♕c3 50.♕d1 f3 ]

## □ 7.1) Endgames without Passed ■ Nils Grandelius vs. Erwin L'A

X	I	I	I	I	I	I	I	Y
8-	+	-	♖	-	+	-	+	0
7+	-	+	-	♙	♙	♙	-	0
6♙	♙	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	♙	0
4-	+	R	♙	-	+	-	+	0
3+	-	+	-	+	-	+	-	0
2♙	+	-	+	K	♙	♙	♙	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h

**31.♕d3** What does White allow here? ♕d6 This is the first move in the wrong way. Grandelius hoped to play Kd4 and Rc6 but blundered ... Kd6 , which prevented Rc6 and forced the transfer to an unpredictable pawn endgame. The position immediately became dangerous. **32.d5 | d7** A double-purpose move - Black wants to take on d5 or play ... Rc7 . **33.g4** The engine confidently shows that the arising pawn endgame is equal, but for Grandelius it was not obvious. So, he decided to keep the rooks on the board, which appeared to be a decisive mistake. Black is winning from here on, and L'Ami gave him no chance. **b5** It was also good to begin with the ... h5xg4 capture, but L'Ami correctly decided that it is useful to gain an extra tempo for his pawn majority.

## □ 7.1) Endgames without Passed ■ Nils Grandelius vs. Erwin L'A

(Diagram)

**32... | d7** The double idea move - Black wants to take on d5 or play ... Rc7 . **33.♕d4 | c7 34. | xc7 ♕xc7** At first sight, the

X	I	I	I	I	I	I	I	Y
8-	+	-	t	-	+	-	+	0{
7+	-	+	-	+	p	p	-	0
6p	p	-	k	-	+	-	+	0
5+	-	+	P	+	-	+	p	0
4-	+	R	+	-	+	-	+	0
3+	-	+	K	+	-	+	-	0
2P	+	-	+	-	P	P	P	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

endgame is bad for White. But the evaluation of this endgame is a hard business. If we imagine that Black plays ... Kd6 and creates a passed pawn on the queenside, it looks unsafe for White. But White has more than one good defensive idea. Let me show you the main lines.  
**35. ♠e5** The most straightforward move allows White to achieve a draw with an active plan without calculating endless waiting moves with the pawns on both sides.

□ 7.1) Endgames without Passed  
 ■ Nils Grandelius vs. Erwin L'A

(Diagram)

**36. ♗g5** What weakness can Black attack?  
 ♗c7 The white pawns are horrible, and the black rook moves to attack them. **37.f4**  
 ♗c1 **38.h4** ♗d1+ **39.♠e4** ♗h1  
 With the king on the 4th rank, the f4 - f5 idea no longer helps.

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	r	+	p	+	-	0
6p	+	-	k	-	+	p	+	0
5+	p	+	P	+	-	+	-	0
4-	+	-	+	-	+	R	+	0
3+	-	+	K	+	-	+	-	0
2P	+	-	+	-	P	-	P	0
1+	-	+	-	+	-	+	-	0[
x	a	b	c	d	e	f	g	h
								y

□ 7.1) Endgames without Passed  
 ■ Nils Grandelius vs. Erwin L'A, Reykjavik 2014)

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	t	k	+	0{
7p	-	+	-	+	p	p	p	0
6-	p	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	P	-	+	-	+	0
3+	-	+	-	+	-	+	-	0
2P	+	-	+	-	P	P	P	0
1+	-	R	-	+	-	k	-	0
x	a	b	c	d	e	f	g	h
								y

The next game illustrates how easy it is to lose even a seemingly simple position. The position is absolutely drawn. The isolated pawn on d4 does not play an important role because it is easy to defend it, and White can attack the opponent's queenside pawns.  
**26... ♗d8 27. ♗c7 a6 28. ♠f1**

[ White could force the exchange of the d4 - pawn in many ways (see the 28. ♗c6 and Rc6 lines), but the Swedish GM decided to keep the pawn on the board. ;  
 28. ♗c6 g6 29. ♗xb6 ♗xd4 30.g3 ♗a4  
 31. ♗b2 With an easy draw. ] **28...h5**  
**29. ♗c4** [ 29. ♗c6 ♗xd4 30. ♗xb6 ♗a4  
 31. ♗b2 ] **29...♠f8 30.♠e2 ♠e7 31.♠d3**

**♠d6** This is the first move in the wrong way. Grandelius hoped to play Kd4 and Rc6 but blundered ... Kd6 , which prevented Rc6 and forced the transfer to an unpredictable pawn endgame. The position immediately became dangerous. **32.d5** | **d7** A double-purpose move - Black wants to take on d5 or play ... Rc7 . [Of course, the pawn was poisoned. 32...♠xd5?? 33. | d4+ ] **33.g4** The engine confidently shows that the arising pawn endgame is equal, but for Grandelius it was not obvious. So, he decided to keep the rooks on the board, which appeared to be a decisive mistake. Black is winning from here on, and L'Ami gave him no chance. [ 33.♠d4! | c7 34. | xc7 ♠xc7 At first sight, the endgame is bad for White. But the evaluation of this endgame is a hard business. If we imagine that Black plays ... Kd6 and creates a passed pawn on the queenside, it looks unsafe for White. But White has more than one good defensive idea. Let me show you the main lines. 35.♠e5! The most straightforward move allows White to achieve a draw with an active plan without calculating endless waiting moves with the pawns on both sides. Besides preparing d5 - d6 , White also disables the moves by the f7 -pawn (the king will come to e6 in this case). Black's only plan is to advance the queenside pawns. The defensive strategy for this scenario is to give up the passed pawn ( d6 - d7 ) at the proper moment and use the 5th rank to win one of the queenside pawns back. The engine states that 35.h3 was also enough to hold the balance, but it is harder to calculate the lines there. b5 36.d6+ ♠c6 37.h4 a5 38.d7! It is fine to delay the pawn sacrifice by playing 38.f3 or 38.g3 . ♠xd7 39.♠d5 b4 40.♠c5 ♠e6 41.♠b5 ♠d5 42.♠xa5 ♠c5 ; 33.♠e4! leads to the same position after | e7+ 34.♠d4 | c7 ; A nice discovered check makes the Rc6xb6 idea bad. 33. | c6+??

♠xd5 34. | xb6 ♠c5+ ] **33...b5** It was also good to begin with the ... h5xg4 capture, but L'Ami correctly decided that it is useful to gain an extra tempo for his pawn majority. **34. | f4** [Black should also win after the following moves. 34. | c6+ ♠xd5 35. | xa6 hxg4 ] **34...hxg4 35. | xg4 g6** Black wins the central pawn without any compensation. **36. | g5** [This is the critical line in which White lacks one move to save the pawn endgame. 36. | d4 ♠c5 37.♠e4 f5+! 38.♠e5 | e7+ 39.♠f6 ♠xd4 40.♠xe7 ♠xd5 41.♠f6 b4 42.♠xg6 a5 43.h4 a4 44.h5 b3 45.axb3 a3! 46.h6 a2 47.h7 a1 ♠ ; 36.♠d4 | c7 Planning ... Rc2 or ... Rc4 . ] **36... | c7** The white pawns are horrible, and the black rook moves to attack them. **37.f4 | c1 38.h4 | d1+** [ Black went around a tricky saving idea. 38... | h1?? 39.f5! and White exchanges all kingside pawns with a draw. ] **39.♠e4 | h1** With the king on the 4th rank, the f4 - f5 idea no longer helps. **40. | g2** [ 40.f5 | xh4+ 41.♠d3 | h5 ] **40... | xh4 41. | g1** [ 41. | c2 f5+ ] **41...f5+ 42.♠e3 ♠xd5 43. | xg6 | h3+ 44.♠e2 | a3** White resigned because Black gets the connected passed pawns.

## 7.1) Endgames without Passed Ian Nepomniachtchi vs. Alirez

(Diagram)

Both rooks are on the open files and ready to attack the opponent's pawns. The next few moves will determine the pawn structure. Since it is White to move, White has better chances. **26. | d5 | b4** Leaving the pawn on e5 is a serious mistake because the white rook will be able to attack the queenside pawns from there with Ra5 and Rc5 . **27. | xe5 fxxg3** It was hard to avoid this capture, which creates a

```

X| | | | | | | | Y
8- ♖ - + - + ♙ + 0
7+ - ♙ - + - ♙ ♙ 0
6♙ + - + - + - + 0
5+ - + - ♙ - + - 0
4- + ♙ + - ♙ - + 0
3+ - + - + - ♙ - 0
2♙ + - + ♙ ♙ - ♙ 0
1+ - + ♖ + - ♙ - 0[
x a b c d e f g h y

```

passed pawn for White. 28.hxg3 | xc4  
 29. | a5 | c6 Here, Firouzja confirmed his intention to play the endgame passively. In other words, White has as much time as needed to advance the central pawns.  
 30. ♕ g2

□ 7.1) Endgames without Passed  
 ■ Ian Nepomniachtchi vs. Alirez

```

X| | | | | | | | Y
8- ♖ - + - + ♙ + 0
7+ - ♙ - + - ♙ ♙ 0
6♙ + - + - + - + 0
5+ - + - ♙ - + - 0
4- + ♙ + - ♙ - + 0
3+ - + - + - ♙ - 0
2♙ + - + ♙ ♙ - ♙ 0
1+ - + ♖ + - ♙ - 0[
x a b c d e f g h y

```

26. | d5 What is the best defense? fxg3  
 Since the ... f4xg3 capture was inevitable anyway, the best defending way was to take on g3 and advance the e5 -pawn to put the white rook to a worse square. 27.hxg3 e4  
 28. | e5 | b2 29. | xe4 | xa2 White does not get a chance to bring the rook to c5 .

□ 7.1) Endgames without Passed  
 ■ Ian Nepomniachtchi vs. Alirez,2022)

```

X| | | | | | | | Y
8- ♖ - + - + ♙ + 0
7+ - ♙ - + - ♙ ♙ 0
6♙ + - + - + - + 0
5+ - + - ♙ - + - 0
4- + ♙ + - ♙ - + 0
3+ - + - + - ♙ - 0
2♙ + - + ♙ ♙ - ♙ 0
1+ - + ♖ + - ♙ - 0[
x a b c d e f g h y

```

Both rooks are on the open files and ready to attack the opponent's pawns. The next few moves will determine the pawn structure. Since it is White to move, White has better chances. 26. | d5 | b4  
 Leaving the pawn on e5 is a serious mistake because the white rook will be able to attack the queenside pawns from there with Ra5 and Rc5 . Since the ... f4xg3 capture was inevitable anyway, the best defending way was to take on g3 and advance the e5 -pawn to put the white rook to a worse square. [ 26...fxg3! 27.hxg3 (The engine prefers to take with the f2 -pawn here, but humans used to take to the center. 27.fxg3 The only rational idea behind such a capture is to comfortably defend on e2 with the move Kf2 . In the end, it also leads to an equal position. | b2 28. ♕ f2 | xa2 29. | xe5 | b2! 30. | c5 | b7 The king will come to the center and help the rook. ) 27...e4! ( 27... | b2 28. | xe5 | xa2 29. ♕ f1! | b2 30. | c5 | b7 31.e4 This pawn structure is similar to what happened in the game. The passed pawn on the a-file does not make a crucial difference. White is close to winning. ) 28. | e5 | b2 29. | xe4 | xa2 White does not get a chance to bring the rook to c5 . 30. | e5 (Black sticks the rook to the 4th rank in response to other

moves. 30.♙f1 ♖a4 ) 30...♙c2 ] **27.♙xe5 fxc3** [It was hard to avoid this capture, which creates a passed pawn for White because after 27...♙xc4 , White attacks on a6 . 28.♙a5 ] **28.hxc3 ♜xc4** [Black could practically force a transfer to an atypical endgame with e, f, and g-pawns against g- and h-pawns. There is no special theory about such endgames (at least nothing I'm aware of). I would rate the winning chances there as relatively high, even though the engine shows the evaluation about '+0.5'. 28...♙a4!? 29.♙c5 ♙xa2 30.e3 a5 31.♙xc7 ♙c2 32.♙a7 ♙xc4 33.♙xa5 ] **29.♙a5 ♙c6** [Here, Firouzja confirmed his intention to play the endgame passively. In other words, White has as much time as needed to advance the central pawns. Instead, the best option for Black was to prepare to push the passed pawn. It still could lead to the '3 vs. 2' endgame with an open question if White can win there. 29...♙c2 30.♙f1 c5 31.♙xa6 c4 ] **30.♙g2 ♙f7** [ 30...♙c2 was still the best alternative for Black. But Alireza didn't change his plan to defend passively. ] **31.f4 ♙e7 32.e4 ♖b6 33.♙f3 ♙c6** The last more or less interesting moment in the game. Nepomniachtchi made a hole in his pawn structure and gave some chance for Black to disconnect and block his pawns. But even there, White was still winning (with a few more difficulties). **34.f5** [ 34.g4 was simpler because Black can't cut off the king on the second rank without losing the a6 -pawn. ♙c3+ 35.♙f2 ♙c6 36.♙e3 ] **34...♙f7** [Black should have played 34...♙f6! **A)** 35.♙f4?? would be a fatal mistake. g5+! 36.♙g4 (The best try because the exchange of the f5 -pawn loses all of White's edge. 36.fxc6 hxc6 ) 36...♙c4! Black is ready to give up a pawn to get an active king. 37.♙xa6+ ( 37.♙f3 ♙c3+ ) 37...c6 38.♙f3 ♙c3+ 39.♙f2 ♙e5 The piece activity provides Black with sufficient compensation for the pawn. ; **B)**

35.♙g4! ♙c4! 36.♙xa6+ c6 37.♙f4 g5+ 38.fxc6 hxc6 39.♙a5 Compared to the 35. Kf4 line White managed to win the a-pawn, which should be enough to win the game. But still, Black should have tried this. ] **35.g4** Now it is over. Black has nothing to offer against the white pawns in the center. **h6 36.♙f4 ♙e7 37.♙a4** White prepares e4 - e5 by preventing ... Rc4 . ♖b6 **38.♙c4 ♙d8 39.e5 ♙b1** The rook became active too late to save the game. **40.♙c6 ♙b4+ 41.♙f3 ♙b5 42.♙e4 ♙b4+ 43.♙d5** The pawn on g4 is the maximum of what Black can achieve in this endgame. The white king goes to f7 to support the e-pawn advancing. ♙xg4 **44.♙e6 ♙c8 45.♙xa6 ♙b7 46.♙a3 ♙g2 47.♙f7 ♙f2 48.f6 ♙c6** [ 48...gxf6 49.e6 ] **49.♙xg7 ♙d7 50.♙f7** The e5 -pawn is unstoppable; Black resigned.

## □ 7.1) Endgames without Passed ■ Pia Cramling vs. Natalija Pog

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	k	+	-	+	0
7+	p	+	-	+	p	p	-	0
6p	+	-	+	r	+	-	p	0
5+	-	+	p	+	-	+	-	0
4P	P	-	P	p	+	P	+	0
3+	-	+	-	P	-	+	P	0
2-	+	-	+	-	P	-	+	0
1+	-	R	-	+	-	K	-	0
x	a	b	c	d	e	f	g	h
								y

White has only two obvious advantages in the starting position: control over the open file (though without a chance to enter the opponent's camp), and the d5 -pawn. The third advantage is less visible - White has a mobile pawn structure on the kingside. Pushing the kingside pawns should create one more weakness. As we know, it is hard

to defend two weaknesses. So, we can say that Black's defensive mission is far from simple. 31. | c5 | d6 32.a5  
Cramling correctly decided to fix the b7 - pawn. The check on c8 does not make sense because Black can at least play ... Rd8 (the pawn endgame is drawish). ♠d7 33.b5

□ 7.1) Endgames without Passed

■ Pia Cramling vs. Natalija Pog

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	p	+	-	+	p	p	- 0
6	-	+	k	t	-	+	-	p 0
5	P	-	R	p	+	-	+	- 0
4	-	+	-	P	p	+	P	+ 0
3	+	-	+	-	P	-	+	P 0
2	-	+	-	+	-	P	-	+ 0
1	+	-	+	-	+	-	K	- 0
x	a	b	c	d	e	f	g	h
y								

35...♠d7 White should understand the opponent's defensive idea to find the best move in this position. 36.♠f1  
It was necessary to keep the king closer to the queenside to prepare for the long-term plan to exchange the a5 - and b7 - pawns. ♠e6 37. | b5 | a6 38.♠e2 | a7 39.♠d2 ♠d6 40.♠c3 ♠c6 41. | b6+ ♠c7 42.♠b4 Right on time!

□ 7.1) Endgames without Passed

■ Pia Cramling vs. Natalija Pog

(Diagram)

36.♠g2 What chance did Pogonina miss in the game? ♠e6 37. | b5 | a6 38.f3 exf3+ 39.♠xf3 | a7 Black is very close to completely equalizing by playing ... Ke6 -

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+ 0
7	+	p	+	k	+	p	p	- 0
6	-	+	-	t	-	+	-	p 0
5	P	-	R	p	+	-	+	- 0
4	-	+	-	P	p	+	P	+ 0
3	+	-	+	-	P	-	+	P 0
2	-	+	-	+	-	P	-	+ 0
1	+	-	+	-	+	-	K	- 0[
x	a	b	c	d	e	f	g	h
y								

d6 - c6 and (after ... Rc5 - Kd6 ) ... Ra6 and ... b7 - b6 .

□ 7.1) Endgames without Passed

■ Pia Cramling vs. Natalija Pog

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	p	+	k	+	p	+	- 0
6	-	+	-	t	-	+	-	p 0
5	P	-	R	p	+	-	p	- 0
4	-	+	-	P	p	+	P	+ 0
3	+	-	+	-	P	-	K	P 0
2	-	+	-	+	-	P	-	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h
y								

37...♠d8 How to get a winning position?  
38.h4 For some reason, Cramling will play h3 - h4 only 11 moves later. But it was already strong enough to get a winning position here. gxh4+ Otherwise, White plays h4 - h5 with a position similar to the game (11 moves later). 39.♠xh4 ♠d7 40.♠g3 White has no good defense against the ... Kf4 - e5 idea.

□ 7.1) Endgames without Passed

■ Pia Cramling vs. Natalija Pog

```

Xl | | | | | | | Y
8- + - k - + - + 0{
7+ p + - + p + - 0
6- + - t - + - p 0
5P - R p + - p - 0
4- + - P - + P P 0
3+ - + - P - K - 0
2- + - + - + - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

49...♙d7 Pogonina has forgiven her opponent. It was a bad idea to allow White to fix the pawn on h6. 50.h5 The position instantly became hopeless for Black. The next step for White is to play e3 - e4. Cramling is again in no hurry (as with the h3 - h4 advance), but this delay does not worsen anything. ♙d8 51.♙f3 ♙d7 52.♙e2 ♙d8 53.♙d3 ♙d7 54.♙b5 ♙c7 Time to move forward. 55.e4

□ 7.1) Endgames without Passed

■ Pia Cramling vs. Natalija Pog, Sochi 2015)

(Diagram)

White has only two obvious advantages in the starting position: control over the open file (though without a chance to enter the opponent's camp), and the d5 - pawn. The third advantage is less visible - White has a mobile pawn structure on the Kingside. Pushing the Kingside pawns should create one more weakness. As we know, it is hard to defend two weaknesses. So, we can say that Black's defensive mission is far from simple. 31.♙c5 ♙d6 32.a5 Cramling correctly decided to fix the b7 -

```

Xl | | | | | | | Y
8- + - + k + - + 0
7+ p + - + p p - 0
6p + - + r + - p 0
5+ - + p + - + - 0
4P P - P p + P + 0
3+ - + - P - + P 0
2- + - + - P - + 0
1+ - R - + - K - 0[
x a b c d e f g h y

```

pawn. The check on c8 does not make sense because Black can at least play ... Rd8 (the pawn endgame is drawish). ♙d7

[ The engine suggests exchanging the b-pawn. But in that case, White also has a big advantage after bringing the rook to a7 (from where it attacks both the a6 - and f7 - pawns). 32...b6 33.♙c8+ ♙d7 34.♙a8 bxa5 35.bxa5 ] 33.b5 axb5 Black can't allow b5 - b6, which creates an outpost on c7. But after ... a6xb5, it is easier to attack the b7 - pawn (from b5). 34.♙xb5 ♙c6 35.♙c5+ ♙d7 White should understand the opponent's defensive idea to find the best move in this position. 36.♙g2

[ It was necessary to keep the King closer to the Queenside to prepare for the long-term plan to exchange the a5 - and b7 - pawns. 36.♙f1! ♙e6 37.♙b5 ♙a6 38.♙e2 ♙a7 39.♙d2 ♙d6 40.♙c3 ♙c6 41.♙b6+ ♙c7 42.♙b4 Right on time! ] 36...g5

A weak try to lock down the Kingside.

[ Black hasn't used her chance. 36...♙e6! 37.♙b5 ♙a6 38.f3 (Here it is late to throw the King to the Queenside. 38.♙f1 ♙a7! 39.♙e2 ♙d6 40.♙d2 ♙c6 41.♙c5+ ♙d6 42.♙c3 ♙a6 followed by ... b7 - b6.) 38...exf3+ 39.♙xf3 ♙a7 Black is very close to completely equalizing by playing ... Ke6 - d6 - c6 and (after ... Rc5 - Kd6) ... Ra6 and ... b7 - b6. ] 37.♙g3 ♙d8

[ Black should be focused on the Kingside and can't play actively on the Queenside.

37...♙e6 38.♖b5 ♖a6 39.h4 ♖a7 40.h5  
 ♙d6 Otherwise, White plays f2 - f4  
 activating the King with a decisive  
 advantage. 41.♖b6+ ♙e7 42.♖xh6 ♖xa5  
 43.♖h8 The h5 -pawn, together with the  
 weakness of the b7 -pawn, guarantees  
 White an easy win. ] **38.f3** [For some  
 reason, Cramling will play h3 - h4 only 11  
 moves later. But it was already strong  
 enough to get a winning position here.  
 38.h4! ♖xh4+ Otherwise, White plays h4 -  
 h5 with a position similar to the game (11  
 moves later). 39.♙xh4 ♙d7 40.♙g3  
 White has no good defense against the ...  
 Kf4 - e5 idea. ] **38...exf3 39.♙xf3**  
 The only thing that changed in the position  
 after this pawn exchange is that White got a  
 weakness on e3 . The win became  
 problematic. In the next few moves, White  
 gets convinced that there is nothing to do  
 besides the h3 - h4 undermining. ♙d7  
**40.♙g3 ♙d8 41.♙f2 ♙d7 42.♙e2 ♙d8**  
**43.♙d2 ♙d7 44.♙d3 ♙d8 45.♙e2 ♙d7**  
**46.♙f1 ♙d8 47.♙g2 ♙d7 48.♙g3 ♙d8**  
**49.h4 ♙d7** Pogonina has forgiven her  
 opponent. It was a bad idea to allow White  
 to fix the pawn on h6 . [ 49...♖xh4+!  
 50.♙xh4 ♙d7 Was closer to a draw than to  
 White's win. For example, 51.♙g3  
 ♙d8 52.♙f4 ♙d7 53.♖b5 ( 53.♙e5 ♖e6+  
 54.♙xd5 ♖xe3 ) 53...♙c7 54.♙f5 ♖e6!  
 55.♖xd5 ♖xe3 56.♙f6 ♖e4 In both cases,  
 the black rook managed to find the right  
 moment to attack the opponent's pawns. ]  
**50.h5** The position instantly became  
 hopeless for Black. The next step for White  
 is to play e3 - e4 . Cramling is again in no  
 hurry (as with the h3 - h4 advance), but this  
 delay does not worsen anything. ♙d8  
**51.♙f3 ♙d7 52.♙e2 ♙d8 53.♙d3 ♙d7**  
**54.♖b5 ♙c7** Time to move forward. **55.e4**  
**dxe4+ 56.♙xe4** The advantage conversion  
 was technically done by the legendary  
 Swedish player. ♖f6 [There was no chance  
 to activate the rook. 56...♖e6+ 57.♙f5 ♖e1  
 58.♙f6 ♖g1 59.♙g7 ♖xg4 60.♙xh6

followed by Kg7 and the h-pawn march. ]  
**57.♖f5 ♖e6+ 58.♙d5 ♖d6+ [ 58...♖e7**  
**59.♖f6 ] 59.♙c4 f6 60.♖b5 ♖e6**  
 [ White can transfer to the pawn endgame  
 after 60...♙c8 61.♖b6! ♖xb6 62.♙xb6  
 ♙d7 63.♙d5 ♙e7 64.♙e4 ♙e6 65.d5+  
 ♙d6 66.♙f5 ♙xd5 67.♙xf6 ♙e4  
 68.♙g6 ♙f4 69.♙xh6 ♙xg4 70.♙g6 ]  
**61.♙d5** After the ... f7 - f6 move, the white  
 King has got the e4 - f5 - g6 route. Black  
 should decide what to allow - Rb6 or Ke4 ,  
 followed by Kf5 - g6 . It is not a pleasant  
 choice. ♖e3 **62.♖b6 ♖f3 63.♙e6 ♖f4**  
**64.d5** The following lines are easy. ♖e4+  
 [ 64...♖xg4 65.d6+ ♙c8 66.d7+ ♙d8  
 ( 66...♙c7 67.♖xb7+ ) 67.a6! ♖e4+  
 68.♙d5 ♖e5+ 69.♙d6 ] **65.♙xf6 ♖xg4**  
**66.d6+ ♙c8 67.♙g6 ♖g1 [ 67...♖a4**  
**68.♙xh6 ♖xa5 69.♙g6 ] 68.♙xh6 g4**  
**69.♙g7 g3 70.h6 ♖h1** [After 70...g2  
 White has two ways to stop the pawn.  
 71.♖b2 (Or 71.d7+ ♙xd7 72.♖g6 )]  
**71.♖b2 [ 71.d7+ ♙xd7 72.♖g6**  
 was a bit simpler. ] **71...♖h4 [ 71...♖h2**  
**72.h7 ] 72.h7 ♖g4+ 73.♙f6 ♖h4 74.♙g6**  
**♙d7 75.♖xb7+ ♙xd6 76.♖b1 ♙e5**  
**77.a6 g2 78.♖g1 ♖g4+ 79.♙h5**  
 Black resigned.

□ **7.1) Endgames without Passed**  
 ■ **David Navara vs. Baadur Jobav**

(Diagram)

There are two open files on the board. At  
 first sight, Black's chances are higher  
 because their rook is already on one of  
 them and ready to invade the second rank.  
 But in fact, the more active King allows  
 White to level out the opponent's rook  
 control of the open file. **18.♙c3**  
 Now the white rook is ready to occupy the  
 7th rank. Black needs to think up something  
 to get counterplay. ♙f8 There was an



```

XI | | | | | | | | Y
8- + - ♖ - + ♙ + 0
7♙ - + - + ♙ ♙ ♙ 0
6- + ♙ + ♙ + - + 0
5+ - + - + - + - 0
4- + - + ♙ ♙ - + 0
3+ - + - + - + - 0
2♙ ♙ ♙ + - + ♙ ♙ 0
1+ - + - + - + ♖ 0[
x a b c d e f g h y

```

active plan that required precise calculation. Jobava instead preferred a passive setup.  
**19.** ♖b1 ♙e7 **20.** ♖b4 White could have activated his rook with better chances.

□ 7.1) Endgames without Passed  
 ■ David Navara vs. Baadur Jobav

```

XI | | | | | | | | Y
8- + - ♖ - + ♙ + 0
7♙ - + - + ♙ ♙ - 0
6- + - + ♙ + - + 0
5+ - ♙ - + - + ♙ 0
4- + - + ♙ ♙ - + 0
3+ - ♙ - + - + - 0
2♙ + ♙ + - + ♙ ♙ 0
1+ ♖ + - + - + - 0[
x a b c d e f g h y

```

**20.** ♙c4 Continuation of the previous variation. Here is the instructive moment. Black has a choice of two continuations: ... Rd4 and ... Rd2. How to choose which one is better? ♖d2 The engine says that both are leading to equal play. But from a human point of view, it is easier to play after ... R d2 because the e4 -pawn does not help create a passed pawn for Black.

□ 7.1) Endgames without Passed  
 ■ David Navara vs. Baadur Jobav

```

XI | | | | | | | | Y
8- + - ♖ - + ♙ + 0
7♙ - + - + ♙ ♙ ♙ 0
6- + ♙ + ♙ + - + 0
5+ - + - + - + - 0
4- + - + ♙ ♙ - + 0
3+ - + - + - + - 0
2♙ ♙ ♙ + - + ♙ ♙ 0
1+ - + - + - + ♖ 0[
x a b c d e f g h y

```

**18.** ♙c3 Now the white rook is ready to occupy the 7th rank. Black needs to think up something to get counterplay. ♖h5 MaKing luft for the King and advancing the pawn one square closer to the promotion (it will be important when the black rook reaches the g2 - and h2 -pawns and the pawn run begins). **19.** ♖b1 ♙c5 Now Black builds an outpost for the rook. Continued in the next variation.

(Diagram)

**26...** ♖d5 **27.** ♙c4 White invited the rook to the second rank, and Black accepted it. ♖d2 From a general point of view, it looks correct to play actively in the rook endgame. But this time, playing solid and defensive was enough for an equal position. **28.** ♙a5 Black lacks at least one tempo in all lines. White is winning. ♙d8 **29.** ♖b8+ ♙c7 **30.** ♖f8 ♖d7 **31.** ♙b4 ♙a6 **32.** ♙c5 A demonstrative picture - the domination of the white pieces is obvious and leaves no hope for Black to save.

```

XI | | | | | | | | Y
8- + - + - + - + 0{
7p - + - k p p - 0
6- + p + p + - + 0
5+ - t - P - + p 0
4P R - + - P - + 0
3+ K + - + - P - 0
2- + P + - + - P 0
1+ - + - + - + - 0
x a b c d e f g h y

```

- 7.1) Endgames without Passed  
 ■ David Navara vs. Baadur Jobav, 2016)

```

XI | | | | | | | | Y
8- + - t - + k + 0
7p - + - + p p p 0
6- + p + p + - + 0
5+ - + - + - + - 0
4- + - + P P - + 0
3+ - + - + - + - 0
2P k P + - + P P 0
1+ - + - + - + R 0[
x a b c d e f g h y

```

There are two open files on the board. At first sight, Black's chances are higher because their rook is already on one of them and ready to invade the second rank. But in fact, the more active King allows White to level out the opponent's rook control of the open file. **18.♙c3** Now the white rook is ready to occupy the 7th rank. Black needs to think up something to get counterplay. **♙f8** There was an active plan that required precise calculation. Jobava instead preferred a passive setup. [ **18...h5!** Making luft for the King and advancing the pawn one square closer to the promotion (it will be important when the

black rook reaches the g2 - and h2 -pawns and the pawn run begins). **19.♗b1 c5!** Now Black builds an outpost for the rook. **A)** **20.♙c4?!** Here is the instructive moment. Black has a choice of two continuations: ... **Rd4** and ... **Rd2**. How to choose which one is better? The engine says that both are leading to equal play. But from a human point of view, it is easier to play after ... **Rd2** because the e4 -pawn does not help create a passed pawn for Black. **A1)** **20...♗d4+?!** **21.♙xc5 ♗xe4 22.g3 ♗e2 23.c4** Here, Black can only hold the balance by taking on a2 (again, the creation of a passed pawn matters!). **♗xa2!** (**23...♗xh2?** **24.♙c6 ♗g2 25.c5 ♗xg3** Too late. **26.♙b7** Black can't stop the c5 - pawn. ) **24.♙c6 a5 25.c5 a4** followed by ... **a4 - a3** and ... **Rb2** with equal play. ; **A2)** **20...♗d2!** **21.c3 ♗xg2 22.♙xc5 ♗xh2 ; B)** **20.♗b7 ♗d4 21.♗xa7 ♗xe4 B1)** **22.a4 ♗xf4 23.a5 ♗a4 24.♙b3 (24.a6? h4 25.♙b3 ♗a5** The white King and rook are disconnected. Black can quietly use the pawn majority on the Kingside. ) **24...♗a1 25.♙c4 ♗a2 26.♙b3 ; B2)** **22.g3** (The a-pawn is not dangerous due to the **Ra4 - a5** maneuver (if White plays **a5 - a6**) that cuts off the white King from it.) **h4** Thanks to the **h7 - h5** move, Black has counterplay on the Kingside. The position is complicated. ] **19.♗b1 ♙e7 20.e5** Navara grabbed more space in the center, but at the same time, he created a hook for the opponent's play. [Instead, White could have activated his rook with better chances. **20.♗b4!? ♗d7 21.♗a4 h6 22.♗a5** followed by **h2 - h4 - h5 , a2 - a4** with pressure on both sides. ] **20...h5** Jobava correctly made a helpful move on the Kingside. [Right now, ...**f7 - f6** would be a fatal mistake. **20...f6?** **21.♗b7+ ♗d7 22.♗xd7+ ♙xd7 23.exf6 gxf6 24.g4** and then **Kd4 , h2 - h4 , g4 - g5** . Black can't cope with all problems - the defense of the **c6 - and e6 -pawns** and holding the

outside passed pawn. ;The idea to prepare ... f7 - f6 with ...Rd7 was also not fast enough. 20... | d7 to be ready for ... f7 - f6 . 21.a4! f6?! 22.a5! White plans to play a5 - a6 , and then his King comes to c5 , and the rook is ready to invade on b7 or b8 . fxe5 23.fxe5 ♠d8 24. | b8+ ♠c7 25. | e8 ]

**21.a4** White prepared a4 - a5 - a6 advancing. Black should stop it. | **d5** **22. | b7+ | d7 23. | b8 | d8** [ 23... | d1 24. | a8 | d7 25.♠c4 ] **24. | b4 | d5 25.g3** Navara waits for a good moment. | **c5+** A first inaccuracy. [With the pawn on h5 , it was already possible (and needed) to attack the white pawns with the ...f7 - f6 breakthrough. 25...f6! 26. | b7+ | d7 27. | xd7+ ♠xd7 28.exf6 gxf6

Compared to the pawn endgame we saw in the 20... f6 line, White can't easily create a passed pawn on the Kingside. 29.♠c4 ♠d6 30.h3 f5! 31.♠d4 c5+ 32.♠c4 a6

The black pawns are placed perfectly, and the King can move from c6 to d6 and back. ] **26.♠b3 | d5 27.c4** White invited the rook to the second rank, and Black accepted it. | **d2** From a general point of view, it looks correct to play actively in the rook endgame. But this time, playing solid and defensive was enough for an equal position. [ 27... | d3+! 28.♠c2 | d7

All Black needs is to bring his King to the c7 - and c8 -squares. White can't disturb this plan. 29.a5 **A)** 29...c5? The activity is not in time. 30. | b8! | c7 ( 30... | d8? 31. | b5 | c8 32. | b7+ ) 31.♠d3

White has a dangerous attack on the Kingside. ; **B)** 29...♠d8! 30. | b8+ ( 30.a6 ♠c7 and then 31...c5 and 32...Kc6 . ) 30...♠c7 31. | g8 g6 32.♠c3 c5

This is a key difference with the game text - White can't put the King on c5 . ] **28.a5** Black lacks at least one tempo in all lines. White is winning. [There was no sense to give a check. 28. | b7+ | d7 ] **28...♠d8** [ 28... | xh2 29. | b7+ ♠e8 30. | xa7

With the King cut off on the 8th rank,

Black has no chance to stop the a-pawn. ; 28... | d7 There was an equal position with the pawn on a4 and the King on c2 . But now, Black is late to handle all threats.

29.♠a4! (After a careless pawn move, the black King can come to c7 . 29.a6? ♠d8! 30. | b8+ ♠c7 31. | g8 g6 And White can't play Kb4 - c5 because of ... Kb6 . ) 29...f6

The breakthrough does not play an important role here because the black pieces are too passive. ( 29...♠d8 30. | b8+ ♠c7 31. | g8 g6 32.♠b4 followed by Kc5 with a winning position. ) 30.a6! fxe5 31.fxe5 **A)** 31...g5 32. | b8 | d8 33. | b7+ | d7 34.♠b4! ♠d8 35.♠c5! | xb7 36.axb7 ♠c7 37.b8♠+ ♠xb8 38.♠xc6

The white King's activity overwhelms the resources of an outside passed pawn. ♠c8 39.c5 g4 40.♠d6! a5 41.♠xe6 a4 42.♠d6 a3 43.e6 a2 ( 43...♠d8 44.e7+ ♠e8 45.c6 a2 46.c7 ) 44.e7 a1♠ 45.e8♠+ ♠b7 46.c6+ Black loses the Queen. ; **B)** 31...♠d8 32. | b8+ ♠c7

Earlier, we saw how bringing the King to c7 could equalize the position, but now there is another situation - Black can't play . .. c6 - c5 and ... Kc6 (to prevent the white King from invading on c5 ). White puts the King on a5 , the rook on some square on the b-file, and Black appears in a zugzwang - the King should be near b6 (to play ... Kb6 in case of Kb4 ), and the rook should be on d7 (to stop the Rb7 - b8 - a8 maneuver). 33. | b3 g5 34.h4 g4 35.♠a5

Here is a zugzwang. | e7 ( 35...♠c8 36.♠b4 ) 36. | b7+ ♠d8 37. | b8+ ♠c7 38. | a8 ] **29. | b8+ ♠c7** [ 29...♠e7 30.a6 ] **30. | f8 | d7 31.♠b4 a6 32.♠c5**

A demonstrative picture - the domination of the white pieces is obvious and leaves no hope for Black to save. **g6 33. | a8 ♠b7 34. | f8** There was no need to hurry. ♠c7 **35.h3 ♠b7 36.g4 hxg4 37.hxg4 ♠c7 38. | a8 ♠b7 39. | h8 ♠c7 40. | h1**

White planned to bring the rook to b6 . But it is not the end - Black can cope with this

threat. | d2 41. | h7 [White could have lost the whole advantage in 1 move. 41. | b1?? | a2 ] 41... | d7 Black has defended everything, and there is an impression that a long way to win the game is ahead. But Navara managed to do this in one move. Can you find it? 42.g5 [ Black resigned because any of his moves allow White to play Rh7 - h1 - b1 - b6 with a win of both Queenside pawns. Moreover, White has a breakthrough idea with f4 - f5 , that works after ...Kb7 . 42.g5 ♖b7 ( 42... | e7 43. | h1! | d7 44. | b1 ) 43.f5! ( 43. | h1 also wins. ) 43...exf5 ( 43...gxf5 44.g6 ) 44.e6 ]

☐ 7.1) Endgames without Passed  
☒ Rasmus Svane vs. Mykhaylo Ole

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	♞	-	+	0
7	♙	-	+	r	+	♙	+	♙0
6-	+	♙	+	-	+	♙	+	0
5	+	-	+	-	+	-	+	0
4-	+	-	+	-	+	-	+	0
3	+	R	+	-	+	-	+	P0
2	P	P	-	+	K	P	P	+
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
								y

32. | c3 What was the correct defense? | b7  
 Black chose the correct defense.

☐ 7.1) Endgames without Passed  
☒ Rasmus Svane vs. Mykhaylo Ole

(Diagram)

43.b4 There was a nice tactical decision to level the chances. Can you find it? a5  
 44.bxa5 | b2 I guess Oleksiyenko refused

X	I	I	I	I	I	I	I	Y
8-	♞	-	+	-	+	-	+	0
7	♙	-	+	-	+	-	+	♙0
6-	+	♙	♞	-	+	♙	+	0
5	+	-	+	-	+	♙	+	0
4-	+	K	+	-	P	-	+	0
3	+	P	+	-	R	-	+	P0
2	P	+	-	+	-	+	P	+
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
								y

this idea because of 45. | a3 It seems Black does not have time to take on g2 . But a tricky in-between check changes everything. | c2+ The white King can't avoid the checks without moving to the 3rd rank.

☐ 7.1) Endgames without Passed  
☒ Rasmus Svane vs. Mykhaylo Ole

X	I	I	I	I	I	I	I	Y
8-	♞	-	+	-	+	-	+	0
7	♙	-	+	-	+	-	+	0
6-	+	-	+	-	+	-	+	0
5	+	-	+	K	+	R	+	P0
4	P	+	-	+	-	+	-	♞0
3	+	-	+	-	+	-	+	0
2-	+	-	+	-	+	-	+	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
								y

57... | xa4 58.♙e6 Black can't stop the h-pawn. At the same time, he can't hope for his a-pawn because the white rook cuts off the black King along the 5th rank. As we remember from a theoretical part, such a cut-off is enough to win the 'rook vs. pawn' endgame irrelevantly of where the white King is.

□ 7.1) Endgames without Passed  
 ■ Rasmus Svane vs. Mykhaylo Ole, 2017)

```

X| | | | | | | Y
8- + - + - + k + 0
7p - + r + p + p 0
6- + p + - + p + 0
5+ - + - + - + - 0
4- + - + - + - + 0
3+ R + - + - + P 0
2P P - + - P P + 0
1+ - + - + K + - 0[
x a b c d e f g h y

```

It is enough to value the pawn structure (the a7 - and c6 -pawns are weak) to say that White is better. Let's see how the game continued. 31.♙e2 ♜f8 32.♖c3 ♜b7

[ Black chose the correct defense. His rook could have become very passive in the case of straightforward 32...♖d6 33.♖a3 ♖d7 34.♖a6 ♖c7 35.♙d3 ♙e7 36.♙c4 ♙d6 37.b4 Compared to the starting position, White achieved obvious progress. ] 33.b3

After b2 - b3 , the white rook can no longer attack the a7 -pawn in one move. ♖b6

34.♙d3 ♙e7 35.♙c4 [The German player didn't use an opportunity to take the 5th rank under control, which would have disturbed Black to activate his rook (at least for a while). 35.♖c5!

Though Black's position would still have remained solid enough. h5!

( Black should prevent g2 - g4 as that fixes his Kingside pawns. 35...♙d6? 36.♖a5 ♖b7 37.g4 ) 36.♖a5 ♖b7 37.h4 ♙d6 38.f3 ♖e7 And Black is ready for the Kingside play. 39.g4 hxg4 40.fxg4 f6 ]

35...♖b5 36.♖e3+ ♙d6 37.♖d3+ ♙c7

[ Black could leave the King on the e-file to not play ...f7 - f5 , as it slightly weakens his position. 37...♙e7!? ] 38.♖f3 f5 39.♖e3 ♙d6 40.♖d3+ ♙c7 41.f4 Here, we again face a moment where the defending side

should decide on their strategy - will it be passive or active play? With the next two moves, the Ukrainian GM left his rook passive, and the game irrevocably turned into a play for two results. ♜b8

[ The black rook could have been activated even from b5 . 41...♙b6! 42.♖d7

The exchange of the a-pawn simplifies the defender's task. ( 42.b4 a5 43.a3 axb4 44.axb4 ♙c7 ) 42...♖c5+ 43.♙d3 ♖c1

44.♖xh7 ♖g1 ] 42.♖e3 ♙d6 This is a serious mistake because this move kills most of the rook's hopes of becoming a good piece. [It was not too late to use the d-file to improve the rook. 42...♖d8! 43.♖e7+ ♙b6 44.♖xh7 ♖d2 The play is equal, e.g., 45.g4 ♖xa2 46.gxf5 gxf5 47.♖h5 ♖h2 ]

43.b4 [White must have again used the 5th rank for the rook (this time to restrict the a7 -pawn). 43.♖e5 with a stable advantage. ]

43...♖f8 [There was a nice tactical decision to level the chances. 43...a5! 44.bxa5 ♖b2 I guess Oleksiyenko refused this idea because of 45.♖a3 It seems Black does not have time to take on g2 . But a tricky in-between check changes everything. ♖c2+!

The white King can't avoid the checks without moving to the 3rd rank.

( Black loses the pawn endgame in the following line. 45...♙c7?? 46.a6 ♙b8 47.♖b3+! ♖xb3 48.axb3 ♙a7 49.♙c5 )

46.♙b4 ♖b2+ 47.♙c3 Now Black can take on g2 . ♖xg2! 48.a6 ( 48.♖a4 ♙c7 The King stands in front of the pawn, and the rook attacks the Kingside pawns. )

48...♖g3+ 49.♙b2 ♖xa3 50.♙xa3 ♙c7 51.♙b4 ♙b6 52.a7 ♙xa7 53.♙c5 ♙b7

Black has an extra pawn, but the white outside passed pawn levels the chances. 54.h4 h6 55.a4 ♙c7 56.a5 ♙b7 57.♙d6 ♙a6 58.♙xc6 ♙xa5 59.♙d6 ♙b5

60.♙e6 ♙c5 61.♙f6 ♙d5 62.♙xg6 ♙e4 63.♙xh6 ♙xf4 64.♙g6 ♙g4 65.h5 ]

44.a4 The black rook is now passive, and White can steadily improve his position.

♖g8 After several inaccuracies from both

sides, Black made a mistake that strongly worsened his chances. The white King got an excellent chance to occupy the c5 - square, and Svane used it. [But honestly speaking, it was hard to find a strong defensive idea for Black (even though there was more than one such an idea). 44... ♖f6!? This move prepares Black for the Rd3, Kc5 invade but leaves the 8th rank undefended (moves like 45.Re8 are often rejected for psychological reasons, and someone rarely voluntarily allows such moves). But there seems to be less damage from the rook on the back rank than from the King on c5. 45. ♖e8 ( 45. ♖d3+ ♕c7 46. ♕c5 ♖e6 Rd3 - d6 is stopped, ... Re6 - e2 is prepared. ) 45... ♖f7 This defends both 7th rank pawns. 46.h4 ♕d7 47. ♖g8 ♕d6! Kc5 is prevented, ... Rf7 - e7 - e2 is prepared. The position is equal. ] **45. ♖d3+ ♕c7 46. ♕c5** Black's last chance. ♖e8 This try for activity fails due to the bad position of the black King. [ 46...g5? Looks promising (Black hopes to open the g-file for the rook), but White uses the back-and-forth maneuver to lock down the g-file and return to the Queenside. 47. ♖g3! h6 ( 47...g4 48. ♖e3! gxh3 49. ♖xh3 ♖g7 50. ♖h6 ) 48.h4! g4 49. ♖e3 ; 46...a5! It was the correct undermining. But I don't really know how someone can find and calculate it well in a real game. Just be ready to calculate everything! **A)** 47.b5 cxb5 48. ♕xb5 ( 48.axb5 ♖c8! 49.b6+ ♕b7+ 50. ♕b5 a4! 51. ♖d7+ ♕b8 52. ♕xa4 ♖c4+ 53. ♕b5 ♖xf4 54. ♖xh7 ♖f2 The b-pawn is stopped, and two vs. two on the Kingside does not cause any problems for Black. ) 48... ♖b8+ 49. ♕xa5 ♕c6 The King is arrested, and the black rook can attack the Kingside pawns. The position is equal. For example, 50. ♖c3+ ♕d5 51. ♖c7 ♕e4 52. ♖c4+ ♕d5 ; **B)** 47.bxa5 ♖a8 48. ♕b4 ♖b8+ and then ... Ra8 to attack a5 again. ; **C)** 47. ♖d6 axb4 48. ♖xc6+ ♕d7! The King moves away

from the a-pawn, but it is not a problem because White should first solve the b4 - pawn problem. 49. ♖b6 ♖c8+ 50. ♕xb4 ♖c2 51.a5 ♖xg2 The position is again equal. ] **47. ♖d6 ♖e2 48. ♖xc6+ ♕b7 49. ♖f6 ♖xg2 50. ♖f7+ ♕b8 51. ♖xh7 g5** [AttackKing f4 would have been answered with an attack against the a7 -pawn. 51... ♖f2 52. ♕c6! ♖c2+ 53. ♕b5 ♖f2 54. ♕a6 Nice play by the King! ♖xf4 55. ♖b7+ ♕c8 56.a5 ♖e4 57.b5 f4 58. ♖f7 White's passed pawns win the game. ] **52.fxg5** [Another winning line was tied to the King's maneuver from the previous comment. 52. ♖h5! gxf4 53. ♖xf5 ♖h2 54. ♕c6! ♖c2+ 55. ♕b5 ♖h2 56. ♕a6 ♖xh3 57. ♖f8+ ♕c7 58. ♖xf4 ] **52... ♖xg5 53.h4 ♖g6 54. ♕d5** The German player correctly evaluated the consequences of exchanging the b- and f-pawns. ♖g4 [ 54... ♖b6 55.h5 ♖xb4 56. ♖f7 ♖h4 ( 56... ♖xa4 57.h6 ) 57. ♖xf5 Transfers to the game text. ] **55.h5 ♖xb4 56. ♖f7 ♖h4** [ 56... ♖xa4 57.h6 The h6 - h7, Rf8, and h7 - h8=Q idea is unstoppable. ] **57. ♖xf5 ♖xa4 58. ♕e6** Black can't stop the h-pawn. At the same time, he can't hope for his a-pawn because the white rook cuts off the black King along the 5th rank. As we remember from the theoretical part, such a cut-off is enough to win the 'rook vs. pawn' endgame irrelevantly of where the white King is. **♕c7 59. ♕f7 ♖h4 60. ♕g7** [ 60. ♕g6 would win faster, but anyway, already nothing can help Black. ] **60... ♕d6 61.h6 ♖g4+ 62. ♕f7 ♖h4 63. ♕g7 ♖g4+ 64. ♕f7 ♖h4 65. ♕g6** Finally, the King comes closer to the g5 -square, and the rook can build a bridge on this square. **♕e6 66. ♖g5 a5 67.h7** Black resigned.

□ 7.1) Endgames without Passed  
 ■ Nihal Sarin vs. Justin Wang #

```

XI | | | | | | | Y
8- + - + - + - + 0{
7+ r + - + - + p 0
6R + p k - + p + 0
5+ - + p + p + - 0
4- + - P - + - P 0
3+ - + - P - P - 0
2- + - + - PK + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

Let's evaluate the position. The white rook is more active. The white King has a promising path ( f3 - f4 - g5 - h6 ), while the black King is passive and can only defend weaknesses. White only has one pawn that requires help ( f2 ), with the other pawns all defended by pawns.

Meanwhile, Black has two pawns to take care of ( c6 and h7 ). For these reasons, White has better chances. Black should have made a decision regarding the concrete problems. How to split the roles between King and rook? And what to do with the h7 -pawn? Leave it on h7 , move it to h6 (with the idea ... g6 - g5 ) or h5 ? I'll ask you to answer these questions and suggest a move for Black. **44...h5**

[ 44...h6? Black lost time because the ... g6 - g5 idea was unachievable. It was better to build a fortress in the following manner: place the pawns on h5 , g6 , and f5 , move the rook to c2 to defend the c6 -pawn and attack the f2 -pawn (to prevent Kf4 ), with the King defending the g6 -pawn. ] **45.♠f3** | **b2** **46.** | **a7** ♠e6 **47.** | **g7** ♠f6 **48.** | **c7** | **c2**

□ 7.1) Endgames without Passed  
 ■ Nihal Sarin vs. Justin Wang #

```

XI | | | | | | | Y
8- + - + - + - + 0{
7+ r + - + - + p 0
6R + p k - + p + 0
5+ - + p + p + - 0
4- + - P - + - P 0
3+ - + - P - P - 0
2- + - + - PK + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

**44...h6** Black lost time because the ... g6 - g5 idea was unachievable. **45.** | **a8**

The rook goes to h8 , and the game might have finished here if Nihal had found the correct follow-up. ♠e6 **46.h5** [ **46.** | **c8** This move does not lose the advantage, but White could win the pawn right now without Rc8 . ] **46...g5** **47.** | **h8**

□ 7.1) Endgames without Passed  
 ■ Nihal Sarin vs. Justin Wang #

```

XI | | | | | | | Y
8- + R + - + - + 0
7+ - + - + - + - 0
6r + p + - k p + 0
5+ - + p + p + p 0
4- + - P - k - P 0
3+ - + - P P P - 0
2- + - + - + - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

**54.** | **b8** A first try of a zugzwang. The King should stop Ke5 and Kg5 when the rook has no other squares on the 6th rank. But it is not a big deal for Black. | **a3**

Black instinctively pushed the rook as far as possible in the game, but in this case, the best place for the rook is the third rank (there are three white pawns). 55. | b6 | c3 This is the best square for the rook - from here, it defends the c6 -pawn and attacks the white pawns. It is essential to see such squares for your own pieces (not only in the endgames but also in other game stages).

□ 7.1) Endgames without Passed  
 ■ Nihal Sarin vs. Justin Wang #

X	I	I	I	I	I	I	I	Y		
8	-	+	-	+	-	+	-	+	O	
7	R	-	+	-	+	-	+	-	0	
6	-	+	p	+	-	k	p	+	0	
5	+	-	+	p	+	p	+	p	0	
4	-	+	-	P	-	k	-	P	0	
3	+	-	+	-	P	P	P	-	0	
2	-	+	-	+	-	+	-	+	0	
1	+	-	t	-	+	-	+	-	0	
	x	a	b	c	d	e	f	g	h	y

77. | a5 The interesting phase of the game begins. White wants to play Rc5 . How would you defend here? | b1 The best defense was to bring the rook to the 6th rank. 78. | c5 | b6 Now the King stays on f6 to hold the colleague, and the rook moves on b6 and a6 until White thinks up something new.

□ 7.1) Endgames without Passed  
 ■ Nihal Sarin vs. Justin Wang #

(Diagram)

94... | g5 95.h6 The game went into its final and decisive stage. White has two ideas that he will try to combine to

X	I	I	I	I	I	I	I	Y		
8	-	+	-	+	-	+	-	+	O	
7	+	-	+	-	+	-	+	K	0	
6	-	+	-	+	k	+	-	+	0	
5	+	-	+	p	+	-	+	P	0	
4	-	+	-	P	-	R	-	+	0	
3	+	-	+	-	+	-	+	-	0	
2	-	+	-	+	-	+	-	+	0	
1	+	-	+	-	+	-	t	-	0	
	x	a	b	c	d	e	f	g	h	y

overcome the opponent's resistance. The first is to free the King from the corner (by playing Rg8 ); the second is to win the d5 - pawn. At the same time, Black has two defensive strategies: 1) to keep the King stuck in the corner; 2) to take on d4 and to enter the equal endgame 'pawn vs. rook.' Both players should have considered these different ideas to find the best moves with seconds left on the clock. Even though Nihal missed a few more winning continuations, Black was the side to make the last mistake in this dramatic endgame. ♠e7 Instinctively, it does not look risky to keep the rook on g5 , but the rook should be on any other square of the g-file. The point is that White has an idea to bring his rook to e5 to attack both the rook and the d5 - pawn. 96. | f1 Black has many different move orders to try in this position, but none bring the desired effect.

□ 7.1) Endgames without Passed  
 ■ Nihal Sarin vs. Justin Wang #

(Diagram)

108. | g7+ Where should Black move his King to? ♠f6 Justin has correctly solved this puzzle. The King should not block the 8th rank.



X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	R	K	O
7	+	-	+	-	+	k	+	P	O
6	-	+	-	+	-	+	-	+	O
5	+	-	+	p	+	-	+	-	O
4	r	+	-	P	-	+	-	+	O
3	+	-	+	-	+	-	+	-	O
2	-	+	-	+	-	+	-	+	O
1	+	-	+	-	+	-	+	-	O
x	a	b	c	d	e	f	g	h	y

□ 7.1) Endgames without Passed

■ Nihal Sarin vs. Justin Wang #

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	K O {
7	+	-	+	-	K	-	+	P O
6	-	+	-	+	-	+	-	+ 0
5	+	-	+	p	+	R	+	- 0
4	-	+	-	P	-	+	-	+ 0
3	+	-	+	-	+	-	+	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	t	- 0
x	a	b	c	d	e	f	g	h y

113...♙e6 How does White get the King

from out of the corner? 114. ♖e5+

The culmination of the endgame. ♙d6

115. ♖e8 Now it is over. White can free the King from h8 , as seen in the theoretical section.

□ 7.1) Endgames without Passed

■ Nihal Sarin vs. Justin Wang (,2020)

The following online rapid game was not a top-level game. Still, it included so many instructive mistakes (natural for this time control) that I had to include it in this course.

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	r	+	-	+	-	+	p	0
6R	+	p	k	-	+	p	+	0
5+	-	+	p	+	p	+	-	0
4-	+	-	P	-	+	-	P	0
3+	-	+	-	P	-	P	-	0
2-	+	-	+	-	P	K	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

e. Since the endgame was very long (more than 70 moves!) , I will be explaining only the critical moments. Let's evaluate the position. The white rook is more active. The white King has a promising path ( f3 - f4 - g5 - h6 ) , while the black King is passive and can only defend weaknesses. White only has one pawn that requires help ( f2 ) , with the other pawns all defended by pawns. Meanwhile, Black has two pawns to take care of ( c6 and h7 ). For these reasons, White has better chances. Black should have made a decision regarding the concrete problems. How to split the roles between King and rook? And what to do with the h7 -pawn? Leave it on h7 , move it to h6 (with the idea ... g6 - g5 ) or h5 ? I'll ask you to answer these questions and suggest a move for Black. 44...h6

Black lost time because the ... g6 - g5 idea was unachievable. It was better to build a fortress in the following manner: place the pawns on h5 , g6 , and f5 , move the rook to c2 to defend the c6 -pawn and attack the f2 - pawn (to prevent Kf4 ) , with the King defending the g6 -pawn. [ 44...h5! 45.♙f3 ♖b2 46.♖a7 ( 46.♙f4 ♖xf2+ 47.♙g5 ♖f3 48.♙xg6 ♖xe3 followed by 49...Rxc3 . ) 46...♙e6 47.♖g7 ♙f6 48.♖c7 ♖c2 ]

45. ♖a8 The rook goes to h8 , and the game might have finished here if Nihal had found the correct follow-up. ♙e6 [Black loses the h6 -pawn if he decides to play ...g6 - g5

. 45...g5 46. | h8 ] **46. | c8** [This move does not lose the advantage, but White could win the pawn right now without Rc8 . 46.h5! g5 ( 46...gxh5 47. | h8 ) 47. | h8 ] **46... | b6 47. | h8** White missed one more chance to win the h6 -pawn, and the game switched back to equality. [ 47.h5 ] **47...h5** Nothing special happened during the next few moves. **48. | c8 ♠f6 49.♠f3 | a6 50.♠f4 | b6** White can't directly invade on the e5 - or g5 -square. **51. | f8+ ♠e7 52. | c8 ♠f6 53.f3 | a6 54. | b8** A first try of a zugzwang. The King should stop Ke5 and Kg5 when the rook has no other squares on the 6th rank. But it is not a big deal for Black. **| a1** [ Black instinctively pushes the rook as far as possible, but in this case, the best place for the rook is the third rank (there are three white pawns). 54... | a3! 55. | b6 | c3 This is the best square for the rook - from here, it defends the c6 -pawn and attacks the white pawns. It is essential to see such squares for your own pieces (not only in the endgames but also in other game stages). 56. | a6 | c1 57. | a8 | c3 This position will happen later in the game. ] **55. | f8+ ♠e7 56. | c8 | c1** Luckily for Black, this position is still equal, but of course, it was better to avoid the variations of Ke5 and Kg5 . **57.♠e5** [The black rook is in time to take enough of the opponent's pawns. 57.♠g5 | c3 58.♠xg6 | xe3 59.f4 | xg3+ 60.♠xf5 | d3 61. | xc6 | xd4 ] **57... | c3 58.♠f4** Nihal correctly decided not to force simplifications. **♠f6** Black finally built a fortress, and during the next 18 moves, Nihal moved back and forth, looking for a chance. **59. | f8+ ♠e7 60. | a8 ♠f6 61. | c8 | c1 62. | d8 ♠e7 63. | h8 ♠f6 64. | f8+ ♠e7 65. | b8 ♠f6 66. | b2 | c3 67. | a2 | c1 68. | b2 | c3 69. | b7 | c1 70. | d7 ♠e6 71. | d8 ♠e7 72. | h8 ♠f6 73. | h7 | c3 74. | c7 | c1 75. | d7 ♠e6 76. | a7 ♠f6 77. | a5** The interesting phase of the game begins. White wants to play

Rc5 . How would you defend here? **♠e6** This move destroys Black's construction, and Justin needs to resolve new problems. With the seconds left on the clock, it is not easy. [Black can't ignore the threat of Rc5 . 77... | c3?? 78. | c5! | xc5 79.dxc5 ♠f7 80.♠e5 ♠e7 81.f4 ; The best defense was to bring the rook to the 6th rank. 77... | b1! 78. | c5 | b6 Now the King stays on f6 to hold the colleague, and the rook moves on b6 and a6 until White thinks up something new. 79.e4 ( 79.g4 fxc4 80.fxc4 hxc4 81.♠xc4 | a6 ) 79...fxe4 80.fxe4 dxe4 81.♠xe4 | a6 ] **78.♠g5** [There was a simple draw in the pawn endgame after 78. | c5? | xc5 79.dxc5 ♠f6 80.g4 fxc4 81.fxc4 hxc4 82.♠xc4 ♠f7 83.♠g5 ♠g7 ] **78... | g1 79. | c5** [Nihal keeps avoiding the exchanges. 79.♠xc6 | xg3+ 80.♠xh5 | xf3 ] **79...♠d6** [Black missed a chance to simplify the position. 79... | xg3+! 80.♠f4 | h3 81. | xc6+ ♠f7 The white King can't move forward, and the game should end with a draw. ] **80.♠f4** The black rook on the first rank is placed worse (compared to the 3rd rank), but the position remains equal. **| f1 81. | c2 | g1 82. | a2** A new challenge for Black. The white rook goes to attack the g6 -pawn. How to defend? **| f1** Black should have directed the rook to c3 . But seconds were ticking, and Justin decided to leave the rook closer to the white pawns, preventing the white King from moving forward again. [ As a quiet home analysis shows, White can't make use of their own achievements after 82... | c1! 83. | a8 ( 83. | a6 | c3 ; 83.♠g5 | g1 84.♠xc6 | xg3+ ) 83...♠e6 84.♠g5 | g1 ] **83. | a7 ♠e6 84. | c7 | c1 85.♠g5 | c3** Black tries his best, but it is not enough. **86.♠xc6 | xe3 87. | xc6+ ♠d7 88. | f6 | xf3 89. | xf5 | xg3+ 90.♠xh5** [There was a tricky trap after 90. | g5? White seems to win both black pawns, but Black has an answer. **A)**

90... | d3 91. | xd5+ with symmetrical variations. ♖e6 ( 91... ♖c6 92. | c5+ ♖d6 93. | c4 ♖d5 94. | b4 ) 92. | e5+ ♖d6 93. | e4 ♖d5 94. | f4 ; **B**) 90... | g4 Black takes on d4 with a draw. ] **90... ♖e6** White won the pawn, but the toughest part of the endgame has only just begun. This was the first clearly winning moment. White needed to organize the King's position on the g-file to free the way for the passed pawn. Can you find it? **91. | f4** [ 91. | e5+! At first, pushing the King to the d-file was required. ♖d6 92. | g5 At second, kicking the rook from the g-file. | h3 93. | g4 And finally, defending the h4 - pawn to prepare Kg6 . Black's pieces can't prevent this. ; 91. | g5? | h3 92. | g4 ♖f5 This is why the Re5 check is the correct move. ] **91... | g1 92. ♖h6** The g-file blocking followed by Kg6 also looks strong here, but Black can destroy this plan with the King on e6 . [ 92. | g4 | f1! On the g-file, the white King will not have a hiding square from the side checks. 93. ♖g6 | f6+ 94. ♖h7 ♖f5! The simplest. The King attacks on d4 , and White can't avoid the drawish endgame 'pawn vs. rook.' 95. | g1 ♖e4 96. | d1 | f4 97. h5 | g4 Black is waiting. 98. h6 ♖e3 99. ♖h8 | g2 100. h7 ♖e4 ] **92... | e1** Nihal could have freed the road for the h-pawn. I offer you to train in finding the win in this position. [ It was necessary to stay passive and control the g-file. 92... | g2 ] **93. h5** [ 93. ♖g5! | g1+ 94. | g4 The best chance for Black is to put the rook on the f-file to give the side checks, but this time it does not help due to an opportunity to hide the King on h4 . | f1! 95. h5 | f5+ 96. ♖h4! ♖f6 97. h6 | f1 And now one more precise move is required. Do you see it? 98. | g3! Preparing the Rh3 -shelter (against ... Rh1 ). All arising pawn endgames are losing for Black. | h1+ 99. | h3 | xh3+ ( 99... | g1 100. h7 ♖g7 101. | g3+ ; 99... | e1 100. ♖g4 | e4+ 101. ♖f3 | e8 102. h7 | h8

103. ♖f4 ) 100. ♖xh3 ♖g6 101. ♖g4 ♖xh6 102. ♖f5 ] **93... | g1** The position again becomes drawish; the white King can't easily free the road for the pawn. [ A try to win the d4 - pawn was a fatal mistake. 93... | e4?? 94. ♖g5 ] **94. ♖h7 | g5 95. h6** The game went into its final and decisive stage. White has two ideas that he will try to combine to overcome the opponent's resistance. The first is to free the King from the corner (by playing Rg8 ); the second is to win the d5 - pawn. At the same time, Black has two defensive strategies: 1) to keep the King stuck in the corner; 2) to take on d4 and to enter the equal endgame 'pawn vs. rook.' Both players should have considered these different ideas to find the best moves with seconds left on the clock. Even though Nihal missed a few more winning continuations, Black was the side to make the last mistake in this dramatic endgame. **♖e7** Instinctively, it does not look risky to keep the rook on g5 , but the rook should be on any other square of the g-file. The point is that White has an idea to bring his rook to e5 to attack both the rook and the d5 - pawn. [It was better to move the rook down. 95... | g1 The most probable is that the game would come to one of the positions we will see later in the text. All other continuations do not give White a win. 96. | f8 ( 96. | f2 | g4 97. | e2+ ♖f7 ; This is the line on how the position can transfer to the game text. 96. ♖h8 | g2 97. h7 | g1 98. | f8 It is the position after move 99. Rf8 . ) 96... | g4! 97. | g8 | xd4 98. ♖g7 | g4+ It is not the only way to reach a draw. ( 98... | h4 99. h7 d4 100. h8 ♖ | xh8 101. | xh8 ♖e5 When the King of the strongest side is on the same side as the pawn, there are fewer chances to win the game (see the Outflanking position from the theoretical part of this course). ) 99. ♖f8 | f4+ 100. ♖e8 | a4 101. | g6+ ♖f5 ] **96. ♖h8** White pushes the King forward, which is

natural - the pawn can reach the 7th rank. But this reflex makes the position drawish. The winning way was connected with the ideas of Kh7 - g6 - h5 (this works perfectly with the black rook on the 4th rank (where it appears after capturing on d4 )) or the Rg5 ( h5 ) bridges with the King on g6 . Ke3 Kf5 d4 Rg3+ Ke2 Ke4+- d3 Re1+- Re8 Rxd4 A draw seems close, but Black loses due to a short distance between his rook and the white pawn. Kg6! Rg4+ Kh5! Rg1 h7 Rh1+ Kg6 d4 h8=Q Rxh8 Rxh8 Ke5 The white King is on the wrong side, but White can drive the opponent's King to the Queenside because the Kings are almost on the same rank. Kg5! Ke4 Kg4! Ke3 Kg3! d3 Ke2 Re8+- Re8+ Kd2 Kf2+- [ The moves 96. | f2 and Rf3 were equally good to win the game. Rf1! Black has many different move orders to try in this position, but none bring the desired effect. **A)** 96... | g4 97. | f5! The rook attacks on d5 and (what is more crucial in this position) prepares a bridge for the King to hide from the checks. | xd4 ( 97... ♣e6 98. | e5+ ♣d6 99. | e8 leads to the 96...Ke6 line. ) 98. ♣g6! | g4+ 99. ♣h5! (This is too early for the bridge. 99. | g5?? | xg5+ 100. ♣xg5 ♣f7 ) 99... | g1 100. h7 | h1+ 101. ♣g6 Now, it is time for the bridge. | g1+ ( 101...d4 102. | h5 ) 102. | g5 ; **B)** Re1+ Kd6 The King should defend the pawn. Kf6 96... | e5 ; **C)** Re5 White wants to play Kh8 , h7 , Re8 , and Rg8 . That's why Black can't stay passive, and his best chance is to take on d4 to get the chance in the 'pawn vs. rook' endgame. Rg4 96... | g1 97. ♣h8 | g4 ( 97... | g2 98. h7 | g1 Re8+- ) 98. h7 | xd4 Rg5 Rh4 99. ♣g7 Kc5 The tricks do not end in this endgame. Can you find the win in this position? Kg6! Thanks to this master move, the white King begins the 'rook vs. pawn' endgame from h7 but not from h8 . But even after that, it remains challenging to see all of the best moves. Rxh7 Otherwise, White plays 104.

Rh5 Rg4 105. Kh6 followed by 106. h8=Q . Kxh7 Kd4! The continuation that offers the most resistance - the King transfers to the e-file to disturb the white King coming closer. Kc4 Kg6 d4 Kf5 d3 Ke4 d2 Rd5 Kc3 Ke3+- Kg6 Ke4 (h8=Q? Rxh8 Kxh8 Kc4 99. ♣g7 d4 Kf6 d3 Rg8 d2 Rd8 Kc3 Ke5 Kc2= ) 99... | g4+! Ke5 Kg5 d4 Rg1! Ke4 Kg4! Ke3 Kg3! Ke2 Kf4! d3 Rg2+- ; **D)** 96... ♣e6 ] **96... | g6** [This move allowed White to bring the King back to h7 to use all the ideas from the previous comment. But of course, the opponents even didn't consider the Kh8 - h7 move. Black should have played 96... ♣e6 to defend the f5 - square and to move his rook away from the 5th rank (where it might be attacked with the move Re5 ). ] **97. h7** [As we already know, the winning continuation was 97. ♣h7 . ] **97... | g1 98. | f5 ♣e6 99. | f8** White threatens to play Rg8 and then Kg7 to promote the pawn (see the freeing the King from a8 ( h8 ) position from the theoretical part of this course). How to defend against this? | **b1** Justin moved his rook away from the Rg8 tempo, which made the Rg8 move pointless (Black will simply play ... Kf7 ). [Ignoring the threat was a bad idea. 99... | g2? 100. | g8 | h2 101. ♣g7 | g2+ 102. ♣f8 | f2+ 103. ♣e8 | a2 104. | g6+ ♣f5 105. | d6 ; Black could have taken on d4 , but the lines after that are far from simple. 99... | g4! 100. | g8 | xd4 101. ♣g7 **A)** 101... | g4+ 102. ♣h6 ( 102. ♣f8 is worse because the promotion does not come fast. | f4+ 103. ♣e8 | a4 104. | g6+ ♣f5 105. | d6 | h4 106. | d7 d4 ) 102... | h4+ 103. ♣g6 | xh7 104. ♣xh7 is similar to the 101...Rh4 line. ♣f5 Again makes a draw. You can check the lines yourself. ; **B)** 101... | h4 102. h8 ♠ | xh8 103. | xh8 **B1)** 103...d4?? 104. | h5 See the rook stops the pawn position from the theoretical part of this course. ; **B2)** 103... ♣e5? 104. ♣g6! ♣e4 (Shouldering comes too late now. 104... ♣f4 105. | d8

♖e4 106.♖g5 d4 107.♖g4 ♖e3  
 108.♖g3 d3 109.♗e8+ ) 105.♖g5 d4  
 106.♖g4 ♖e3 107.♖g3 ; **B3)** 103...♖f5!  
 Shouldering is important - the white King  
 should not have access to the g6 -square.  
 104.♗d8 (Giving the checks along the  
 ranks also does not work to the  
 underpromotion (see the underpromotion to  
 the knight position from the theoretical part  
 of this course). 104.♗h5+ ♖e4 105.♖f6  
 d4 106.♗h4+ ♖e3 107.♖e5 d3 108.♗h3+  
 ♖e2 109.♖e4 d2 110.♗h2+ ♖e1  
 111.♖e3 d1♖+ ) 104...♖e4 105.♖f6 d4  
 106.♖g5 d3 107.♖g4 ♖e3 **B3a)**  
 108.♗e8+ ♖f2 ( 108...♖d2? 109.♖f3 );  
**B3b)** 108.♖g3 ♖e2 109.♗e8+ ♖f1  
 You could see this trick in the time-gaining  
 check position in the theoretical part.  
 ( 109...♖d1? 110.♖f2 d2 111.♗d8 )]  
**100.♗f2** [The first rank checks will force  
 White to return his King to h8 in the case of  
 100.♖g7 ♗g1+ ] **100...♗g1 101.♗f8 ♗b1**  
**102.♗f3 ♗g1** The white King is hopelessly  
 locked down in the corner, and the draw  
 looks inevitable. But the Indian GM keeps  
 seeKing for new chances. **103.♗e3+ ♖f7**  
**104.♗e5 ♗a1 105.♗g5 ♗a4** Black didn't  
 see the stalemate idea. Have you already  
 found it? [ 105...♗a8+! 106.♗g8 ♗f8!  
 107.♗xf8+ ♖xf8 ] **106.♗g4 ♗a8+**  
**107.♗g8 ♗a4** [ 107...♗f8! Could again  
 have brought the desired result. ] **108.♗g7+**  
 Where should Black move his King to?  
 ♖f6 [Justin has correctly solved this  
 puzzle. The King should not block the 8th  
 rank. 108...♖f8? 109.♗g4 ♗a1 110.♗f4+  
 ♖e7 111.♖g7 ♗g1+ 112.♖h6 ] **109.♗g4**  
 ♗a8+ [There was a losing pawn endgame  
 in the following line. 109...♖f7? 110.♗f4+  
 ♖g6 111.♖g8 ♗a8+ 112.♗f8 ♗xf8+  
 113.♖xf8 ♖xh7 114.♖f7 ;Black could  
 have transferred the game to the already  
 well-known to us endgame 'rook vs. pawn.'  
 109...♖f5 110.♗g1 ♗xd4 111.♖g7 ♗h4  
 But Justin never took this risk because he  
 had no time to properly calculate the

consequences of such a transformation. ]  
**110.♗g8 ♗a1** Black again made the correct  
 move when facing a hard choice. The rook  
 should have a chance to give the check on  
 the g-file. [ 110...♗a4? 111.♗f8+! ♖e7  
 112.♖g8 ] **111.♗f8+ ♖e7** [Black should  
 have kept the f5 -square under control by  
 playing 111...♖e6 . ] **112.♗f2**  
 [ White missed the occasional chance.  
 112.♗f5! ♖e6 113.♖g7! ( 113.♗e5+  
 ♖f7 ) 113...♗a7+ 114.♖g6 ♗xh7  
 115.♗e5+ ] **112...♗g1 113.♗f5 ♖e6**  
**114.♗e5+** The culmination of the endgame.  
 Where to move the King? ♖d6  
 [ Black should have sacrificed his last pawn  
 to keep the white King locked down in the  
 corner. 114...♖f7! 115.♗xd5 ♗a1  
 The rook can't handle all the problems.  
 116.♗d8 The best chance. ( 116.♗f5+ ♖g6  
 117.♗f8 ♗a7 ; 116.♗d7+ ♖g6 117.♗g7+  
 ♖h6 118.d5 ♗a8+ 119.♗g8 ♗a7 )  
 116...♗a7! ( 116...♖g6?? 117.♖g8 )  
 117.♗g8 ( 117.d5 ♖g6 118.♗d6+ ♖f7  
 119.♗d8 ♖g6 120.♗g8+ ♖h6 ) 117...♗a6  
 118.d5 ( 118.♗g7+ ♖f6 ) 118...♗d6  
 119.♗g7+ ♖f6 ( 119...♖f8? 120.♗g1  
 ♗xd5 121.♗f1+ ♖e7 122.♖g7 ♗g5+  
 123.♖h6 ) ] **115.♗e8** Now it is over. White  
 can free the King from h8 , as seen in the  
 theoretical section. ♗b1 [ 115...♖d7  
 116.♗g8 ♗h1 117.♖g7 ] **116.♖g7 ♗g1+**  
**117.♖f6 ♗f1+ 118.♖g5 ♗g1+ 119.♖f4**  
 ♗f1+ **120.♖g3** Nihal has finally used the  
 presented chance. Black resigned.

## 7.1) Endgames without Passed Edward Song vs. Alex Lenderma

(Diagram)

**37.♗d3 ♗g5** [Of course, Black used the  
 opponent's inaccuracy and began the attack  
 on the Kingside. I think Lenderman spent  
 no time thinkKing on 37...♗d8 because it is

XI	I	I	I	I	I	I	I	Y
8-	t	-	+	-	+	-	+	0
7+	-	+	-	<del>k</del>	p	p	-	0
6-	+	-	+	p	+	-	<del>p</del>	0
5p	-	<del>p</del>	-	+	-	+	-	0
4-	+	P	+	-	+	-	+	0
3+	P	+	-	+	-	+	P	0
2P	+	-	+	K	<del>P</del>	P	+	0
1+	-	+	R	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

impossible to evaluate the resulting pawn endgame precisely. The Kingside advancing is a more practical decision because White can't use the d-file control anyway. The rook trade can be offered later. ] 38.♙d2 White has decided to leave the pawns as they are. Such a passive strategy brought bad results. White should have restricted at least something on the Kingside. h5 39.♙c3 f5 40.♙d1 h4 41.a3 g4 Without difficulties, Black created threats on the Kingside. It is obvious that Black wanted to take on h3 and play ... Rg8 - g2 to attack the white pawns. Lendermann has successfully defended against this one. Continued in Edward Song vs. Alex Lenderman #3 and from White's perspective in the next variation.

□ 7.1) Endgames without Passed  
 ■ Edward Song vs. Alex Lenderma

(Diagram)

41...g4 Continuation of the previous variation. Without difficulties, Black created threats on the Kingside. It is obvious that Black wanted to take on h3 and play ... Rg8 - g2 to attack the white pawns. Lendermann has successfully

XI	I	I	I	I	I	I	I	Y
8-	t	-	+	-	+	-	+	0{
7+	-	+	-	<del>k</del>	-	+	-	0
6-	+	-	+	p	+	-	+	0
5p	-	<del>p</del>	-	+	p	p	-	0
4-	+	P	+	-	+	-	<del>p</del>	0
3P	P	<del>k</del>	-	+	-	+	P	0
2-	+	-	+	-	<del>P</del>	P	+	0
1+	-	+	R	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

defended against this one. But there was also another idea. If you spot it, you can find the only idea of how to hold the balance in this position. I would also highlight that this dangerous situation happened because White had decided to play passively on the Kingside and done nothing against the opponent's advancing. You can make the correct conclusion yourself - the defending side should not allow the opponent to advance their pawns without any resistance. 42.hxg4 Was what White should have played. fxg4 43.♙h1 ♜h8 44.b4

□ 7.1) Endgames without Passed  
 ■ Edward Song vs. Alex Lenderma

(Diagram)

42.♙h1 #1Continuation of Edward Song vs. Alex Lenderman g3 Here is Black's second idea. The weakness on g2 leaves White with almost no hope to save.

XI	I	I	I	I	I	I	I	Y
8-	t	-	+	-	+	-	+	0
7+	-	+	-	k	-	+	-	0
6-	+	-	+	p	+	-	+	0
5p	-	p	-	+	p	+	-	0
4-	+	P	+	-	+	p	p	0
3P	P	k	-	+	-	+	P	0
2-	+	-	+	-	P	P	+	0
1+	-	+	R	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

- 7.1) Endgames without Passed  
 ■ Edward Song vs. Alex Lenderma

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	p	k	-	P	0
3+	-	+	K	+	-	p	-	0
2-	+	R	+	-	+	P	+	0
1+	-	+	-	+	-	t	-	0
x	a	b	c	d	e	f	g	h
y								

58.♙d4 How does Black make progress?  
 ♚d1+ Pushing the King away from the e-pawn.  
 59.♙c4 ♙e3 The black King does not create a threat, but it forces the white rook to control the second rank and frees his rook to take the h-pawn (no necessity for the rook to cut off the white King along the d-file). Black is winning.

- 7.1) Endgames without Passed  
 ■ Edward Song vs. Alex Lenderma, Charlotte 2021)

As often happens, the first move in the endgame is important because it allows for

XI	I	I	I	I	I	I	I	Y
8-	t	-	+	-	+	-	+	0
7+	-	+	-	k	p	p	-	0
6-	+	-	+	p	+	-	p	0
5p	-	p	-	+	-	+	-	0
4-	+	P	+	-	+	-	+	0
3+	P	+	-	+	-	+	P	0
2P	+	-	+	K	P	P	+	0
1+	-	+	R	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

determining the pawn structure. Which pawn structure on the Kingside should White choose? The answer is simple - they should be on the same squares as when no pawns were on the Queenside (h4, g3, and h2). 37.♙d3 [The engine does not indicate that there is anything wrong with 37.♙d3. But I still want to 'award' this move with the '?' mark. The reason is that in the case of h4, White would have fewer problems to worry about.] 37...g5 [Of course, Black used the opponent's inaccuracy and began the attack on the Kingside. I think Lenderman spent no time thinking on 37...♙d8 because it is impossible to evaluate the resulting pawn endgame precisely. The Kingside advancing is a more practical decision because White can't use the d-file control anyway. The rook trade can be offered later.] 38.♙d2 White has decided to leave the pawns as they are. Such a passive strategy brought bad results. White should have restricted at least something on the Kingside. [Song might have disliked the g2 - g4 idea because of ...h6 - h5 and ...Rh8 followed by the occupation of the h-file. But in this case, White could at least bring his King to g2 to protect the key squares on the h-file. 38.g4!? h5 39.♙f3 ♙h8 40.♙g2] 38...h5 39.♙c3 [39.g4 was still possible, but in this case Black would have a choice - to play ... Rh8 and

then invade on the h-file or to play ... h5 - h4 to fix the pawn on h3 followed by play with ... f7 - f5 . Both options look unpleasant for White. So, if White didn't play g2 - g4 on the previous move, there was less sense in doing this now. ] **39...f5** **40. | d1 h4 41.a3 g4** Without difficulties, Black created threats on the Kingside. It is obvious that Black wanted to take on h3 and play ... Rg8 - g2 to attack the white pawns. Lendermann has successfully defended against this one. But there was also another idea. If you spot it, you can find the only idea of how to hold the balance in this position. I would also highlight that this dangerous situation happened because White had decided to play passively on the Kingside and done nothing against the opponent's advancing. You can make the correct conclusion yourself - the defending side should not allow the opponent to advance their pawns without any resistance. **42. | h1** [ White should have played 42.hxg4! fxg4 43. | h1 | h8 44.b4 cxb4+ 45.axb4 axb4+ 46.♣xb4 h3 47.gxh3 gxh3 Both sides have got the passed pawn. Visually, Black's position is advantageous (his rook is placed correctly behind the passed pawn, while the white rook is passive), but with correct play, White should be able to save this endgame. He can even direct his King straight to the h3 -pawn. ;With the pawns on the 4th rank, Black is ready for the pawn endgame in the following line. 42. | d3? | d8! **A)** 43. | xd8? ♣xd8 44.f3 ( Unfortunately for White, he does not have enough time to create a passed pawn. 44.b4 gxh3 45.gxh3 cxb4+ 46.axb4 a4! The white King can't simultaneously stop all black pawns. 47.b5 e5 48.♣b4 e4 49.♣xa4 f4 50.♣b3 e3 51.fxe3 f3 ) 44...gxh3 45.gxh3 e5 Black easily uses the better pawn structure. 46.b4 ( 46.♣d3 a4! 47.bxa4 ♣c7 48.♣c3 ♣b6 49.♣c2 ♣a5 50.♣b3 e4! The pawns distract the King.

51.fxe4 fxe4 52.♣c3 ♣xa4 53.♣d2 ♣xa3 54.♣e3 ♣b4 55.♣xe4 ♣xc4 ; 46.a4 This move prevents the ... a5 - a4 idea, but having the extra pawn in the center is enough to win. ♣e7 47.♣d3 f4 48.♣d2 ♣e6 49.♣e2 ♣f5 50.♣d3 e4+! A typical temporary pawn sacrifice. 51.fxe4+ ♣e5 ) 46...cxb4+ 47.axb4 a4 One of the pawns will become a Queen. ; **B)** 43. | e3 ♣f6 If White plays b3 - b4 , the black rook invades on the second rank. If White stays passive, Black continues advancing his pawns. White is hopeless. ] **42...g3** Here is the second black idea. The weakness on g2 leaves White with almost no hope to save. **43.f3** [TaKing on g3 would have created the passed pawns for both sides, but the black pawns would have been more promising, while the h-pawn hardly would have dreamt about reaching further than the 5th rank. The problem is that 43.f3 also does not make White's position better. ] **43... | d8** [ 43...e5 was a bit more technical since, with the rook on b8 , White could not create a passed pawn on the Queenside. Though, even the b3 - b4 idea can't turn the game in a White's favor. ] **44. | e1** White could have played Rb1 instantly. Though the final position in the following line is still bad for White, I believe it was his best chance. Despite the engine's evaluation (about +5 for Black), the winning plan there is far from simple. White will have a similar chance later (on move 49), but Song will prefer the other direction. [ 44. | b1 e5 45.b4 axb4+ 46.axb4 cxb4+ 47. | xb4 | d1 48. | b2 | f1 49.♣d3 ♣d6 ; Black wins with the white rook on g1 in the following line. 44.b4 cxb4+ 45.axb4 axb4+ 46.♣xb4 | d2 47. | g1 e5 ] **44...♣f6 45. | b1 e5 46.b4** Otherwise, White slowly dies without any counterplay. **axb4+ 47.axb4 cxb4+ 48. | xb4 | d1 49.c5** [Since 49.c5 didn't help White to save this endgame, it is easy to suggest



playing Rb2 here. Black is active, but, as I said earlier (see the comment to move 44), this position had been Black's best chance.

Rb2 | f1 50.♙d3 ♙e6 Ra2-+ White is just waiting. ] 49... | c1+ 50.♙d2 | xc5

51. | xh4 | a5 The position of the rook on h4 and the weakness on g2 determines the decisive advantage of Black. 52. | c4 ♙g5 Creating a threat of check on a2 .

[ 52... | a2+? 53. | c2 | xc2+ 54.♙xc2 e4

55.f4 Black can't improve here. ] 53. | c2

[ Black has a winning breakthrough in the pawn endgame if White plays 53. | c8?

| a2+ 54. | c2 | xc2+ 55.♙xc2 e4!

56.fxe4 f4 ] 53...♙f4 54.♙e2

[ White should have tried the Queen endgame. 54. | c4+ e4 55.fxe4 fxe4

56. | c2 | a1 57. | c8 | a2+ 58. | c2 | xc2+

59.♙xc2 ♙e3! 60.h4 ♙f2 61.h5 e3

62.h6 e2 63.h7 e1♙ 64.h8♙ ♙e4+

This is winning for Black, but the Queen endgames were never easy. ] 54... | a1

55.h4 This pawn can't become a serious

distractor of the black pieces. | g1 56.♙d3

e4+ 57.fxe4 fxe4+ 58.♙d4 | d1+

Pushing the King away from the e-pawn.

59.♙c4 ♙e3 The black King does not create a threat, but it forces the white rook to control the second rank and frees his rook to take the h-pawn (no necessity for the rook to cut off the white King along the d-file). Black is winning. 60.h5 | d4+

[ 60... | h1 was equally good. ] 61.♙c5 | d8

62. | a2 ♙d3 63. | a3+ ♙d2 64. | a2+

[ 64. | xg3 e3 ] 64...♙e1 65. | a3 ♙f2

66. | a2+ ♙f1 67. | a3 ♙xg2

White resigned.

## □ 7.2) Endgames Without Passed

### ■ Many Pawns,Material Imbalance

Rook endgames with many pawns but no passed pawns (with a material imbalance).

Z0

## □ 7.2) Endgames Without Passed

### ■ Nodirbek Abdusattorov vs. Jan

XI								Y	
8-	+	-	+	-	+	-	+	0{	
7R	-	+	-	+	-	p	p	0	
6-	p	-	+	r	+	-	+	0	
5+	-	p	-	+	-	+	-	0	
4-	+	P	+	-	k	-	+	0	
3+	-	+	-	+	P	+	-	0	
2-	+	-	+	-	K	-	P	0	
1+	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

In 2021, the young Uzbekistan player Nodirbek Abdusattorov shocked the chess world by winning the World Rapid Chess Championship. He beat world-leading players like Caruana, Aronian, Wojtaszek, Gelfand, and Carlsen on his road to the title. But in the last round game against the Polish player Jan-Krzysztof Duda, Nodirbek had severe problems in the rook endgame. In this position, White's chances look poor. Black already has an extra pawn, and his King is more active. The c4 -pawn is weak, and if Black takes it without losing on b6 , Black gets connected passed pawns with a win. The h2 -pawn is also vulnerable. The only positive factor is the active rook on the 7th rank. Right now, Black has a direct path to a win, and I ask you to find it. 34... | h6 Was the right idea. 35. | f7+ Before taKing on g7 , White needs to push the black King back. ♙e5 The King comes closer to the c4 -pawn. 36. | xg7 ♙d4 The key point of the endgame for Black was maKing the black King active.

□ 7.2) Endgames Without Passed

■ Nodirbek Abdusattorov vs. Jan

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	R	-	+	-	+	-	p p	0
6	-	p	-	+	r	+	-	0
5	+	-	p	-	+	-	+	0
4	-	+	P	+	-	m	-	0
3	+	-	+	-	+	P	+	0
2	-	+	-	+	-	K	-	P 0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h y

34... ♗g6 The g7 -pawn does not matter in this position. 35.h4 ♖h6 36. ♗xg7

□ 7.2) Endgames Without Passed

■ Nodirbek Abdusattorov vs. Jan, 2021)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	R	-	+	-	+	-	p p	0
6	-	p	-	+	r	+	-	0
5	+	-	p	-	+	-	+	0
4	-	+	P	+	-	m	-	0
3	+	-	+	-	+	P	+	0
2	-	+	-	+	-	K	-	P 0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h y

In 2021, the young Uzbekistan player Nodirbek Abdusattorov shocked the chess world by winning the World Rapid Chess Championship. He beat world-leading players like Caruana, Aronian, Wojtaszek, Gelfand, and Carlsen on his road to the title. But in the last round game against the Polish player Jan-Krzysztof Duda, Nodirbek had severe problems in the rook endgame. In this position, White's chances

look poor. Black already has an extra pawn, and his King is more active. The c4 -pawn is weak, and if Black takes it without losing on b6 , Black gets connected passed pawns with a win. The h2 -pawn is also vulnerable. The only positive factor is the active rook on the 7th rank. Right now, Black has a direct path to a win, and I ask you to find it. 34... ♗g6 The g7 -pawn does not matter in this position. [The right idea was as follows. 34... ♖h6! 35. ♗f7+ Before taking on g7 , White needs to push the black King back. ♕e5 The King comes closer to the c4 -pawn. 36. ♗xg7 (If White decides to block the black King's path, Black gets time to save the g7 -pawn. 36. ♕e3 g6! 37. ♗b7 ♗xh2 38. ♗xb6 ♗h4 Black wins the second pawn. 39. ♗b7 h5 40. ♕d3 ♗d4+ 41. ♕c3 ♗f4 ) 36... ♕d4! The key point of the endgame for Black was making the black King active. ( 36... ♗xh2+? 37. ♕e3 ) 37. ♗g4+ ♕d3 38.h4 Currently, the white rook defends both pawns on the 4th rank, but the black pieces can increase pressure to crush the resistance. ♗d6 The idea is to play ... Rd4 . 39. ♗f4 There are more opportunities to save the endgame if White takes on b6 . (There is not enough counterplay if White takes on h7 . 39.h5 ♗d4 40. ♗g7 ♕xc4 41. ♗xh7 b5 42.h6 ♗d6 The most technical way. The rook attacks the pawn along the rank and cuts off the white King along the d-file, while the King assists the b-pawn to become the Queen (see the Vancura Defense position in the theoretical part). ) 39... ♗d4 40. ♗f6 ♗xc4 41. ♗xb6 ♗xh4 We will have a similar position in the game, with the only difference being that Abdusattorov's King will be on e3 . This difference will be enough to make the position drawish. Here White has no saving chances. 42. ♗d6+ ♗d4 43. ♗h6 c4 44. ♗xh7 c3 ] 35.h4 ♖h6 36. ♗f7+ In the 34...Rh6 line, this check was forced to avoid the white King pushing to the back rank (Black threatened ... Rxb2

+ there). The same check is a major blunder in this position because it helps the black King come to the vital d4 - and d3 -squares. [ 36. | xg7! | xh4 37. | f7+ ♣e5 38. | b7 This transfers to the game text without allowing the 37...Kd4 ! chance. ] **36... ♣e5 37. | xg7 | xh4** The position again became drawish. Starting here, Abdusattorov made no mistakes. [Black should have brought the King forward. 37...♣d4! 38. | g4+ ♣d3 As we saw in the comment to Black's 34th move, Black is winning due to the ... Rh6 - d6 - d4 idea. ] **38. | b7 ♣d4 39. | xb6 ♣xc4** [Black can't put the King on d3 and take on c4 without losing his h-pawn. 39...♣d3 40. | b7 | xc4 41. | xh7 | d4 This seems dangerous for White, but it is a draw with accurate play. ( 41...♣d2 42. | c7 ) 42. ♣e1 The King intends to stand in front of the pawn, and if the black King goes to the c-file to block this path, the white King uses the e-file to move forward and help the f-pawn. | a4 ( 42...c4 43. ♣d1 ♣c3+ 44. ♣e2 ; 42...♣c2 43. ♣e2 c4 44. ♣e3 ) 43. | d7+ ♣e3 44. ♣d1 ] **40. ♣e3** White has time to push his last pawn to the 7th rank. This will not give Black a chance to promote his c-pawn. The extra black pawn on h7 does not matter because Black can't push both pawns simultaneously. | **h1 41.f4 ♣c3 42. ♣e2** White prevents ... Re1 with check, but it was not necessary. [ 42.f5 ] **42...c4 43.f5 | h5 44. | f6** White plans to bring the King to g4 , from where it will support the f-pawn and fight against the h-pawn. ♣c2 **45. ♣f3 c3 46. ♣g4 | h1 47. | f7 ♣b2 48. | b7+** Black's problem is that the white rook will always give checks and force the black King to be in front of the pawn. The black rook can't help because it should control the f-pawn. ♣c1 **49.f6 | f1 50.f7 h6 51. ♣h5 | f6** The opponents could agree to a draw already here, but the game lasted for another 16 moves. **52. | c7 c2 53. | d7 ♣b2 54. | b7+ ♣a3 55. | c7 ♣b3**

**56. | b7+ ♣c4 57. | c7+ ♣d3 58. | d7+ ♣e2 59. | c7 ♣d2 60. | d7+ ♣e1 61. | c7 ♣d1 62. | d7+ ♣c1 63. | c7 | f2 64. ♣xh6 ♣d1 65. ♣g7 | xf7+ 66. ♣xf7 c1♠ 67. | xc1+ ♣xc1** Finally, the opponents agreed on a draw, and Nodirbek went to prepare for the tie-break against Ian Nepomniachtchi.

## □ 7.2) Endgames Without Passed

### ■ Levon Aronian vs. Magnus Carl

X	I							Y	
8-	+	-	+	-	+	-	t	0	
7+	p	p	-	+	-	+	-	0	
6p	+	-	+	-	k	-	p	0	
5+	-	+	-	+	-	p	-	0	
4-	+	-	+	-	+	-	+	0	
3+	-	P	-	+	-	+	P	0	
2P	P	-	+	-	P	P	+	0	
1+	-	+	-	R	-	k	-	0	
x	a	b	c	d	e	f	g	h	y

Levon Aronian showed excellent technique against Magnus Carlsen in the next online-rapid game. For some of you, It might seem to be a simple realization task for White. Still, it is helpful to see how to win such absolutely winning positions (especially when your opponent is the World Champion) . In the comments, you can see many other winning ideas that, somewhere, could have made the win even shorter. Anyway, Aronian never allowed any doubt in his success. White has an extra pawn on the Kingside, which appears enough for a win. First, Aronian improved his rook and King. **32. | d1 | e8 33. ♣f1 | e5** Magnus planned to defend the c7 - pawn from c5 , but Levon had another plan for his rook. **34. | d4** From d4 , the rook can support the pawns on both sides. **a5 35.f3** Continued in the next variation.

□ 7.2) Endgames Without Passed  
 ■ Levon Aronian vs. Magnus Carl

```

XI | | | | | | | Y
8- + - + - + - + 0{
7+ p p - + - + - 0
6- + - + - k - p 0
5p - + - t - p - 0
4- + - R - + - + 0
3+ - P - + P + P 0
2P P - + - + P + 0
1+ - + - + K + - 0
x a b c d e f g h y

```

35...b6 Continuation of the previous variant. It is time to improve the King. 36.♠f2 | b5 37.b3 | e5 38.h4 It would have been better for Black to have his pawn on g7 . Now if Black takes on h4 , White gets a passed pawn (on the f-file) . And if he ignores the h4 -pawn, White fixes the pawn on h6 and gets an idea of bringing his rook to h7 to win it. Both options are equally unsatisfactory for Black. | e6 39.h5 A weakness is fixed. Continued in the next variation.

□ 7.2) Endgames Without Passed  
 ■ Levon Aronian vs. Magnus Carl

(Diagram)

39... | e5 Continuation of the previous variant. How did Aronian restrict the black rook? 40.g4 Aronian began the operation of restricting the black rook. First, he took t he f5 -square under control. b5 41.c4 Now White takes the d5 -square under control. The next move is Re4 , after which the black rook will be forced to move to c5 . In such a way, the e3 - d4 path will open for the white King. Technical play! Carlsen

```

XI | | | | | | | Y
8- + - + - + - + 0{
7+ - p - + - + - 0
6- p - + r k - p 0
5p - + - + - p P 0
4- + - R - + - + 0
3+ P P - + P + - 0
2P + - + - k P + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

decided to move it there immediately. | c5 42.♠e3 Aronian followed his plan (bringing the King to the center). Instead, he could take on b5 and move his rook to the optimal square on c6 (from there, it attacks c7 and h6 ).

□ 7.2) Endgames Without Passed  
 ■ Levon Aronian vs. Magnus Carl

```

XI | | | | | | | Y
8- + - + - + k + 0{
7R - + - + - + - 0
6P + - + - + - p 0
5+ - + - + - p P 0
4r + p + - + P + 0
3P - k - + P + - 0
2- + - + - + - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

58...♠h8 How does Aronian simplify the position? 59.♠b2 Aronian decided to exchange the a6 - and c4 -pawns to transfer to an endgame with two extra pawns without any counterplay for Black.

□ 7.2) Endgames Without Passed  
 ■ Levon Aronian vs. Magnus Carl,2021)

```

X| | | | | | | Y
8- + - + - + - t O
7+ p p - + - + - O
6p + - + - k - p O
5+ - + - + - p - O
4- + - + - + - + O
3+ - P - + - + P O
2P P - + - P P + O
1+ - + - R - K - O[
x a b c d e f g h y

```

Levon Aronian showed excellent technique against Magnus Carlsen in the next online-rapid game. For some of you, It might seem to be a simple realization task for White. Still, it is helpful to see how to win such absolutely winning positions (especially when your opponent is the World Champion). In the comments, you can see many other winning ideas that, somewhere, could have made the win even shorter. Anyway, Aronian never allowed any doubt in his success. White has an extra pawn on the Kingside, which appears enough for a win. First, Aronian improved his rook and King. **32. | d1 | e8 33. ♖f1 | e5** Magnus planned to defend the c7 - pawn from c5 , but Levon had another plan for his rook. **34. | d4** From d4 , the rook can support the pawns on both sides. **a5 35.f3** It is time to improve the King. **b6 36. ♖f2 | b5 37.b3 | e5 38.h4** It would have been better for Black to have his pawn on g7 . Now if Black takes on h4 , White gets a passed pawn (on the f-file). And if he ignores the h4 -pawn, White fixes the pawn on h6 and gets an idea of bringing his rook to h7 to win it. Both options are equally unsatisfactory for Black. **| e6 [ 38...gxh4 39. | xh4 ♖g6 40. | c4 | e7 ( 40...c5 41. | e4! | d5 42. | e6+ ♖g7**

**43. ♕e3 b5 44. | a6** White wins the second pawn. **) 41.a4!** White fixes the a5 -pawn before playing b3 - b4 (no ... a5 - a4 will be available for Black). **| d7 42.b4** Again, Black's choice is hard. If he leaves the pawn on a5 , White takes on a5 and plays Rc5 to take it. If Black captures on b4 , White plays c3xb4 and creates a passed pawn on the a-file by playing a4 - a5 . Stopping this pawn and defending the c7 - pawn will be impossible for the black rook. White will win the second pawn and the game. **] 39.h5** A weakness is fixed. **| e5 40.g4** Aronian began the operation of restricting the black rook. First, he took the f5 -square under control. [It was also good to invade on the 7th rank. **40. | d7 | c5 41.c4 | c6 42.a4** Black is in zugzwang. His rook should be on c6 to defend against Rxc7 and Rh7xh6 (after Rh6 , Black can play ... Ke5 ). The King should protect the g7 -square to avoid the Rd7 - g7 - g6 maneuver. **] 40...b5 41.c4** Now White takes the d5 -square under control. The next move is Re4 , after which the black rook will be forced to move to c5 . In such a way, the e3 - d4 path will open for the white King. Technical play! Carlsen decided to move it there immediately. **[ 41. | d7 | c5 42. | h7 | xc3 43. | xh6+ ♕f7 44. | g6 ] 41... | c5** After ... b5 - b4 , Black immediately loses on h6 . **[ 41...b4? 42. | d7 | c5 43. | h7 ] 42. ♕e3** Aronian followed his plan (bringing the King to the center). Instead, he could take on b5 and move his rook to the optimal square on c6 (from there, it attacks c7 and h6 ). **[ 42.cxb5 | xb5 43. | c4 ] 42...c6 43. | e4** [White could already force the rook exchange by restricting the black rook even more here. **43.a4! bxc4 44.bxc4 | e5+ 45. | e4 ♕e6 ( 45... | c5 46. ♕d4 ) 46. ♕d4 | xe4+ 47. ♕xe4** followed by f3 - f4 with a win. **] 43...bxc4 44. | xc4 [ 44.bxc4 a4 45. ♕d4 | a5** At first glance, it seems hard to break through. But if you

think about this position deeper, you can find out that the black pieces have no moves. The King should prevent the Re5 and Kc5 idea, the rook should guard the c5 - square. So the only possible move for Black is ... a4 - a3 . Considering this, it would be perfect for White to make such a waiting move that he could play Re3 after ... a4 - a3 . 46. | e2! a3 47. | e3 ] 44... | e5+ 45. ♖d3 | d5+ [White wins on a5 in the following line. 45... | e6 46. | c5 | d6+ 47. ♖c4 ] 46. | d4 | c5 47. | d6+ ♖g7 The position has strongly improved for White; his rook has finally achieved the perfect square; the black King is passive. Considering that White has an 'extra King' on the Queenside, the last stage of the endgame is relatively easy. 48. ♖d2 The black rook is left without any moves on the c-file. a4 Black gave up the pawn; the game comes to the end. [This is how the game might have continued if Black had played only with the King. 48... ♖h7 49. | d7+ ♖g8 50. | a7 ♖h8 51. a4 ♖g8 52. ♖d3 ♖h8 53. ♖d4 | d5+ 54. ♖c4 ♖g8 55. | c7 | d6 56. b4! axb4 57. a5 ] 49. | d7+ ♖g8 [ 49... ♖f6 50. | h7 ] 50. bxa4 | c4 51. a5 | a4 52. | a7 c5 [The lines after 52... | xa2+ were not difficult. 53. ♖c3 | a4 54. ♖b3 | f4 ( 54... | a1 55. ♖b4 ) 55. a6 | xf3+ 56. ♖b4 ] 53. ♖d3 ♖f8 54. a6 ♖g8 55. a3 ♖h8 [ 55... | xa3+ 56. ♖c4 | xf3 57. | b7 Black can't stop a6 - a7 , Rb8 +, a7 - a8=Q . ] 56. ♖c3 c4 [ 56... ♖g8 57. ♖b3 | a5 58. ♖c4 ♖h8 59. ♖d5 ♖g8 60. ♖c6 The King comes to b6 to free the rook, then White moves his rook away and promotes the pawn. ] 57. ♖d4 ♖g8 58. ♖c3 [ Aronian didn't need the complications that might have arisen after the Kc5 - b5 maneuver. 58. ♖c5 c3 59. ♖b5 | c4! Though, this was still winning for White. 60. | e7! ( 60. ♖xc4?? c2 61. | b7 c1E+ 62. ♖b5 White does not lose here, but it can hardly be a big success. ) 60... c2 61. a7 | c8 62. | e1 ] 58... ♖h8 59. ♖b2

Aronian decided to exchange the a6 - and c4 -pawns for transferring to the endgame with two extra pawns without any counterplay for Black. ♖g8 60. | c7 | xa6 61. | xc4 | f6 62. | c3 | f4 63. ♖b3 Carlsen resigned because he had nothing to offer against the a-pawn march.

## 7.2) Endgames Without Passed

### Fabiano Caruana vs. Vladislav

XI								Y
8-	+	-	+	-	+	k	+	0
7+	-	+	-	+	-	+	p	0
6-	+	-	+	-	+	p	+	0
5+	-	+	-	+	-	+	-	0
4-	p	-	+	-	+	-	+	0
3+	P	+	-	R	P	P	-	0
2-	t	-	+	-	+	K	P	0
1+	-	+	-	+	-	+	-	0
	a	b	c	d	e	f	g	h
	x	a	b	c	d	e	f	g

36. ♖h3 Unluckily for Black, play is much harder here. While White's plan is simple (playing g3 - g4 , h2 - h4 , and then trying to bring the King to the Queenside to win the b4 -pawn), it is unclear what Black should do. Surprisingly, Artemiev had even two chances to save this game, but both were hard to evaluate correctly. Can you find at least one of them? | c2 [ 36...h5 Artemiev delayed accepting the critical decisions, which Rc2! kind of was. ]

## 7.2) Endgames Without Passed

### Fabiano Caruana vs. Vladislav

(Diagram)

47. b5 One more interesting key position. Black should find out how to effectively

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	k	+	0
7+	R	+	-	+	-	+	-	0
6-	+	-	+	-	+	p	+	0
5+	-	+	-	+	-	P	p	0
4-	P	r	+	-	+	-	P	0
3+	-	+	-	+	-	+	K	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

combine play against the h4 -pawn and fight with the b-pawn. The most natural way here (to place the rook on b4 ) fails to b5 - b6 , followed by the white King's march to the Queenside. Black should be more flexible and be ready to move his rook to the 6th rank (Vancura's idea!) when White plays b5 - b6 . ♚d4 48.b6 ♚d6 49.♙g3 ♚e6 50.♙f4 ♙h8 The black rook perfectly restricts both the opponent's King and rook, so it is enough to just play ... Kh8 - g8 .

## □ 7.2) Endgames Without Passed

### ■ Fabiano Caruana vs. Vladislav

(Diagram)

**38.fxg4** Black should already have found out how to set the pieces up here. White threatens to play Kh3 - h4 - g5 . Moreover, a slow King's run to the Queenside via the center also looks scary for Black. So, Artemiev should have solved how to stop both of White's threats simultaneously. With a few minutes left on his clock, he couldn't cope with this challenge. We have more time and can think about the position deeper It makes sense to begin with White's long threat (the King's run to the Queenside). What can Black do against it?

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	k	+	0
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	p	+	0
5+	-	+	-	+	-	+	-	0
4-	p	-	+	-	+	p	+	0
3+	P	+	-	R	P	+	K	0
2-	t	-	+	-	+	-	P	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

The rook on the third rank will perfectly defend the b3 - and h3 -pawns and protect the King from the rear checks. Moreover, the white King will always have an idea to switch to the play against the black King and the g6 -pawn. We can assume that if the King comes to e4 , it will be over for Black. The only piece that can actively do something is the rook. Where to put it? Correct, the d4 -square would be the perfect one - from there, the rook will handle the long King's run and stick the opponent's rook to the 3rd rank (otherwise, Black wins on b3 ). Now, we must decide which move order will work the most effectively. There are at least four candidates to choose from - ... Kf7 , ... Kg7 , ... Rd2 , and ... g6 - g5 . Have you already made your choice? ♙g7 ... Rd2 does not do anything against the Kh4 threat. But of course, we still need to calculate this concretely. The ... g6 - g5 advancing is a reflexive way to restrict the white pawns but generally does not look good because it creates a big gap between the King and the pawn. It also weakens the f5 -square (remember that the white King's path lies through the e4 -square?) So, the two King moves are left. The instinct 'in the endgame, the King should be closer to the center' says that ... Kf7 should be better than ... Kg7 . But you also need to remember that the control of the h6 -square often plays a decisive role in similar

situations (you will see a few positions on this maneuver in the exercises part of the course).

## 7.2) Endgames Without Passed

### Fabiano Caruana vs. Vladislav, 2020)

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	k	+	0{
7+	-	+	-	+	-	+	p	0
6-	+	-	+	-	+	p	+	0
5+	-	+	-	+	-	+	-	0
4-	p	-	+	-	+	-	+	0
3+	P	+	-	R	P	P	-	0
2-	+	-	+	-	+	K	P	0
1+	r	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

The starting position can be evaluated as slightly better for White - he has an extra pawn, but the black rook is more active. Moreover, with his next move, Black forces the white King to move to the awkward h3 - square. 35... ♖b2+ 36. ♔h3 Unluckily for Black, his play is much harder here. While White's plan is simple (playing g3 - g4 , h2 - h4 , and then trying to bring the King to the Queenside to win the b4 -pawn), it is unclear what Black should do. Surprisingly, Artemiev had even two chances to save this game, but both were hard to evaluate correctly. Can you find at least one of them? h5 [Artemiev delayed accepting the critical decisions, which 36... ♗c2! kind of was. Let's see what might have happened in this case. 37. ♗e4 This is the only way to save the extra pawn. ♗c3 38. ♗xb4 ♗xf3 The game transferred to a more typical pawn structure. There is almost a classical '3 vs. 3 on the Kingside + a passed pawn on the Queenside' endgame. The next few moves should decide who benefits more from having no pawns on the

f-file. 39. ♗b7 ( 39. ♔g4 ♗f2 40. h4 ♗f5 41. ♔h3 ♔g7 ) 39... ♗f2! 40. g4

For the engine, there is no secret in this position, it confidently says the position is equal. Moreover, it shows many lines that help Black to save the game. But the problem is that at the end of all these lines, some tricky moment is hard to find for a human. Let me show you a few of such difficult moments. ♗f3+ 41. ♔g2

( 41. ♔h4? h6 ) 41... ♗d3 42. b4

White pushes his b-pawn and hopes to bring the King there later. What should Black do on the Kingside? Nothing, ... g7 - g5 or ... h7 - h5 ? Luckily all answers are fine so far. A) 42... g5 43. b5 ♗b3 44. b6

This is the crucial moment of this line.

White has a clear plan - to bring the King to the Queenside. What can Black offer against it? To keep the King on the

Kingside and hope that the rook will take the pawn on the Kingside, and then Black gets counterplay there? To throw the King to the Queenside and to leave the Kingside pawns without protection? The correct answer sounds unexpected - the King should run to d8 (!), and then the rook can take the h-pawn. If the King makes one odd move (to c8 ), White moves his rook to c6 (thanks to a check from c7 ). If the King stops earlier, the white rook moves to c7 , followed by b6 - b7 and Rc8 . Moreover, Black should be quick with this plan because a minimal delay makes it ineffective. A1) 44... h6? Black has no time for this move. 45. ♔f2 ♔f8 46. ♔e2 ♔e8 47. ♔d2 ♔d8 ( 47... ♗b2+ 48. ♔c3 ♗xh2 49. ♗h7 ) 48. ♔c2 ♗h3 49. ♗c7!

It is vitally important not to allow the black King to come to c8 ! ( 49. ♗h7? ♔c8 ) 49... ♗xh2+ 50. ♔c3 ♗h1 ( 50... ♗g2 51. ♗c4 ) 51. ♔d4 ♗b1 52. ♔c5 Then Kc5 - c6 - b7 , and the pawn promotes into the Queen. ; A2) 44... ♔f8 45. ♔f2 ♔e8 46. ♔e2 ♔d8 47. ♔d2 ♗b2+ Right on time! 48. ♔c3 ♗xh2 49. ♗g7 ♔c8 ; B)



42...h5 43.g5 White needs to save more pawns on the Kingside. | d5 44.h4 | d4 45.♠g3 | g4+ 46.♠h3 | c4 47.b5 One more interesting key position. Black should find out how to effectively combine play against the h4 -pawn and fight with the b-pawn. The most natural way here (to place the rook on b4 ) fails to b5 - b6 , followed by the white King's march to the Queenside. Black should be more flexible and be ready to move his rook to the 6th rank ( Vancura's idea ! ) when White plays b5 - b6 . **B1)** 47...| b4? 48.b6 ♠f8 49.| b8+ Neither a passive (keeping the King in the corner) nor an active (moving the King to the Queenside) defense helps Black to save the game. **B1a)** 49...♠g7 50.♠g3 | g4+ ( 50...♠h7 51.♠f3 ♠g7 52.| b7+ ♠g8 53.♠e3 Black can't stop the King's run to c5 . ) 51.♠f3 | xh4 52.| b7+ ♠f8 53.| c7 followed by b6 - b7 , Rc8 , and b7 - b8=Q . ; **B1b)** 49...♠e7 50.b7 ♠d7 51.| g8 | xb7 52.| g7+! ♠c8 53.| xg6 Black is lost because his King is too far. | b3+ 54.♠g2 | b4 55.♠g3 | b3+ ( 55...♠d7 56.| h6 ) 56.♠f4 | b4+ 57.♠f5 | xh4 58.| h6 ♠d7 59.♠g6 ♠e7 60.| xh5 then Kg7 , g5 - g6 etc. ; **B2)** 47...| d4 **B2a)** White can change his setup, but it does not give much. 48.| b6 ♠g7 49.| c6 | b4 50.b6 The only challenging moment is not allowing White to push the black King to the back rank. ♠f7 51.♠g3 | g4+ 52.♠h3 ( 52.♠f3 | xh4 53.| c7+ ♠e6 ) 52...| b4 ; **B2b)** 48.b6 | d6! 49.♠g3 | e6 50.♠f4 ♠h8 The black rook perfectly restricts both the opponent's King and rook, so it is enough to just play ... Kh8 - g8 . The idea of 36... Rc2 followed by ... Rc3 was good enough to hold the draw, but you can rate yourself how difficult it was to see at least one of these drawn lines. ] **37.g4 hxg4+** **38.fxg4** Black should already have found out how to set the pieces up here. White threatens to play Kh3 - h4 - g5 . Moreover, a slow King's run to the Queenside via the

center also looks scary for Black. So, Artemiev should have solved how to stop both of White's threats simultaneously. With a few minutes left on his clock, he couldn't cope with this challenge. We have more time and can think about the position deeper. It makes sense to begin with White's long threat (the King's run to the Queenside). What can Black do against it? The rook on the third rank will perfectly defend the b3 - and h3 -pawns and protect the King from the rear checks. Moreover, the white King will always have an idea to switch to the play against the black King and the g6 -pawn. We can assume that if the King comes to e4 , it will be over for Black. The only piece that can actively do something is the rook. Where to put it? Correct, the d4 -square would be the perfect one - from there, the rook will handle the long King's run and stick the opponent's rook to the 3rd rank (otherwise, Black wins on b3 ). Now, we must decide which move order will work the most effectively. There are at least four candidates to choose from - ... Kf7 , ... Kg7 , ... Rd2 , and ... g6 - g5 . Have you already made your choice? ... Rd2 does not do anything against the Kh4 threat. But of course, we still need to calculate this concretely. The ... g6 - g5 advancing is a reflexive way to restrict the white pawns but generally does not look good because it creates a big gap between the King and the pawn. It also weakens the f5 -square (remember that the white King's path lies through the e4 -square?) So, the two King moves are left. The instinct 'in the endgame, the King should be closer to the center' says that ... Kf7 should be better than ... Kg7 . But you also need to remember that the control of the h6 -square often plays a decisive role in similar situations (you will see a few positions on this maneuver in the exercises part of the course). So, the correct move was Kg7 , fighting against Kh4 - g5 and leaving

enough time to bring the rook to d4 . **g5**  
 [ 38...♠g7!! The only correct move in this position! 39.♠g3 ♔d2! 40.♠f4  
 A good try - White takes on b4 at the cost of the h2 -pawn. But what can Black offer in response? (White has fewer resources if he allows the rook to come to d4 . 40.h4 ♔d4 ) 40...♔xh2 41.♔e4 ♠h6! The King is ready to fight for the g5 -square. 42.♔xb4 ♔f2+ 43.♠e5 ♔b2 The only thing White can do here is to bring the King to c3 to free the rook. (It was premature to play 43...♠g5?? 44.♔d4 Securing the b3 - b4 advancing and the King's march to the Queenside. ) 44.♠d4 ♠g5 45.♠c3 ♔g2! 46.♔d4 ♔xg4 The pawn endgame is fine for Black. ;Now let's see why Black can't bring the rook to d4 after Kf7 . 38...♠f7? 39.♠g3 ♔d2 40.♔e4 g5! Probably the best chance - Black hopes for an active rook. ( 40...♔d3+ 41.♠f4! 41.Kh4 ! leads to the same position. ♔xb3 42.♠g5! There is an equal number of pawns, but the g6 -pawn is doomed. ♔h3 43.♔xb4 ♔xh2 44.♔b7+ White takes on g6 and wins as described in the Kling & Horwitz does not help position of the theoretical part. ) 41.♔xb4 ♔d3+ 42.♠g2 ♔d2+ **A)** 43.♠f3? ♔xh2 44.♠e4 ♔f2!  
 White surprisingly can't reach progress because there is no way to leave the rook on the 4th rank and push the pawn forward without worsening the King's position. **A1)** 45.♠e3 ♔g2 46.♠f3 ♔b2 47.♔b5 ♠f6 48.♠e4 ( 48.♠e3 ♔g2 49.♔b4 ♔g3+ ) 48...♔f2 ; **A2)** 45.♔c4 ♠e6! 46.b4 ♔f4+ 47.♠d3 ♔f3+ 48.♠d4 ♠d6! The rook is poorly placed. 49.b5 ♔g3 ; **A3)** 45.♠e5 ♔f3 ; **A4)** 45.♠d5 ♔f3 ; **A5)** 45.♔d4 ♠e6! 46.♠d3 ♠e5! White can't activate his King. 47.b4 ( 47.♠c4 ♔c2+ 48.♠d3 ♔f2 ) 47...♔f1 48.♠c3 ( 48.♔c4 ♔f3+ 49.♠c2 ♠d6 ) 48...♔c1+ 49.♠d2 ♔b1 ; **B)** 43.♠g1 Black holds the endgame if White immediately gives up the pawn. **B1)** 43...♔d1+ 44.♠f2 ♔d2+ 45.♠e3 ♔xh2

With the King on e3 , White already can win. 46.♠d4! **B1a)** 46...♔g2 47.♠e5!  
 It is a good moment to remind Black that he voluntarily placed his pawn on g5 . ( 47.♠c5? ♔g3 ; 47.♠d5? ♔g3 ) 47...♔f2 48.♔d4 The King remained active, and the rook made the path for the b-pawn free. White easily wins. ; **B1b)** 46...♔h3  
 An attempt to disable the rook's move along the 4th rank. 47.♠e4 Again, a weakness of the f5 -square decides the game. ; **B2)** 43...♠e7 44.h3! ♠f6 45.♔b5 ♔d3 46.♠g2 The Rb5 - f5 - f3 idea forces the black King to worsen its position. ♠g6 47.♔b6+ ♠f7 48.b4 ♔d4 49.♠f3 ♠g7 50.♠e3 ♔c4 51.♠d3 ♔f4 52.♠c3 ♔f3+ 53.♠c4 ♔xh3 54.♔e6 The rook finally comes to the 4th rank with all goals (the b-pawn is free to go, the King remains active) achieved. ; 38...♔d2? White wins simplest of all here. 39.♠h4! ♔xh2+ ( 39...♠f7 40.♠g5 ♔d5+ 41.♠h6 Black loses the g6 - pawn. ; 39...♠g7 40.♠g5 ♔d5+ 41.♠f4 followed by Re4 etc. ) 40.♠g5 ♠f7 ( 40...♠g7 41.♔e7+ ♠f8 42.♔e4 ) 41.♔e4 ♔d2 42.♔xb4 ♔d5+ 43.♠h6  
 The h6 -square is more crucial than it can seem. ] **39.♠g3 ♔b1** [In other cases, White can play h2 - h4 with a winning position. 39...♔d2? 40.h4! gxf4+ 41.♠xh4 The Re4xb4 threat forces Black to make one more move for the rook (instead of activating the King). ♔b2 ( 41...♔d4 42.♠g5 ♠f7 43.♠f5 It renews the Re4 - threat. Black is helpless. ♔d5+ 44.♠f4 ) 42.♠g5 The black rook can't stop the King from running to the b4 -pawn, and also can't stop the Re4 -idea. ♠f7 43.♠f5 ♔f2+ 44.♠e5 ♔b2 45.♠d5 ♔c2 46.♔e4 ; 39...♠f7!? 40.h4 gxf4+ 41.♠xh4 ♠f6  
 Compared to 39...Rd2 line, Black has an active King, but even this does not help him. Though, White needs to solve a hard puzzle here! 42.♠g3 ♠g5 43.♠f3 ♔b1 44.♠e4!! White gives up his extra pawn and runs to the b4 -pawn. Surprisingly, Black can't

arrange any of the known defending techniques. ♖xg4 45.♙d5 ♕f5 ( 45...♙f4 46.♙e4+ ♕f5 47.♙xb4 ) 46.♙c4 ♖c1+ ( 46...♙f4 47.♙e8 ) 47.♙xb4 ♖c8 48.♙e1 White will use the d-file to hide from the frontal checks and put the rook on b1 to push the pawn forward. ♙b8+ 49.♙c4 ♖c8+ 50.♙d5 ♖b8 ( 50...♙d8+ 51.♙c6 ♖b8 52.♙b1 ) 51.♙f1+ ♕g6 52.♙b1 ♕f6 53.b4 ♕e7 54.♙c6 ] **40.h3** Makes the winning way longer. [White could have activated the King. 40.♙f3 ♕f7 41.♙e4 ♕f6 ( 41...♙f1 42.♙f3+ ) 42.♙d5 ♖c1 43.♙e6+ ♕f7 44.♙e4 ] **40...♙f7 41.♙f3** This is the last moment where Black could more or less put serious difficulties in front of the opponent. ♙f1+ [Artemiev should have tried to build a wall before the white King. 41...♙d1! 42.♙e4 ♕e6 ( It offers more resistance if the King protects the d5 -square. 42...♙f6? 43.♙d3! ♙e1+ 44.♙d5 Black can't prevent both Kc4 / Kc5 and Rd4 . ) 43.♙d3 ♙e1+ 44.♙d4 ♖c1 45.♙e3+ ♕d6 I couldn't find more than the far from primitive endgame 'two vs. one'. 46.♙f3 ♕e6 47.♙f5 ♖c3 48.♙xg5 ♙xb3 49.h4 The endgame tablebase proves that this is winning, but a good technique is required. ] **42.♙e4** Now Black can't stop the King's run to the Queenside. ♕e6 **43.♙d4+ ♕d6 44.♙c4 ♙f4+ 45.♙b5 ♙d4 46.♙e8** White wins the second pawn. ♙f4 47.♙g8 ♙f3 48.♙xb4 ♙xh3 49.♙xg5 There is nothing difficult for a GM in such a position. White alternately moves both of his pawns forward. ♙h1 50.♙b5 ♙g1 51.b4 ♙b1 52.♙g8 ♙b2 53.g5 ♕e6 54.g6 ♕f6 55.♙c5 ♖c2+ 56.♙b6 Black resigned; the b-pawn is unstoppable.

## □ 7.2) Endgames Without Passed ■ Valeriy Aveskulov vs. Esteban

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	p	+	-	t	-	p	-	0
6p	+	p	+	-	+	-	+	0
5+	-	+	-	+	-	+	k	0
4P	+	P	k	-	+	R	P	0
3+	P	+	-	+	P	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

51...♙f7 Can you find the engine's recommendation for this position? **52.b4 ♕h6 53.♙c5** It throws the f3 -pawn away and brings the King to b6 . But what to do when the black rook takes the pawn and returns to the 7th rank? ♙xf3 **54.♙b6 ♙f7 55.c5** White prepares a breakthrough in the pawn endgame!

## □ 7.2) Endgames Without Passed ■ Valeriy Aveskulov vs. Esteban

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	p	+	-	t	-	p	-	0
6p	+	p	+	-	+	-	+	0
5P	-	+	-	+	k	+	-	0
4-	P	P	R	-	+	-	P	0
3+	-	+	-	+	P	k	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

51...♙c7 Up to now, I didn't see my following plan. I just knew that advancing the Queenside pawns was the correct strategy. But when the pawns are stumped,

the time to generate the next idea has come. I was lucky to find the Rg4 - g5 maneuver to support the b4 - b5 breakthrough. After that, Black will have a real problem on the Queenside (the b7 -pawn). I still didn't see the whole plan to win there, but I didn't need to. I should have created the second weakness and then thought of what to do with it. 52. | g4 ♠f6 53. | g5 | d7 54.b5 axb5 55.cxb5 | c7 [This move has affected me strongly. I spent all my time thinking about the cxb5 variation, and when his rook moved to c7 , I was shocked, and all my following play was far from confident realization. Now, with the emotions behind me, I can say that nothing scary happened to White. Black just managed to direct the game in an unforeseen way for me. Objectively speaking, 55... | c7 was a mistake that must have been punished immediately. ] 56. | c5 Continued in the next variation.

## 7.2) Endgames Without Passed

Valeriy Aveskulov vs. Esteban

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	p	t	-	+	-	p	- 0
6	-	+	p	+	-	k	-	0
5	P	P	R	-	+	-	+	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	P	k	- 0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h

56... ♠e6 Continuation of the previous variation. The saddest moment in the game. I saw the winning line to the last move but forgot about the in-between check that clarifies things. Can you do better than me and calculate the forcing win? 57.b6 | c8

58. ♠g4 ♠d6 59. | g5 c5 I was scared by the c-pawn and decided not to take a risk. If I saw the Rg6 check, no hesitation would remain. 60. | g6+ Driving the black King away from the best square (from d6 it prevents Rc7 ) . This check is more technical than Rxc7 , though the latter also wins.

## 7.2) Endgames Without Passed

Valeriy Aveskulov vs. Esteban, Budapest 2022)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	p	+	-	+	r	p	- 0
6	p	+	p	+	k	+	-	0
5	+	-	+	-	+	-	R	- 0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	P	P	P	+	-	P	K	+
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h

After showing a few good examples of how to convert the extra pawn in pawn and rook endgames, I offer you to now look at how I failed to do so. On the one hand, the result is upsetting for me, as the engine's evaluation indicated about +7 at some point. On the other hand, I played well in the technical stage of the game. I made one mistake, and it was enough to lose all advantage. Under severe time pressure, I couldn't generate the last decisive idea, which would end the game. Instead, I made an ugly move that wasn't calculated well, though even this one was bad due to having a good reply. My Colombian opponent didn't spoil his chance. White has an extra pawn on the Kingside, but it is hard (or even impossible) to create a passed pawn there if White will play only on the Kingside. This is a good moment to remind

you of the principle of two weaknesses. If the opponent has only a single weakness to take care of (in this endgame, it is the fight to prevent the creation of a passed pawn on the Kingside) , it often can be handled without losing the game. One must open the second wing to make the opponent's task harder. After that, the defender must take care of two problems simultaneously, which can become unsolvable. So, with many back-and-forth moves (to gain some time on the clock or to be sure I don't miss anything) , I started pushing my Queenside pawns. 31. ♖g3 First, White needed to take care of the ... Rf7 - d7 - d2 idea. ♜d7 32. ♜d3 The pawn endgame is hopeless for Black - White will easily realize the material advantage. ♜c7 33.c4

The first pawn has moved. ♜f5 34.♜f3 It would be unpleasant for White to see the black King on e4 . ♜e7 35.h4

[ A tactical miscalculation. I should have played 35.b3 first (to defend on c4 ), and only after that h3 - h4 would be fine.

Luckily, my opponent did not punish me for this blunder, and the game continued normally. ] 35...♜g6 [Black should have exchanged a few pawns. 35... ♜e4! 36. ♜d7 ♜xh4 37. ♜xb7 ( 37. ♜xg7 b5! A strong move that leaves Black with a solid pawn structure. 38.cxb5 axb5 followed by ... Rc4 - c2 . The extra pawn does not play a significant role. ) 37... ♜xc4 38. ♜xg7 ♜c2 39. ♜b7 a5 The black pieces are too active, and even his imperfect pawn structure should not be a big issue for him. ] 36.b3 Everything is fine. ♜f7+ 37.♜g3 ♜e7 38.♜f3 ♜f7+ 39.♜g3 ♜e7 40.a4

Moving the undefended pawn from the second rank removes the danger from ... Re2 for White. ♜f5 41.♜f3 ♜f7 42. ♜d8 ♜e5+ 43.♜e3 ♜f5 44.♜f3 ♜e5+ 45.♜e3 Another repetition for time-gaining. ♜f5 46. ♜d4 The Kg4 idea was not so strong, and there was no need to move the rook from the active square.

[ 46.a5! ♜g4 47. ♜d4+ was the stronger alternative. ] 46...♜g6 47.f3 [The engine again states that 47.a5 was the stronger move, but f3 is connected with an interesting plan - I wanted to move my King to f2 (away from the frontal checks) and to have the outpost on g4 for my rook (from there it will push on g7 and defend all my pawns on the 4th rank). ] 47... ♜e7+ 48.♜f2 ♜h5 49.a5 [Stockfish offers an interesting variation that can hardly be calculated during a real game. Here it is. 49. ♜g4 This move prevents ... g7 - g5 . But I didn't see what I could do against the ... Rd7 - e7 - f7 plan. ♜d7 50.♜e3 ♜e7+ 51.♜d4 ♜f7 Can you find the engine's recommendation for this position? 52.b4! ♜h6 53.♜c5! It throws the f3 -pawn away and brings the King to b6 . But what to do when the black rook takes the pawn and returns to the 7th rank? ♜xf3 54.♜b6 ♜f7 55.c5! White prepares a breakthrough in the pawn endgame! ♜e7 56.a5! ♜f7 57. ♜d4 ♜h5 58. ♜d8! ♜xh4 59. ♜h8+!

The necessary check that puts the black King on the road of the g-pawn. ♜g3 60. ♜b8 g5 61. ♜xb7 ♜xb7+ The white King and pawns are ready to win the rook endgame if Black rejects the trade offer. 62.♜xb7 g4 63.b5 The white Queen will appear on the board first. Well, what to say? It was elegant but extra difficult for a real human game. ] 49...♜g6 [The 49...g5 exchange would not change much; White would keep pushing on the Queenside. ] 50.b4 ♜f5 51.♜g3 ♜c7 Up to now, I didn't see my following plan. I just knew that advancing the Queenside pawns was the correct strategy. But when the pawns are stumped, the time to generate the next idea has come. I was lucky to find the Rg4 - g5 maneuver to support the b4 - b5 breakthrough. After that, Black will have a real problem on the Queenside (the b7 - pawn). I still didn't see the whole plan to win there, but I didn't need to. I should

have created the second weakness and then thought of what to do with it. **52. | g4 ♠f6 53. | g5 | d7 54.b5 axb5 55.cxb5 | c7**

This move has affected me strongly. I spent all my time thinKing about the cxb5 variation, and when his rook moved to c7 , I was shocked, and all my following play was far from confident realization. Now, with the emotions behind me, I can say that nothing scary happened to White. Black just managed to direct the game in an unforeseen way for me. Objectively speaKing, 55... Rc7 was a mistake that must have been punished immediately.

[ The more resistant path was connected with the capture on b5 . 55...cxb5 56. | xb5 ♠g6 White would already have faced a severe challenge here. What to push first - the f3 -pawn of the King? At first, it does not seem crucial, but the wrong choice makes the position drawish. What's your favorite? 57.f4! The winning plan is connected with the Kingâ€™s transfer to the Queenside at the right moment.

( White does not have a way to improve the position with the f-pawn pinned. 57.♠g4? | d4+ 58.f4 | a4 ) 57... | d3+ Passive play also does not save Black. ( 57...♠f6 58.♠g4 ♠g6 59.h5+ ♠h6 60.♠f5! | e7 61. | e5 | f7+ 62.♠e6! | xf4 63. | b5 | a4 64.♠d6 followed by Kc7xb7 . ) 58.♠g4 | a3 59.f5+! The only winning path. If the King goes to the center, Black loses the pawns, and if the King stays on the h-file, the white King can run to the Queenside. ♠f6 ( 59...♠h7 60.♠f4 Going to the Queenside to take the b7 -pawn with the King. ) 60. | b6+! ♠e5 61. | xb7 | xa5 62.♠g5! | a1 63. | e7+ ♠d6 64. | xg7 The endgame with h- and f-pawns can only be saved when the King of the defending side is in front of the pawns. ] **56. | c5 ♠e6**

The saddest moment in the game. I saw the winning line to the last move but forgot about the in-between check that clarifies things. Can you do better than me and

calculate the forcing win? **57.bxc6**

[ Here is the direct winning way. 57.b6! | c8 ( 57... | d7 58. | xc6+! bxc6 59.a6 ) 58.♠g4 ♠d6 59. | g5 c5 I was scared by the c-pawn and decided not to take a risk. If I saw the Rg6 check, no hesitation would remain. 60. | g6+! Driving the black King away from the best square (from d6 it prevents Rc7 ). This check is more technical than Rxg7 , though the latter also wins. ♠d5 61. | xg7 ♠d6 White has many ways to win, this is one of them. ( 61...c4 62. | xb7 c3 63. | c7 ) 62. | xb7 c4 63. | c7 | xc7 64.bxc7 ♠xc7 65.♠f4 The King enters the square of the passed pawn. ]

**57...bxc6 58.a6 ♠d6 59. | a5 | a7** White placed the rook perfectly, and it seems the win should not be an issue. **60.h5 c5 61.♠f2** The King comes closer to the c-pawn and does not block the f-pawn. **♠c6 62.f4 ♠b6 63. | a1 c4** [My last good calculation in this game was connected with the following line. 63... | xa6 64. | xa6+ ♠xa6 65.f5 Then f5 - f6 and the h5 -pawn becomes the Queen. ] **64.♠e3**

[ The next line illustrates an idea I had not seen during the game. White can sacrifice the h-pawn, and almost all versions of the resulting endgame with only the f-pawn left on the board are winning for White. 64.f5 c3 65.♠e3 | e7+ 66.♠d3 ♠a7 67.♠xc3 | f7 68. | f1 ♠xa6 69.♠d4 ♠b6 70.♠e5 ♠c6 71.h6! gxh6 72.♠e6 ] **64... | e7+ 65.♠d4 ♠a7 66. | a4** Chess can be cruel. In this game, I played 65 good moves, but one mistake took my results off. But to be honest, the Ra4 move is so weird that it should not be considered even in time trouble. That's why the punishment was well deserved. Try to play more natural moves! [The instant capture on c4 also led to an equal position. 66.♠xc4?? | e4+ 67.♠b5 | xf4 68. | c1 | f5+ 69. | c5 | f7 ; Seeing no h5 - h6 idea, I was unsure how to win in the following line. Unfortunately, my intuition was inactive and didn't help

me to understand that the position with the rook on f7 and the King on the Queenside can't be equal. 66.f5 | f7 67. | f1 ♖xa6 68.♖xc4 ♖b6 69.♕d5 ♖c7 70.h6 gxh6 71.♕e6 ] 66... | f7 White can't take on c4 without losing the f-pawn. The position is equal. The game might have ended faster, but I was too upset to agree to a draw so fast. 67.♕e4 | c7 68. | a1 | c5 69.♕d4 [ 69.f5 c3 ] 69... | xh5 70. | g1 [ 70.♖xc4 | f5 ] 70... ♖xa6 71. | xg7 | h4 72. | f7 ♖b5 73. | f8 | g4 74. | b8+ ♖c6 75.♕e5 ♖c5 76.f5 | g1 77.f6 | e1+ 78.♕f5 | f1+ 79.♕e6 | e1+ 80.♕f5 Finally, the score sheets were signed.

□ 7.2) Endgames Without Passed  
 ■ Alexander Beliavsky vs. Pavel

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	<del>p</del>	0
6	-	+	-	+	<del>k</del>	+	-	<del>p</del> 0
5	<del>p</del>	-	+	-	+	-	+	0
4	r	+	-	+	-	+	-	<del>P</del> 0
3	+	-	+	-	<del>P</del>	<del>K</del>	<del>P</del>	0
2	<del>P</del>	<del>R</del>	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

51.h5 White has an extra pawn in the starting position, but a difference between the rooks makes this position close to drawish. Beliavsky began advancing his pawns since he had no alternative way to improve his position. For a while, nothing was happening. Eljanov defended well. ♕f6 52.g4 ♕e6 53.e4 ♕e5 54. | b5+ ♕f6 Might have been refused because of the g4 - g5 idea, but there was also nothing hazardous for Black.

□ 7.2) Endgames Without Passed  
 ■ Alexander Beliavsky vs. Pavel

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	<del>R</del>	0
6	-	+	-	+	-	+	-	<del>p</del> 0
5	<del>p</del>	-	+	-	<del>k</del>	-	+	<del>P</del> 0
4	-	+	-	+	<del>P</del>	+	<del>P</del>	0
3	<del>t</del>	-	+	-	+	-	<del>k</del>	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

58.♕h4 The moment of the fatal mistake. Can you find the correct defensive path? | a1 Eljanov should have pushed the King as far from the pawns as possible. White has nothing but to attack the h6 -pawn.

□ 7.2) Endgames Without Passed  
 ■ Alexander Beliavsky vs. Pavel

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	<del>R</del>	0
6	-	+	-	+	-	+	-	<del>p</del> 0
5	<del>p</del>	-	+	-	<del>k</del>	-	+	<del>P</del> 0
4	-	+	-	+	<del>P</del>	+	<del>P</del>	<del>k</del> 0
3	<del>t</del>	-	+	-	+	-	+	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

58... | f3 Can White exchange the e4 -pawn against the a5 - and h6 -pawns? 59. | e7+ ♕d6 60. | a7 ♕e5 61. | xa5+ ♕xe4 62. | a6 Black resigned.

□ 7.2) Endgames Without Passed  
 ■ Alexander Beliavsky vs. Pavel, Sibenik 2010)

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X| | | | | | | Y
8- + - + - + - + 0
7+ - + - + - p - 0
6- + - + k + - p 0
5p - + - + - + - 0
4r + - + - + - P 0
3+ - + - PKP - 0
2PR - + - + - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

The tie-break of the World Championship match-2018 ended with a 3-0 for Carlsen. But history might have gone differently if Caruana hadn't failed in the equal rook endgame. At the critical moment, he had a chance to organize counterplay similar to something that might have happened in the Beliavsky - Eljanov endgame. Let's take a look at both of these examples to learn one defensive technique that can be called 'Pursuing the opponent King.' White has an extra pawn in the starting position, but a difference between the rooks makes this position close to drawish. Beliavsky began advancing his pawns since he had no alternative way to improve his position. For a while, nothing was happening. Eljanov defended well. 51.h5 ♠f6 52.g4 ♠e6 53.e4 ♠e5 54.♭b5+ ♠e6 [ 54...♠f6! might have been refused because of the g4 - g5 idea, but there was also nothing hazardous for Black. 55.g5+ Of course, this move is not compulsory; I show the difference between ... Ke6 and ... Kf6 . hxg5 56.♭f5+ ♠e6 57.♭xg5 Here is one of the saving lines. ♭xa2 58.♭xg7 ♭h2 59.♭g6+ ♠f7 60.♭g5 a4 61.♭a5 a3 White can't win the a-pawn without losing one of their pawns. ] 55.♭b7 ♠e5 [Here, 55...♠f6 was connected with an excellent

idea that was hard to find. 56.♠f4 ♭xa2 57.e5+ ♠e6 58.♭xg7 Can you find a way to save this position? ♭f2+! (There is no sense in pushing the white King to g3 because it goes to h4 from there. 58...♭a4+? 59.♠g3 ♠xe5 60.♭g6 ) 59.♠g3 ♭f8! 60.♭g6+ ♠xe5 61.♭xh6 ♭a8 The journey is over, and the rook is placed perfectly. ] 56.♠g3 White tried the best practical chance - to hide the King on h4 and to try taking both the g7 - and h6 -pawns. Black's task isn't simple now. ♭xa2 [ White's plan works perfectly in the following line. 56...♠f6? 57.e5+! ♠xe5 58.♭xg7 ♭a3+ 59.♠h4 ♭xa2 60.♭g6 ] 57.♭xg7 ♭a3+ 58.♠h4 The moment of the fatal mistake. Can you find the correct defending path? ♭f3 [Black's position is lost if White takes on h6 and the King invades g5 . So, Eljanov should have pushed the King as far from the pawns as possible. 58...♭a1! White has nothing but to attack the h6 -pawn. 59.♭g6 ♭h1+ ( 59...♠f4? loses due to an in-between check. 60.♭f6+ ♠xe4 61.♭xh6 ) 60.♠g3 ♭g1+ A) 61.♠f3 ♭f1+ 62.♠e2 ( 62.♠g2 ♭f6 ) 62...♭f4 Black takes on e4 and does not lose the h6 -pawn. ; B) 61.♠h2 This is the best square for the King. With the King on h2 , Black has many drawish lines. Let me show you the most straightforward in my opinion. ♭e1 62.♭xh6 ♠f4! Aiming for both the e4 - and g4 -pawns and (that is more important) pushing the white King. ( 62...♭xe4 63.♠g3 ) 63.♭g6 One more hard moment. The most natural capture on e4 loses because of the Kh3 , Rf6 idea. First, Black should push the pawn. Kh3 is not dangerous. ( 63.♭e6 ♠xg4 64.h6 ♭e2+ 65.♠g1 ♠g5! An important moment to memorize - the white King can't prevent the appearance of the black rook on the h-file. Black wins the h-pawn. 66.h7 ♭e1+ 67.♠g2 ♭e2+ 68.♠f3 ♭h2 69.♭e7 ♠g6 70.♠f4 ♭xh7 ) 63...a4! ( 63...♭xe4??



64. ♖h3! Defending the g4 -pawn and preparing to kick the black King from its active location. 1.e1 65. ♖f6+ ♕g5 66. ♖f5+ ♕h6 67. ♖xa5 ) 64.h6 ( The ...Rh1 check prevents White from using the same idea to push the black King away. 64. ♖h3 1.h1+ 65. ♕g2 1.h4 ) 64... 1.xe4! Allowing the pawn to go to the 7th rank looks extremely scary. But the bad location of the white King helps Black find a path to the h-file. 65.h7 1.e2+ 66. ♕g1 ( 66. ♖h3 1.e1! 67. ♖f6+ ♕g5 68. ♖f5+ ♕g6 69.h8♖+ ♕g7 70.♖f7 a3 White can't stop the pawn without losing the knight. ) 66... 1.e1+ 67. ♕f2 1.h1 68. ♖g7 a3 ] 59. ♖e7+ [White had other ways to win the game ( 59. ♖g6 or even g5 ), but the move in the game is the clearest. The black King should go to the d-file because it can't go to the f-file (due to the rook exchange), and after that, White takes on h6 and remains in a winning position. ] 59... ♕d6 [ 59... ♕d4 60. ♖e6 ; 59... ♕f4 60. ♖f7+ ♕xe4 61. ♖xf3 ♕xf3 62.g5 ] 60. ♖a7 ♕e5 61. ♖xa5+ ♕xe4 62. ♖a6 Black resigned.

□ 7.2) Endgames Without Passed  
 ■ Magnus Carlsen vs. Fabiano Ca

(Diagram)

In the starting position, the active black pieces compensate for the lack of the pawn. Surely, White is the only side who hopes for a win here, and Carlsen moved forward. 37. ♖c7 Black has a choice - to take on e4 or to give a check. Caruana's decision became a fatal mistake. Like the previous example, Black should have considered worsening the opponent King's position. Please try to find the best move and the following lines! ♕xe4 The reflexive move seems ok, but White immediately gets a

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6p	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	R	+	P	+	-	P	0
3t	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

winning position thanks to an in-between check (I guess Caruana just forgot about it) . This check drives the black King back and guarantees a good position for the white King. 38. ♖e7+ This check has mainly decided the destiny of the whole match. ♕xf5 39. ♖xg7 The white King can hide from the checks on h3 , so Black can't defend against the Rg5xh5 threat. The rest is simple.

□ 7.2) Endgames Without Passed  
 ■ Magnus Carlsen vs. Fabiano Ca

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6R	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	-	+	0
3p	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	-	+	0
1t	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

48... ♕g7 What is the best square for the white King? 49. ♕h4 No need to keep the King on the second rank, it has the perfect nest on g5 . a2 50. ♕g5

□ 7.2) Endgames Without Passed  
 ■ Magnus Carlsen vs. Fabiano Ca, London 2018)

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X| | | | | | | Y
8- + - + - + - + 0
7+ - + - + - p - 0
6p + - + - + - + 0
5+ - + - m P + p 0
4- + R + P + - P 0
3t - + - + - P - 0
2- + - + - + K + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

In the starting position, the active black pieces compensate for the lack of the pawn. Surely, White is the only side who hopes for a win here, and Carlsen moved forward.

37. | c7 Black has a choice - to take on e4 or to give a check. Caruana's decision became a fatal mistake. Like the previous example, Black should have considered worsening the opponent King's position. Please try to find the best move and the following lines! ♠xe4 The reflexive move seems ok, but White immediately gets a winning position thanks to an in-between check (I guess Caruana just forgot about it). This check drives the black King back and guarantees a good position for the white King. [Instead, Black should have given an in-between check himself. This would secure his King access to the f3 -square. 37... | a2+! 38.♠h3 Moving to f3 would have provoked new side checks. With the King on the Queenside (near the c1 -square), White will not have a chance to win because the lone rook cannot win both the g7 - and h5 -pawns (the g3 -pawn will be weak). ( 38.♠f3 | a3+ 39.♠f2 | a2+ 40.♠e1 | a1+ 41.♠d2 | a2+ 42.♠c1 ♠xe4 43. | e7+ ♠xf5 44. | xg7 | g2 ) 38... ♠xe4 **A)** After 39. | xg7 , Black can take on f5 with the rook. | f2! 40. | e7+

♠d5! ( 40... ♠xf5?? 41. | f7+ ) 41. | f7 ♠e5 ; **B)** 39. | e7+ ♠f3! Instead of caring for the pawns, Black begins an attack against the King. 40. | xg7 | a1 41.♠h2 | a2+ ] 38. | e7+ This check has mainly decided the destiny of the whole match. ♠xf5 Moving to the d-file didn't make any sense. [ 38... ♠d5 39. | xg7 ] 39. | xg7 The white King can hide from the checks on h3 , so Black can't defend against the Rg5xh5 threat. The rest is simple. ♠f6 40. | g5 a5 41. | xh5 a4 42. | a5 | a1 43.♠f3 a3 44. | a6+ ♠g7 [After 44... ♠f5 Carlsen would probably repeat the position and push the g-pawn forward. 45. | a5+ ♠f6 46.g4 ] 45.♠g2 The white King is ready for the a3 - a2 advance. After it, Black can only use his King. | a2+ [ Caruana could have defended better, but it would hardly affect the game result. 45...a2 46.g4 ♠h7 47.h5 ♠g7 The only tricky moment. White should move his King away from the g-file. 48.♠h2! ( 48.g5?? | b1 49. | xa2 | b5 White can't save the pawns. With the King on h2 , there is Rg2 . ) 48... ♠h7 49.g5 | b1 50. | xa2 | b5 51. | g2 ] 46.♠h3 | a1 47.h5 ♠h7 48.g4 ♠g7 49.♠h4 No need to keep the King on the second rank, it has the perfect nest on g5 . a2 50.♠g5 ♠f7 51.h6 | b1 52. | a7+ [ 52. | xa2 was also enough for a win, but the in-between check is more technical because it pushes the black King away from the g6 -square. | b5+ 53.♠h4 ♠g6 54. | a6+ ♠h7 55.g5 ] 52... ♠g8 53. | xa2 | b5+ 54.♠g6 | b6+ 55.♠h5 Black resigned.

□ 7.2) Endgames Without Passed  
 ■ Anish Giri vs. Fabiano Caruan

Anish Giri and Fabiano Caruana have belonged to the elite players for many years and are meeting each other multiple times during the year. The following game was

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	R	-	+	-	+	-	+	p0
4	P	+	K	+	p	k	-	+
3	+	-	+	r	+	-	+	P0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

played in Wijk aan Zee in 2016 and presented us with an exciting endgame where the American player was one step away from the win. Caruana should have done a lot of calculations - Rxh3 (to take the pawn and to defend the h5 -pawn), h4 (to save the pawn and to prepare ... Kf4 - e3 - d2 followed by ... e4 - e3 - e2 ), Rd8 (to liberate the pawn for its fastest advancing), or Ra3 (also liberating the pawn and cutting off the King along the 3rd rank). Probably, I have even missed something.

Unfortunately for Caruana, only one of them was winning. If you want to improve in playing the rook endgames, I invite you to set up this position on the board and find the best move. 55... | a3

□ 7.2) Endgames Without Passed  
 ■ Anish Giri vs. Fabiano Caruan

(Diagram)

55... | xh3 Sadly (for Black, of course), the same position with the King on b4 is winning, but having the King on c4 helps White to escape. Let's see other crucial lines. 56. | a8 Giri does not miss his chance. All variations end well for White. The direct e4 -pawn's pushing does not win concretely. In all other cases, White gets

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	R	-	+	-	+	-	+	p0
4	P	+	K	+	p	k	-	+
3	+	-	+	r	+	-	+	P0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

enough time to move his passer to the 7th rank and support it with the King. After that, White wins the rook, and his lone rook can hold two disconnected passed pawns of Black. | h1 57.a5 h4 58.a6 | a1 59.a7 ♠e3 60.♠b5 The King is on time to free the rook.

□ 7.2) Endgames Without Passed  
 ■ Anish Giri vs. Fabiano Caruan, Wijk aan Zee 2016)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	R	-	+	-	+	-	+	p0
4	P	+	K	+	p	k	-	+
3	+	-	+	r	+	-	+	P0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

Anish Giri and Fabiano Caruana have belonged to the elite players for many years and are meeting each other multiple times during the year. The following game was played in Wijk aan Zee in 2016 and presented us with an exciting endgame where the American player was one step away from the win. Caruana should have

done a lot of calculations - Rxh3 (to take the pawn and to defend the h5 -pawn), h4 (to save the pawn and to prepare ... Kf4 - e3 - d2 followed by ... e4 - e3 - e2 ), Rd8 (to liberate the pawn for its fastest advancing), or Ra3 (also liberating the pawn and cutting off the King along the 3rd rank). Probably, I have even missed something.

Unfortunately for Caruana, only one of them was winning. If you want to improve in playing the rook endgames, I invite you to set up this position on the board and find the best move. **55... | xh3** Sadly (for Black, of course), the same position with the King on b4 is winning, but having the King on c4 helps White to escape. Let's see other crucial lines. [ 55... | a3! White has at least three good moves to attempt to save the game, but this time none of them works well. **A)** 56. | a8 e3 57. ♣b4 | d3

An umbrella for the King on d2 . 58. | f8+ ( 58. ♣c4 e2! 59. | f8+ ♣e3 60. | e8+ ♣d2 ) 58... ♣g3 59. | g8+ ♣f2 60. | f8+ ♣e1 61. | f5 e2 White has no time to take on h5 and sacrifice the rook for the pawn. 62. | xh5 ♣d2 63. | e5 | e3 64. | d5+ ♣c2 65. | c5+ ♣b2 ; **B)** 56. | xh5 e3 57. | h8 e2 58. | f8+ ( 58. | e8 | e3 ) 58... ♣g3 59. | e8 ♣f2 60. | xe2+ ♣xe2 61. ♣b5

Here is the moment where a tempo (... Rxh3 ) makes a difference. In all previous lines, this endgame was equal, but now the black King gets enough time to approach the a-pawn. ♣d3 62.a5 ♣d4 63.a6 ♣d5 64. ♣b6 ♣d6 65. ♣b7 ♣d7 ; **C)** 56. ♣b4 | xh3 57. | a8 e3 Here is another moment where the difference between 55...Rxh3 and 55...Ra3 becomes visible. White can't play Kd3 (the move that helps in the 55...Rxh3 line). 58. ♣c3 ♣f3 59. ♣d3 ♣f2 60. | e8 | f3 61.a5 | f6 Stopping the a5 -pawn and indirectly defending the e3 -pawn. The march of the h-pawn will decide the game. ; White saves in the 'rook vs. pawn' endgame in the following variation. 55... | d8? 56. | xh5! e3 57. | h7 | e8 58. | f7+ ♣g3

59. | f1 e2 60. | e1 ♣f2 61. | xe2+ ♣xe2 62.a5 The white King is perfectly placed (not allowing the black King to come closer to the pawn). ; 55...h4? This move also loses a vital tempo. 56. | a8 | a3 57. ♣b4 | a1 58.a5 e3 59. | f8+ ♣g3 60. | e8 ♣f2 61. | f8+ ♣e1 62. | f4! Right on time! White needs the h4 -pawn to ensure that after giving up the rook, he will end in the drawish rook vs. pawn endgame. e2

63. | xh4 ♣f2 64. | e4 ] **56. | a8** Giri does not miss his chance. All variations end well for White. The direct e4 -pawn's pushing does not win concretely. In all other cases, White gets enough time to move his passer to the 7th rank and support it with the King. After that, White wins the rook, and his lone rook can hold two disconnected passed pawns of Black. | **h1** [ 56...e3 57. ♣d3 ♣f3 In the 55...Ra3 56. Kb4 line, we saw how Black wins in such a position by playing ... Kf3 - f2 . 58. | f8+! ♣g2 59. ♣e2 ; 56... | a3 57. ♣b4 | d3 58.a5 e3 59. | f8+ ♣g3 60. | e8 ♣f2 61. | f8+ ♣e1 62. | h8! (There are unnecessary complications in the Queen endgame in the following line. 62.a6? e2 63.a7 ♣d2 64. | e8 | e3 ) 62...e2 ( 62... | d4+ 63. ♣c5 | h4 64.a6 e2 65.a7 | a4 66.a8 ♠ ) 63. | xh5 ♣d2 64. | h2 | d5 65. | xe2+ ♣xe2 66.a6 ] **57.a5 h4 58.a6 | a1 59.a7 ♣e3 60. ♣b5** The King is on time to free the rook. **h3 61. ♣b6 | b1+ [ 61...h2 62. | h8 ] 62. ♣c6 | a1 63. ♣b6** The opponents agreed on a draw.

## 8) Many-Pawn Rook Endgames With Many Passed Pawns

Rook endgames with many (passed) pawns. Z0

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Bence Pribelszky vs. Valeriy

```

X| | | | | | | | Y
8- + - + r + k + 0{
7p - + - + pp - 0
6- + - + p + - p0
5+ - + - + - + - 0
4- + - + - + PP0
3+ P + - + - + - 0
2P + K + - P - + 0
1+ - + - + - + R0
x a b c d e f g h y

```

Both sides have pawn majorities on opposite sides. The sharp and unpredictable rally is close. Every single tempo (or its loss) can become decisive. That's why it is important to find the shortest way to create the passed pawn and, on the other side, to find the most economical way to fight against the opponent's passed pawns. **24...f5**

In the beginning, I played well. Black moves the pawns forward. **25.g5**

I suppose my opponent wanted to block the g7 -pawn. But creating a weakness on g5 plays a more critical (and negative for White) role. **hxg5 26.hxg5 ♠f7**

The King goes to attack the newborn weakness. **27.b4 ♠g6**

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Bence Pribelszky vs. Valeriy

(Diagram)

**29.b5** Here, I missed a strong idea (I have yet to see it). As I understand this now, I was certain that my King performs a vital mission (attacks the g5 -pawn and makes the opponent's rook passive). So, only the rook can attack the f2 -pawn (to get the

```

X| | | | | | | | Y
8- + - + r + - + 0
7p - + - + - p - 0
6- + - + - + k + 0
5+ - + - pp P - 0
4- P - + - + - + 0
3+ - + - + - + - 0
2P + K + - P - + 0
1+ - + - + - R - 0[
x a b c d e f g h y

```

central connected passed pawns). But there were a few logical errors in this line of thinkKing. First, my rook on the 8th rank was perfect for fighting against the opponent's pawns and supporting my pawns. When I throw it forward, the white pawns on the Queenside become way more dangerous. Second, the white rook would not be paralyzed on g1 forever. Once his pawns are advanced enough, the rook will look for a way to become more active. Third, the f2 -pawn was more important than the g5 -pawn. So, I should have looked for the path for the King to attack the f2 -pawn. **f4** This move would have opened the window for the King to go to f3 . **30.a4 ♠f5 31.♠c3 ♠e4 32.a5 ♠f3**  
 Compared to the game text Black won a mass of tempi.

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Bence Pribelszky vs. Valeriy

(Diagram)

**34... ♠b2** A hardly explainable mistake. There was no reason to stop b5 - b6 (because after this move, Black could take on b6 and play Rb2 ) and give a free tempo to the opponent. Moreover, moving the rook away from the d-file allowed the

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7p	-	+	-	+	-	p	-	0
6-	+	-	+	-	+	-	+	0
5P	P	+	-	p	p	+	-	0
4-	+	K	+	-	m	-	+	0
3+	-	+	-	+	-	+	-	0
2-	+	-	t	-	P	-	+	0
1+	-	+	-	+	R	+	-	0
x	a	b	c	d	e	f	g	h
y								

opponent rook to attack the a7 -pawn (the idea that I missed in time trouble). 35. | d1 The opponent took his chance. Here I couldn't cope with the emotional tension and didn't find a way to fight well against an unexpected counterplay. | xf2 36. | d7 e4 37. | xa7 e3 38.b6 Before this move, Black had other ways to hold the balance, but now it was time to find the only good move. Luckily, it wasn't difficult; unluckily, I couldn't do this. | b2 39. | e7 e2 40. ♣c5 ♣f3 41.a6 After crossing move 40, all illusions have gone - my position is hopeless, and I could only wait for the end. But luckily for me, there still was a place for a mistake. Also see change of the leader in the theoretical section.

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Bence Pribelszky vs. Valeriy

(Diagram)

38.b6 Before this move, Black had other ways to hold the balance, but now it was time to find the only good move. Luckily, it wasn't difficult; unluckily, I couldn't do this. | c2+ Black is fine after all King's retreats. 39. ♣b3 The most dangerous continuation for Black. | c5 The most difficult part of the defense. The c5 -square

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7R	-	+	-	+	-	p	-	0
6-	+	-	+	-	+	-	+	0
5P	P	+	-	+	p	+	-	0
4-	+	K	+	-	m	-	+	0
3+	-	+	-	p	-	+	-	0
2-	+	-	+	-	t	-	+	0
1+	-	+	-	+	-	+	-	0[
x	a	b	c	d	e	f	g	h
y								

is perfect; from here, the rook attacks the a5 -pawn and is ready to give the check from b5 or to help the e-pawn with the Re5 move.

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Bence Pribelszky vs. Valeriy

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7P	-	+	-	R	-	p	-	0
6-	P	-	m	-	+	-	+	0
5+	-	+	-	+	p	+	-	0
4-	+	-	+	-	+	-	+	0
3+	-	+	-	+	k	+	-	0
2r	+	-	+	p	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

43...f4 The crucial moment of this dramatic endgame. I offer you to train and find the win. 44. | e8 The rook moves away from the 7th rank to prepare b6 - b7 - b8=Q . Black has nothing to respond to this.

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Bence Pribelszky vs. Valeriy, Budapest 2022)

```

XI | | | | | | | Y
8- + - + r + k + 0{
7p - + - + pp - 0
6- + - + p + - p0
5+ - + - + - + - 0
4- + - + - + P P0
3+ P + - + - + - 0
2P + K + - P - + 0
1+ - + - + - + R0
x a b c d e f g h y

```

The next game is one of my career's most complicated rook endgames. At first, it was equal. Then I got a much better position, but I couldn't realize how to use my advantage. After that, I strongly blundered and didn't even manage to hold equality. White was winning, and my opponent needed to calculate the final lines, but failed and allowed me to create a little study to save the game. The final stalemate combination put a dot in this long-suffering battle. Both sides have pawn majorities on opposite sides. The sharp and unpredictable rally is close. Every single tempo (or its loss) can become decisive. That's why it is important to find the shortest way to create the passed pawn and, on the other side, to find the most economical way to fight against the opponent's passed pawns.

**24...f5** In the beginning, I played well. Black moves the pawns forward. **25.g5** I suppose my opponent wanted to block the g7 -pawn. But creating a weakness on g5 plays a more critical (and negative for White) role. [A primitive capture might have led to almost a symmetrical position with equal play. 25.gxf5 exf5 26.♣d3 ♣f7 27.b4 ♣f6 28.a4 g5 29.hxg5+ hxg5 ] **25...hxg5 26.hxg5 ♣f7**

The King goes to attack the newborn

weakness. **27.b4 ♣g6** The following idea by the engine is practically unfindable during a real game (unless you know it). The engine suggests giving up the pawn, putting the rook on b3 (to prevent Kf3 down the line), and pushing the Queenside pawns. But all this is good for a human if you understand that Rg1 is bad. **28.♭g1** [ 28.♭h3!! ♣xg5 29.b5! ♣f4 ( 29...♭c8+ 30.♭c3 ) 30.a4 g5 31.♭b3 ] **28...e5 29.b5**

Here, I missed a strong idea (I have yet to see it). As I understand this now, I was certain that my King performs a vital mission (attacks the g5 -pawn and makes the opponent's rook passive). So, only the rook can attack the f2 -pawn (to get the central connected passed pawns). But there were a few logical errors in this line of thinKing. First, my rook on the 8th rank was perfect for fighting against the opponent's pawns and supporting my pawns. When I throw it forward, the white pawns on the Queenside become way more dangerous. Second, the white rook would not be paralyzed on g1 forever. Once his pawns are advanced enough, the rook will look for a way to become more active. Third, the f2 -pawn was more important than the g5 -pawn. So, I should have looked for the path for the King to attack the f2 -pawn. **♭d8** [ 29...f4! This move would have opened the window for the King to go to f3 . 30.a4 ♣f5 31.♣c3 ♣e4 32.a5 ♣f3 Compared to the game text Black won a mass of tempi. ♭Black could have attacked the f2 -pawn faster, but I specifically chose the longer way to complicate the advancing of the white pawns. 29...♭h8 30.a4 ♭h2 31.♭f1 ♣xg5 32.a5 White is already a move away from creating the passed pawn, while the prospects of the black pawns are still distant. ] **30.a4 ♭d4 31.♣b3**

[ White could have directly pushed the pawns forward. 31.a5 ♭a4 **A**]

Here was my trapping line. 32.b6?? ♭xa5 33.b7 ♭c5+ followed by ... Rb5xb7 .

( 33... | b5?? 34. | b1 ); **B**) 32.a6! f4  
 ( There is already no time to take on f2 .  
 32... | a2+? 33.♣b3 | xf2?? 34.b6 axb6  
 35.a7 ) 33.♣b3 | d4 34.♣c3 The white  
 pawns have achieved a lot, and White  
 should be out of danger. ] **31... | d2 32. | f1**  
 Bence also played concretely (I attacked -  
 he defended) and did not feel the most  
 crucial nuance - the pawns advancing  
 matters more of all! [ 32.a5! | xf2 33. | d1!  
 A threat is to win the a7 -pawn or to play  
 b5 - b6 . ( 33.b6?? was premature. axb6  
 34.axb6 | d2 The black pawns will have a  
 lot of time before White wins the rook for  
 the b-pawn. ) 33...e4 34.b6 axb6 35.axb6  
 | h2 36. | d8! | h1 37.♣b2 | h2+  
 with a repetition. ] **32...♣xg5 33.a5 ♣f4**  
 Black had a hard choice - ... e5 - e4 also  
 looked promising. Mathematically, both  
 moves do not change the evaluation of the  
 position. Considering that White has only  
 one good idea after Kf4 , it would be fair to  
 admit that this move is stronger from a  
 practical point of view. Though, after ... e5  
 - e4 , the defense would not have been easy  
 for White. [ 33...e4!? 34.♣c3!  
 A technical move to push the rook from the  
 active square. (The idea to play a5 - a6 ,  
 Ra1 , and then b5 - b6 does not work for  
 many reasons, but the most obvious is ...  
 Rd6 , which physically prevents b5 - b6 .  
 34.a6?? f4 35. | a1 | d6 ;An attempt to  
 attack the a7 -pawn fails due to a cold back-  
 move. 34. | c1?? | d7! Black's play on the  
 Kingside is faster. 35.♣b4 ♣g4 36. | c3  
 g5 37.b6 axb6 38.axb6 f4 39.♣b5 e3  
 40.fxe3 f3 ;The breakthrough b5 - b6 leads  
 to an instant loss of the pawn. 34.b6??  
 axb6 35.axb6 | d6 ) 34... | a2 35.a6 ♣f4  
 36. | d1! The rook attacks the a7 -pawn and  
 the Kingside pawns from the back. **A)**  
 The crazy lines after capturing on f2 lead to  
 the '0.00' position, but in the real game,  
 everything might have happened. 36... | xf2  
 Here are just the exemplary lines. 37.b6  
 ( 37. | d7 e3 38. | xa7 | a2 39. | e7 e2

40.♣b3 | a5 41.♣b4 | a2 42. | xe2 | xe2  
 43.a7 | a2 44.b6 g5 45.b7 | b2+ 46.♣c5  
 | xb7 47.a8♠ | e7 with a fortress with the  
 rook on e4 . ) 37...axb6 38. | a1 | h2 39.a7  
 | h8 40.a8♠ | xa8 41. | xa8 ♣f3  
 Here, still a lot to play. ; **B**) 36...♣f3  
 Now both sides are forced to play only  
 moves to force a repetition. 37.♣b3  
 ( 37. | d7?? ♣xf2 38. | xa7 e3 39. | f7 g6 )  
 37... | a5 ( 37... | xf2?? 38.b6 ) 38.♣b4 | a2  
 39.♣b3 ] **34.♣c4** [White should have  
 launched his rook forward. Kc4 does not  
 help much. 34. | c1! | d7! (Black can't  
 take the pawn because there is no way to  
 stop the b-pawn. 34... | xf2?? 35.b6 axb6  
 36.axb6 | d2 37.b7 | d8 38. | c8 ) 35. | c3!  
 Again we see the idea that was shown by a  
 computer yet on the move 28! Now White  
 has more time to advance his pawns. The  
 position remains complicated (as almost in  
 any lines in this endgame). So, I show only  
 one more or less human line that proves the  
 evaluation. e4 36.♣b4 g5 37.b6 axb6  
 38.axb6 g4 39.♣b5 ♣e5 Freeing the way  
 for the f5 -pawn. 40.♣c6 | f7 41.b7 | xb7  
 42.♣xb7 f4 The pawns look scary (... e3  
 fxe3 f3 is a threat), but the check helps.  
 43. | c5+! ( 43.♣c6?? e3 44.fxe3 f3 )  
 43...♣d4 (There is a repetition in the  
 following line. 43...♣f6 44. | c4 ♣f5  
 45. | c5+ ) 44. | g5 e3 Everything is going  
 to be exchanged. ] **34... | b2** A hardly  
 explainable mistake. There was no reason  
 to stop b5 - b6 (because after this move,  
 Black could take on b6 and play Rb2 ) and  
 give a free tempo to the opponent.  
 Moreover, moving the rook away from the  
 d-file allowed the opponent rook to attack  
 the a7 -pawn (the idea that I missed in time  
 trouble). [ 34...e4! would practically end  
 the game. 35. | b1 Black has time to take on  
 f2 and stop the pawn. ( 35.b6 axb6  
 36.axb6 | b2 37.♣c5 ♣f3 The white rook  
 can't stop the pawns even when White wins  
 the black rook for the b-pawn. ) 35... | xf2!  
 36.b6 axb6 37.axb6 | c2+! 38.♣d5 | c8



The black pawns are more powerful than white rooks. 39.b7 | b8 40.♠c6 e3 41.♠c7 |xb7+ 42.♠xb7 e2 43.♠c6 ♠e3 44.♠d5 ♠f2 45.♠e5 g6 ] **35. | d1** The opponent took his chance. Here I couldn't cope with the emotional tension and didn't find a way to fight well against an unexpected counterplay. | **xf2** [ The simplest way to stabilize the situation was to bring the rook to the 7th rank. 35... |c2+! 36.♠b4 |c7 ] **36. | d7 e4 37. | xa7 e3 38.b6** Before this move, Black had other ways to hold the balance, but now it was time to find the only good move. Luckily, it wasn't difficult; unluckily, I couldn't do this. | **b2** [ 38... |c2+! Black is fine after all King's retreats. **A)** 39.♠b5 |b2+ 40.♠c6 ( 40.♠a6?? The ugliest possible square for the King where it only disturbs own pawns. g5 41. |e7 g4 42.b7 g3 ) 40... |c2+ 41.♠d6 Of course, there is no sense in moving to the 7th rank (it blocks the Re7 move). |d2+ It's safer to return to the c-file (on e6 the King disturbs to stop the e3 -pawn). 42.♠c6 |c2+ ; **B)** 39.♠b3 The most dangerous continuation for Black. |c5! The most difficult part of the defense. The c5 -square is perfect; from here, the rook attacks the a5 -pawn and is ready to give the check from b5 or to help the e-pawn with the Re5 move. 40.♠a4! The King should go around the a5 - e1 diagonal. ( 40.♠b4?? e2 41. |e7 |e5 ) 40...e2 41. |e7 |e5 42. |xe5 ♠xe5 43.b7 e1♠ 44.b8♠+ with an equal Queen endgame. ] **39. | e7 e2 40.♠c5 ♠f3 41.a6** After crossing move 40, all illusions have gone - my position is hopeless, and I could only wait for the end. But luckily for me, there still was a place for a mistake. Also see change of the leader in the theoretical section. | **c2+** [There would not have changed much in the case of 41...♠f2 42.a7 |a2 43.b7 |xa7 44. |xe2+ ♠xe2 45.b8♠ Compared to the 44.Rxe2 line, Black can't place his rook in

the safe place to build a fortress. ] **42.♠d6 | a2 43.a7 f4** The crucial moment of this dramatic endgame. I offer you to train and find the win. **44.♠c7** The idea to bring the King to b8 to support the pawns is too slow. Sadly, I also didn't see the direct Re8 win that GM Valeriy Neverov showed right after the end of the game (to my excuse, I can say I didn't try hard since it was not my duty). Instead, I saw the rook sacrifice and hoped to build a fortress there. Now Black can save the game with the study-like idea. Try to find it! [ 44. |e8 The rook moves away from the 7th rank to prepare b6 - b7 - b8=Q . Black has nothing to respond to this. ; 44. |xe2? ♠xe2 45.b7 |xa7 46.b8♠ I saw the Ra6 - f6 maneuver during the game but was unsure if it would be enough for a draw. My fear was the white King and Queen would organize a mating attack. I didn't see the f-pawn could help right on time. |a6+! 47.♠e5 |f6! 48.♠b2+ ♠e3 ( 48...♠f3? 49.♠b7+ ) 49.♠b3+ ♠e2 50.♠e4 f3! 51.♠a2+ ♠f1 52.♠e3 f2 The shelter is prepared. The position is drawish. ;White could even lose in the case of straightforward advancing. 44.b7?? |xa7 45.b8♠ |xe7 Nothing can stop the pawn promotion. ] **44...♠f2 45.♠b8 e1♠ 46. |xe1 ♠xe1 47.b7 f3** [ Black could have also played 47... |xa7 with an analog saving idea. 48.♠xa7 f3 49.b8♠ f2 ] **48.a8♠ |xa8+ 49.bxa8♠ f2** Most of you should know that the endgames 'Queen vs. c2 / f2 -pawn' are often drawish due to the stalemate idea with the King in the corner. But the second pawn usually makes the saving chances equal to '0' since there is no stalemate anymore. Luckily for me, the white King is too distant to come to help the Queen. **50.♠e4+** The Queen should force the black King to stand before the pawn to give the King time to approach the Kingside. For this, it should get access to the square behind the pawn (in this case, this is the f3 -square). Without

Qf3 , the strongest side can't force the Kf1 move. ♖d2 51.♙f3 ♖e1 52.♙e3+ ♖f1 Now it is time for the white King and the g-pawn. Who is faster to help to own forces? 53.♙c7 g5 54.♖d6 g4 The pawn took the f3 -square under control. 55.♖e5 The King lacked one tempo. ♖g2 56.♙e4+ ♖g1 [Of course, Black shouldn't defend the g4 -pawn. 56...♖g3?? 57.♙h1 ] 57.♙xg4+ Now we have the classical 'Queen vs. pawn' endgame. The white King is not close enough to win this. ♖h2 58.♙e2 ♖g1 59.♙e3 ♖g2 60.♙d2 The last try. Where should the black King move to? ♖h1 [Here was the trap. 60...♖g1?? 61.♖f4! f1♙+ 62.♖g3 Black can't avoid the checkmate. ] 61.♖f4 [ 61.♙xf2 Stalemate. ] 61...f1♙+ 62.♖g3 With the King on h1 , Black has a check. ♙g1+ 63.♖h3 ♙e3+ [ 63...♙f1+ was also enough, but I wanted to end this extremely intensive game with a stalemate. ] 64.♙xe3

# 8) Many-Pawn Rook Endgames Wi Samuel Sevian vs. Hans Moke N

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7p	-	+	-	+	-	t	-	0
6-	+	-	+	-	+	-	R	0
5P	-	+	-	+	-	+	-	0
4-	p	-	+	-	+	-	K	0
3+	k	+	-	+	-	+	-	0
2-	P	-	+	-	P	-	P	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

White has two extra pawns, but the position is far from safe. The b4 -pawn looks more dangerous than both the f2 - and h2 -pawns. White should have decided how to hold an equal position. Obviously, he needs to

advance the f-pawn. Let's see how this works. 45.f4 This was the moment when Samuel decided to distract his opponent with his weird behavior. By coincidence (?), after that, he made a decisive mistake. ♖xb2 46.f5 b3 47.♙e6 [White should have calculated one of the following concrete and long lines. It was also possible to play 47.♖h5 . The idea would be the same - White directs his rook closer to the b-pawn and supports his f-pawn with the King. ]

# 8) Many-Pawn Rook Endgames Wi Samuel Sevian vs. Hans Moke N

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7p	-	+	-	+	-	+	R	0
6-	+	-	+	-	P	-	+	0
5P	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	-	K	0
3+	-	+	-	+	-	+	P	0
2k	p	-	+	-	+	r	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

50.♙b7 How does Black win here? ♙g6 The white King cannot support the f-pawn, and Black wins it.

# 8) Many-Pawn Rook Endgames Wi Samuel Sevian vs. Hans Moke N,2022)

(Diagram)

The most difficult situations in rook endgames probably arise when both players have their own passed pawns. Even when similar cases happen in King and pawn endgames, calculating becomes hard. In

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	O
7	<b>p</b>	-	+	-	+	-	<b>r</b>	- O
6-	+	-	+	-	+	-	<b>R</b>	O
5	<b>P</b>	-	+	-	+	-	+	O
4-	<b>p</b>	-	+	-	+	-	<b>K</b>	O
3+	<b>k</b>	+	-	+	-	+	-	O
2-	<b>P</b>	-	+	-	<b>P</b>	-	<b>P</b>	O
1+	-	+	-	+	-	+	-	O[
x	a	b	c	d	e	f	g	h
								y

rook endgames, the complications are exponentially larger. So, let's study a few examples from recent games. The name of the American GM Hans Niemann became extra widespread in 2022 when World Champion Magnus Carlsen accused him of cheating (not directly, but enough for everyone). The second unusual case with Hans Niemann happened during his game against Sam Sevian. That accident has not become so famous amongst non-chess players, but for a few days it was on the main pages of chess websites. While Hans thought about his move, Sam Sevian, for no apparent reason, took the opponent's King from the board and began to twist the piece in his hands. It might sound almost regular for people who have never played in chess tournaments. Still, for GMs, such an act seems extraordinary - they rarely touch the piece on the board during the opponent's thinking on the move, and they never take the pieces from the board just to twist them in their hands. Hans was strongly confused by this occasion; there was some talk between the players, but finally, the referee helped to restore the game. I don't have a clear explanation of what happened there related to this accident (you can find the corresponding video on YouTube and judge it on your own), but I can clarify what was on the chessboard right after that. White has two extra pawns, but the position is far

from safe. The b4 -pawn looks more dangerous than both the f2 - and h2 -pawns. White should have decided how to hold an equal position. Obviously, he needs to advance the f-pawn. Let's see how this works. **45.f4** This was the moment when Samuel decided to distract his opponent with his weird behavior. By coincidence (?), after that, he made a decisive mistake.

**♣xb2 46.f5 b3 47.f6** This move does not lose yet, but it locks the white rook out and makes the draw hardly achievable.

[ A save wasn't simple anyway. White should have calculated one of the following concrete and long lines. **47. ♖e6!**

It was also possible to play **47. Kh5**. The idea would be the same - White directs his rook closer to the b-pawn and supports his f-pawn with the King. **♣a2 48.f6 ♖g2 49.f7** (The idea of giving up the rook on b1 also might have helped to save the game and required precise calculation. **49. ♣h5 b2 50. ♖e1 b1 ♠ 51. ♖xb1 ♣xb1 52.f7 ♖xh2+ 53. ♣g6 ♖f2 54. ♣g7 ♣c2 55.f8 ♠ ♖xf8 56. ♣xf8 ♣c3 57. ♣e7 ♣b4 58. ♣d6 ♣xa5 59. ♣c5** Right on time! ) **49... ♖f2 50. ♖e2+! ♖xe2 51.f8 ♠ b2 52. ♠f7+**

The clearest decision; the game ends with an equal Queen endgame. **♣a1 53. ♠f1+ b1 ♠ 54. ♠xe2 ♠b4+ ] 47... ♖g2 48.h3** Seemingly, White has missed their 50th move. [It was not too late to return to the correct plan - to direct the rook to the b-file and to support the f-pawn with the King. The h2 - h3 move was a fatal loss of tempo.

**48. ♖h5!!** Though the key lines are not difficult here, **48.Rh5** can hardly be called the natural move to consider. I guess, Sevian didn't even see it. **♖f2 ( 48... ♣a2 49. ♖b5 b2 50. ♣h5! b1 ♠ 51. ♖xb1 ♣xb1 52.f7 ♖xh2+ 53. ♣g6 ♖f2 54. ♣g7** White is on time to lock the black King on the a-file. **♣b2 55.f8 ♠ ♖xf8 56. ♣xf8 ♣b3 57. ♣e7 ♣b4 58. ♣d6 ♣xa5 59. ♣c5** ;There is an equal pawn endgame in the following line. **48... ♖xh2+ 49. ♣g5**

♖xh5+ 50.♙xh5 ♖a2 51.f7 b2 52.f8E  
 b1E ) 49.♙g5 The white rook again  
 appears misplaced, but the mission of the f-  
 pawn support is completed. It means that  
 White only needs to sacrifice the rook for  
 the b-pawn. ♖a2 50.♙g6 b2 51.♖b5 ;  
 White had no saving hopes in the case of f6  
 - f7 . 48.f7? ♖f2 49.♖h7 ♖a2

Black wins both the rook and the f-pawn. ]

48...♖a2 49.♖h7 b2 50.♖b7 How does  
 Black win here? ♖g6 The white King  
 cannot support the f-pawn, and Black wins  
 it. 51.f7 ♖f6 52.♙g5 ♖xf7 53.♖xf7

The best practical chance. b1E

With the pawn on a7 , Black has no  
 difficulties in winning this. 54.h4

[ Unfortunately, the a7 -pawn is defended.

54.♖xa7?? ♖g1+ ] 54...♖g1+ 55.♙h5

The King should block the h-pawn to  
 defend it. [ 55.♙f6 ♖f2+ A) 56.♙g6  
 ♖xh4 57.♖xa7 There are many ways to  
 win the rook with checks. You can practice  
 it here. A1) 57...♖e4+ 58.♙h5 ( 58.♙g7

♖d4+ ) 58...♖h1+ 59.♙g4 ♖g1+ ; A2)

57...♖g3+ 58.♙h7 ♖h2+ 59.♙g8 ♖g1+ ;

B) 56.♙g7 ♖g3+! 57.♙f8 ♖xh4

58.♖xa7?? ♖h8+ 59.♙e7 ♖g7+ ]

55...♙b3 Black will finally win the a-pawn  
 and promote his pawn. The rest is simple.

56.a6 ♙c4 57.♖g7 ♖c5+ 58.♖g5 ♖e7

59.♖f5 ♙d4 60.♙g4 ♖e6 61.♙g5 ♙e4

62.♖f6 ♖e7 63.♙g6 ♙e5 64.♖f5+ ♙e6

65.♖f4 ♖e8+ 66.♙g5 ♖g8+ 67.♙h5

♙e5 68.♖f1 ♖d5 69.♖f8 ♖d1+ 70.♙g5

♖d2+ 71.♙h5 ♖d7 72.♖f1 ♖b5 73.♖f8

♖xa6 74.♙g5 ♖e6 75.♖f1 ♖g8+

76.♙h6 ♖h8+ 77.♙g5 ♖d8+ 78.♙h5

a5 White resigned.

## ☐ 8) Many-Pawn Rook Endgames Wi

☒ Richard Rapport vs. Nodirbek

39... ♖c1+ Both sides have passed pawns,  
 the white King is near the passed pawns,  
 and the d-pawn is more advanced than the a-

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7p	-	+	-	+	-	+	-	0
6-	p	-	+	-	+	-	+	R0
5+	-	+	P	+	k	p	-	0
4-	+	K	+	-	+	-	+	0
3+	-	+	-	+	-	+	P	0
2-	+	-	+	-	+	-	+	0
1t	-	+	-	+	-	+	-	0
xa	b	c	d	e	f	g	h	y

and b-pawns. So even though Black has an  
 extra pawn, it is hard to predict the game  
 ending quickly. Basically, it is true, but  
 one mistake from White was enough for the  
 Uzbeki player to end the game instantly.

40.♙b3 The c4 -square is perfect for the  
 King; that's why Black decided to push the  
 King away.

## ☐ 8) Many-Pawn Rook Endgames Wi ☒ Richard Rapport vs. Nodirbek

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7p	-	+	-	+	-	+	-	0
6-	p	-	+	-	+	-	+	R0
5+	-	+	P	+	k	p	-	0
4-	+	K	+	-	+	-	+	0
3+	-	+	-	+	-	+	P	0
2-	+	-	+	-	+	-	+	0
1+	-	t	-	+	-	+	-	0[
xa	b	c	d	e	f	g	h	y

40.♙d4 Black to move and win. Try to find  
 it! ♖d1+ 41.♙c4 b5+ Nodirbek correctly  
 evaluated that the exchange of the d- and b-  
 pawns was his best chance, and he should  
 take it. Of course, he couldn't be sure Black  
 was winning; it was rather an intuitional  
 decision.

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Richard Rapport vs. Nodirbek

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6p	+	-	+	-	+	-	R	0
5+	-	+	-	+	k	p	-	0
4-	K	-	+	-	+	-	+	0
3+	-	+	-	t	-	+	P	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

48. ♖c4 Another defense against Black's threat is to bring the King to the Kingside, but what does it allow? a5 49. ♖b5 ♗e5+ 50. ♖a4 ♗e4+ 51. ♖xa5 ♗h4

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Richard Rapport vs. Nodirbek

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	R	0
7p	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5+	-	K	P	+	k	p	-	0
4-	+	-	+	-	+	-	+	0
3+	p	+	-	+	-	+	P	0
2-	+	-	+	-	+	-	+	0
1+	-	+	r	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

44. ♗f8+ Richard has missed the maneuver of the black King. ♖e4 45. ♗e8+ ♖d3 An unexpected walk across the d-file. The King comes to c2 to support the b-pawn. White can't defend. 46. d6 b2 47. d7 ♖c2 White resigned because of material losses.

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Richard Rapport vs. Nodirbek, 2023)

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7p	-	+	-	+	-	+	-	0
6-	p	-	+	-	+	-	R	0
5+	-	+	P	+	k	p	-	0
4-	+	K	+	-	+	-	+	0
3+	-	+	-	+	-	+	P	0
2-	+	-	+	-	+	-	+	0
1t	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

The older generation often criticizes the young players for their weak endgame technique. It is mainly true because, most time, modern players study opening courses and sharpen their mouse skills (by playing online blitz). But, unfortunately, none of those practices helps with endgame skills. I don't know how coaches built the studying process of Nodirbek Abdusattorov, but the described trend is not about him. He has already outplayed Magnus Carlsen twice in complicated Queen endgames, and in this course, we also saw his save against Duda. Now it is time to look at his superior play in this game vs. Rapport. I offer to begin with the evaluation of the position. Both sides have passed pawns, the white King is near the passed pawns, and the d-pawn is more advanced than the a- and b-pawns. So even though Black has an extra pawn, it is hard to predict the game ending quickly. Basically, it is true, but one mistake from White was enough for the Uzbeki player to end the game instantly. 39... ♗c1+ The c4 -square is perfect for the King; that's why Black decided to push the King away. 40. ♖d4 Black to move and win. Try to find it! [ 40. ♖b3! That is the only correct move. The King stops the connected pawns while the rook exchanges the d- and

g-pawns. After that, the endgame 'the h-pawn vs. a- and b-pawns' is drawish (of course, that still requires a lot of precision from White). Honestly, this evaluation is not obvious to me, and I believe Rapport also didn't think this might be drawish. That's why his choice to keep the King near the d-pawn looks the most natural. But unluckily, Black has a straightforward win after 40.Kd4 . **A)** 40...b5

Such a disconnecting of the a- and b-pawns looks ugly even from the general point of view. 41. | a6 | c5 42. ♣b4 | xd5 43. | xa7 Black would have been winning if he could win the h3 -pawn and save the g5 -pawn. But this mission is impossible. ♣f4

( 43... | d3 44. | h7 ) 44. | h7 ♣g3 Black threatens to bring the rook to h4 .

45. | h5! ( 45. | h8?? | d4+ 46. ♣xb5 | h4 47. | g8 | h5 The King takes on h3 , and the g-pawn march decides the game. ) 45... | f5

46. ♣a5 Black can't improve his position. ;

**B)** 40...♣e5 41.d6 | d1 42. | g6! | xd6 43. | xg5+ It is worth memorizing that such an endgame is equal. Also, this makes

sense to practice in such an endgame by trying to draw it against the engine or your chess friend. ; 40. ♣b4? This helps the pawns. a5+ 41. ♣b3 ( 41. ♣b5 | c5+ 42. ♣xb6 | xd5 The white King is cut off in the wrong part of the board. ) 41...b5

42. | a6 **A)** 42...a4+? This check improves the white King and weakens the black pawns. 43. ♣b4 | b1+ 44. ♣c5 ; **B)**

42... | d1? 43. | xa5 | xd5 44. ♣c2 The King defends the d1 , d2 , and d3 -squares and frees the 3rd rank for the side defense. The endgame tablebase says it is equal, but I still prefer to evaluate this as '=+' because White defends. ( 44. ♣b2 ♣f4 45. | a3 | d2+ 46. ♣c3 | f2 ); **C)** 42... | a1 Black should win this. ] **40... | d1+ 41. ♣c4**

**b5+** Nodirbek correctly evaluated that the exchange of the d- and b-pawns was his best chance, and he should take it. Of course, he couldn't be sure Black was

winning; it was rather an intuitional decision. **42. ♣c5** [Again and again, Richard refuses the pawn exchange when it is his best chance. I believe this was because he didn't see the black King's run on moves 44/45. 42. ♣xb5 | xd5+ **A)**

It is better to keep the King on his half.

43. ♣a6 | d4! 44. | c6 ( 44. ♣xa7 | h4 )

44... | a4+ 45. ♣b5 | a3 46. | h6 a6+!

47. ♣b4 | e3 Threatening ... Re4 - h4 . **A1)**

Another defense against Black's threat is to bring the King to the Kingside but in this case, the a-pawn begins moving. 48. ♣c4

**A1a)** 48... | e4+ 49. ♣d3 | h4??

( Black is still winning after 49... | e6 )

50. | xa6 | xh3+ 51. ♣e2 ; **A1b)** 48...a5!

49. ♣b5 | e5+ 50. ♣a4 | e4+ 51. ♣xa5

| h4 ; **A2)** 48. ♣a5 | e5+! The pawn

endgame with the King on a6 is winning.

49. ♣xa6 | e6+ 50. | xe6 ♣xe6 ; **A3)**

48. ♣c5 Moving away from the 4th rank

check. a5 49. ♣b5 | e5+ 50. ♣a4 | e4+

51. ♣xa5 | h4 ; **B)** 43. ♣c4 | a5 44. | h7

♣f4 Black is winning, but it is not a fast

process. ] **42...b4 43. | h8** [Again, White

could have taken the b4 -pawn. 43. ♣xb4

| xd5 44. ♣c4 | e5 ] **43...b3 44. | f8+**

Richard has missed the maneuver of the black King. [There was the last chance to

catch the b-pawn. 44. | b8 ♣e4! 45. | b4+

♣e5 46. | xb3 | xd5+ 47. ♣c4 White plans

to bring the rook to the g7 - and h7 -squares (to avoid the loss of the h3 -pawn) while his

King stops the a-pawn. This could have

been a difficult technical task for Black.

♣e4 48. | b7 a5 49. | g7 | f5 The only

move to avoid the h3 - h4 exchange. Black

slowly wins here by using the ideas of the a-pawn advancing and the rook's transfer to

h4 . But it is far from simple. ( 49... | e5??

50.h4! gxh4 51. | g4+ ♣f3 52. | xh4 )]

**44...♣e4 45. | e8+** [Black wins the h3 -

pawn in the following line. 45. | b8 | xd5+

46. ♣c4 | d4+! 47. ♣xb3 | d3+ ] **45...♣d3**

An unexpected walk across the d-file. The King comes to c2 to support the b-pawn.

White can't defend. **46.d6 b2 47.d7 ♠c2**  
White resigned because of material losses.

□ 8) Many-Pawn Rook Endgames Wi  
■ Bobir Sattarov vs. Valeriy Av

XI								Y	
8-	+	-	+	-	+	-	+	0{	
7+	-	+	-	+	-	+	-	k 0	
6R	+	-	+	-	+	-	+	0	
5+	p	+	r	+	-	+	p	0	
4-	+	-	+	-	+	-	P	0	
3+	-	+	-	+	-	P	-	0	
2-	+	-	+	-	P	K	+	0	
1+	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

My intuition was telling me that White should be winning. The plan for this (as I saw it at the beginning of the endgame) should have been as follows - the rook will be behind the pawn, and the white pawns will slowly advance. Later I realized that pushing the pawns would be problematic if the black rook is on the 4th rank. A bit later, I understood that he could try to win my b-pawn. I saw that the black rook could create trouble for this, but I had no chance to determine whether such a defense would be successful. But still, I thought that my position could have been better. To say that I was surprised when I saw the evaluation of the starting position (it is drawish) is to say nothing - I was both shocked and shamed. After that, I understood even more clearly how many secrets the rook endgames contain. Let's investigate what happened in this ending. Before the 40th move, I didn't dare to move my pawn forward (being scared that it would be weaker on the 4th rank). **39...b4**

I should have bravely pushed my pawn forward. **40. ♠b6 ♠d4 41. ♠f3 ♠g7**

**42. ♠e3 ♠c4** This is the first drawish setup. The rook is on c4 and ready to meet the opponent's King with the check from c3. If the King goes to d2, the rook returns to c4 with no progress for White; if the King goes to d4, the rook goes to f3. The King just moves between the g7 - and h7 - squares. If White tries to drive away the black rook from the 4th rank, Black advances the pawn to the third rank with a similar defending technique - rook and pawn don't allow the white King to come closer without losing one of his Kingside pawns.

□ 8) Many-Pawn Rook Endgames Wi  
■ Bobir Sattarov vs. Valeriy Av

XI								Y	
8-	+	-	+	-	+	-	+	0{	
7+	-	+	-	+	-	+	-	k 0	
6-	+	-	+	-	+	-	+	0	
5+	-	+	-	+	-	+	p	0	
4-	p	-	+	-	+	-	P	0	
3+	-	r	R	+	-	P	-	0	
2-	+	-	+	K	P	-	+	0	
1+	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

**46... ♠c4** Only now, my position indeed became terrible. How does White push the black rook into a passive position? **47. ♠b3 ♠h6 48. ♠d3 ♠g4** With the rook on g4, White is winning. The winning way is not obvious despite the engine's evaluation of about +10. **49. ♠b1 ♠h7 50. ♠e1**  
A threat is Re4.

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Bobir Sattarov vs. Valeriy Av

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5+	-	+	R	k	-	+	p	0
4-	t	-	+	-	P	-	P	0
3+	-	+	-	+	-	k	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

61.f5 This was the position I calculated and where I failed to see the saving line. Can you find it? | **xh4** 62.f6 | **h1** [ 62... | h2 was also enough for a draw. The rook moves to the f-file to take the pawn while the King supports the h-pawn. ]

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Bobir Sattarov vs. Valeriy Av

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5t	-	+	-	+	-	+	p	0
4-	+	-	+	-	P	k	P	0
3+	R	+	-	k	-	P	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

58.♠d2 I was much relieved when I saw my opponent moving the King to the first rank. | **a2+** I just move my rook along the 2nd rank. 59.♠c1 | **g2** White has no plan.

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Bobir Sattarov vs. Valeriy Av, Budapest 2022)

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	-	+	-	+	-	+	k	0
6R	+	-	+	-	+	-	+	0
5+	p	+	r	+	-	+	p	0
4-	+	-	+	-	+	-	P	0
3+	-	+	-	+	-	P	-	0
2-	+	-	+	-	P	K	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

In 2022, I had a lot of exciting rook endgames. In this course, I will offer a few of them for your studying. During this game I had yet to learn about the evaluation of this endgame - I had never seen anything similar (if you have seen it, leave your comment - I will appreciate this). My intuition was telling me that White should be winning. The plan for this (as I saw it at the beginning of the endgame) should have been as follows - the rook will be behind the pawn, and the white pawns will slowly advance. Later I realized that pushing the pawns would be problematic if the black rook is on the 4th rank. A bit later, I understood that he could try to win my b-pawn. I saw that the black rook could create trouble for this, but I had no chance to determine whether such a defense would be successful. But still, I thought that my position could have been better. To say that I was surprised when I saw the evaluation of the starting position (it is drawish) is to say nothing - I was both shocked and shamed. After that, I understood even more clearly how many secrets the rook endgames contain. Let's investigate what happened in this ending. Before the 40th move, I didn't dare to move my pawn forward (being scared that it would be weaker on the 4th



rank). **39...** | **d3** [I should have bravely pushed my pawn forward. **39...b4!** **40.** | **b6** | **d4** **41.** **♣f3** **♣g7** **42.** **♣e3** | **c4**

This is the first drawish setup. The rook is on c4 and ready to meet the opponent's King with the check from c3 . If the King goes to d2 , the rook returns to c4 with no progress for White; if the King goes to d4 , the rook goes to f3 . The King just moves between the g7 - and h7 -squares. If White tries to drive away the black rook from the 4th rank, Black advances the pawn to the third rank with a similar defending

technique - rook and pawn don't allow the white King to come closer without losing one of his Kingside pawns. **A)** **43.** **♣d3** | **c3+** **44.** **♣d2** ( **44.** **♣d4** | **f3** ) **44...** | **c4** ;

**B)** **43.** | **d6** **b3** **44.** | **b6** | **c3+** ] **40.** **♣f1** | **d2** [It wasn't late to return to the plan with the pawn on b4 by playing **40...b4** . ]

**41.** **♣e1** | **c2** **42.** | **b6** | **b2** [The side defense along the 5th rank was wrong because the black rook couldn't fight against the g3 - g4 advancing. **42...** | **c5?**

**43.f3** **♣g7** **A)** **44.** **♣f2?** | **c2+** **45.** **♣e3** ( **45.** **♣f1** | **b2** ) **45...** | **c3+** **46.** **♣e4** | **c4+** **47.** **♣d3** | **c5** White might still have been winning here, but now it is much harder than after **44.Kf1** . ; **B)** **44.** **♣f1!**

The rook can't prevent the maneuver to h3 . **♣h7** **45.** **♣g2** | **c2+** **46.** **♣h3** | **c3**

( The passive defense leaves no hope to save. The connected pawns supported by the King and the rook easily win the game. **46...** | **c5** **47.g4** ) **47.** | **xb5** **♣g6** **48.** **♣g2** | **c2+** **49.** **♣f1** | **a2** The umbrella helps the

King to leave the first rank. **50.** | **e5** ] **43.** | **d6** The rook goes to the second rank to free the King. **b4** Finally, I decided that pushing was a good decision. But still, I was convinced I would score nothing on this day. **44.** | **d2** | **b3** **45.** **♣e2** | **c3**

[ Seemingly, my psychological state didn't allow me to work properly, and I didn't consider the b-pawn advancing. **45...** **♣g6** **46.** | **d3** | **b2+** **47.** **♣e3** **b3** The pawn on b3

was not weak, as subconsciously realized. **48.** | **d6+** **♣g7** **49.** | **b6** **♣h7** The best

White try is to play f2 - f3 and to bring the King to g5 . But Black is on time to stop this idea. **50.f3** | **b1** ( **50...** **♣g7??** **51.** **♣f4** ) **51.** **♣f4** **b2** Neither g3 - g4 (Black takes and, after any capture, checks the King) nor Kg5 (Black plays ... Rg1xg3 ) can help White to win in this position. ]

**46.** | **d3** | **c4** Only now, my position indeed became terrible. I should have returned to the setup with my rook ahead of the pawn. [ **46...** | **c2+** **47.** **♣e3** | **b2** **48.** | **d7+** **♣h6** **49.** | **b7** **b3** **50.f3** | **b1** **51.** **♣f4** **b2**

Again, Black is on time to prepare for the Kg5 idea. **52.** | **b6+** **♣h7** **53.** **♣g5** | **g1** **54.** | **xb2** | **xg3+** ] **47.** **♣e3** [My opponent didn't use their chance to drive my rook to a passive position. **47.** | **b3!** **♣h6** **48.** **♣d3**

( Playing f2 - f3 first is probably even simpler. The black rook remains without good squares on the 4th rank. **48.f3** | **d4** **49.** **♣e3** | **c4** **50.** **♣d3** | **c1** Black's only

chance is connected to the g3 -pawn attack. **51.** | **xb4** | **g1** **52.g4** **hxg4** **53.fxg4** | **g3+**

The white King is forced to move to the second rank, but this is the last of Black's achievements. **54.** **♣e2** | **h3** **55.** | **b6+**! **♣g7** **56.h5** with a simple win. ) **48...** | **g4**

With the rook on g4 , White is winning. The winning way is not obvious despite the engine's evaluation of about +10. **49.** | **b1** **♣h7** **50.** | **e1** A threat is Re4 . | **g7** **51.** | **e5** **♣h6** **52.** | **b5** | **g4** ( **52...** | **f7** **53.** **♣e3** | **e7+** **54.** **♣f3** | **f7+** **55.** **♣g2** ) **53.** | **b7!**

A zugzwang - the black King should block its rook. **♣g6** **54.** | **d7!** **♣f5** ( **54...** **b3** **55.** | **b7** ) **55.** | **d5+** **♣g6** **56.** | **d4**

And White wins in the pawn endgame. ] **47...** | **c5** From a general point of view, this move is weird. It was more technical to put the rook on one of the bottom ranks. But I was scared of the Rd5 - b5 maneuver (unfortunately, I didn't know that the position with the rook on c4 was drawish). [ **47...** | **c7!** **48.** | **b3** ( **48.** | **d5** **♣h6** **49.** | **b5**

**50.** | **d6+** **♣g7** **51.** | **b6** **♣h7** **52.** | **b6+** **♣h7** **53.** **♣g5** | **g1** **54.** | **xb2** | **xg3+** ] **47.** **♣e3** [My opponent didn't use their chance to drive my rook to a passive position. **47.** | **b3!** **♣h6** **48.** **♣d3**

( Playing f2 - f3 first is probably even simpler. The black rook remains without good squares on the 4th rank. **48.f3** | **d4** **49.** **♣e3** | **c4** **50.** **♣d3** | **c1** Black's only chance is connected to the g3 -pawn attack. **51.** | **xb4** | **g1** **52.g4** **hxg4** **53.fxg4** | **g3+**

The white King is forced to move to the second rank, but this is the last of Black's achievements. **54.** **♣e2** | **h3** **55.** | **b6+**! **♣g7** **56.h5** with a simple win. ) **48...** | **g4**

With the rook on g4 , White is winning. The winning way is not obvious despite the engine's evaluation of about +10. **49.** | **b1** **♣h7** **50.** | **e1** A threat is Re4 . | **g7** **51.** | **e5** **♣h6** **52.** | **b5** | **g4** ( **52...** | **f7** **53.** **♣e3** | **e7+** **54.** **♣f3** | **f7+** **55.** **♣g2** ) **53.** | **b7!**

A zugzwang - the black King should block its rook. **♣g6** **54.** | **d7!** **♣f5** ( **54...** **b3** **55.** | **b7** ) **55.** | **d5+** **♣g6** **56.** | **d4**

And White wins in the pawn endgame. ] **47...** | **c5** From a general point of view, this move is weird. It was more technical to put the rook on one of the bottom ranks. But I was scared of the Rd5 - b5 maneuver (unfortunately, I didn't know that the position with the rook on c4 was drawish). [ **47...** | **c7!** **48.** | **b3** ( **48.** | **d5** **♣h6** **49.** | **b5**

**50.** | **d6+** **♣g7** **51.** | **b6** **♣h7** **52.** | **b6+** **♣h7** **53.** **♣g5** | **g1** **54.** | **xb2** | **xg3+** ] **47.** **♣e3** [My opponent didn't use their chance to drive my rook to a passive position. **47.** | **b3!** **♣h6** **48.** **♣d3**

♖c4 With the rook on c4 the position is drawish (see the comment to Black's 39th move). ) 48... ♖b7 With an extra tempo (compared to the game text), this position is easily drawish, thanks to Black's active counterplay. 49.♔d4 ♔g6 50.♔c4 ♖f7 51.♖b2 ♖f3! (Black has no time to move the King to f3 . 51...♔f5?? 52.♖xb4 ♔g4 53.♔d5+ ♔f3 54.♔e5 and Rf4 wins. ) 52.♔xb4 ♔f5 53.♔c4 ♔g4 54.♔d4 ♖f8 55.♔e5 A threat is to play Rb4 and Rf4 . ♔h3! ( 55... ♖f7?? 56.♖b4+ ♔h3 57.♖f4 ) 56.♔e4 ♔g2 57.♔e3 ♖f3+ 58.♔e4 Black can't take the pawn, but this is unnecessary for achieving a draw. ♖f8 White can't do much. ] **48.♖b3 ♖c4** With the rook on b3 , the black rook can be pushed to the g4 -square. As we saw earlier (see the comment to White's 47th move), Black can't pretend for a draw with the passive rook. [The best chance was to keep the rook behind the pawn. Compared to the 47...Rc7 line, Black misses one tempo, but surprisingly the position remains drawish. 48... ♖b5! 49.♔d4 ♖b7 50.♔c5 ♖f7 51.f3 (One extra tempo (compared to the Rc7 line) does not help White in the following line. 51.♖b2 ♔g6 52.♔xb4 ♖f3 53.♔c4 ♔f5 54.♔d4 ♔g4 55.♔e5 ♔h3 ) 51... ♖g7 52.f4 As we will see in the game, this pawn structure is the least promising for White. ♔g6 53.♔xb4 ♔f5 54.♖e3 ♖b7+! ( 54...♔g4?? 55.♖e5! ♖b7+ 56.♖b5 ) 55.♔c4 ♔g4 We will see a similar position in the game. With precise play, Black should hold the endgame. ] **49.f4** Sadly for my opponent, he couldn't find any of the winning ideas in this position. [ 49.f3 ♔g6 50.♔d3 ♖c1 Black has nothing else. 51.♖xb4 ♖g1 52.g4 Two connected pawns secure a win. (A tactical way to defend on g3 was connected with the trapping idea. 52.♔e3! ♖xg3? 53.♔f2 ♖h3 54.♔g2 ); 49.♔d3 With the winning way described in the comment to White's 47th move. ] **49...♔g6** After a few ups and downs, the

game returns to the equal way. **50.♔d3 ♖c1 51.♔d4** [Black wins the g3 -pawn if White takes on b4 . 51.♖xb4 ♖g1 ] **51...♔f5 52.♖xb4 ♔g4 53.♔d5** Sattarov found a way to sacrifice the g3 - pawn, but Black is not forced to accept this gift. ♖c3 [ 53...♔xg3?? 54.f5 The f-pawn will cost Black the rook. ] **54.♔e5 ♖c5+ 55.♔d4 ♖a5 56.♖b3 ♖f5** Even here, I thought Black was bad due to the idea of Rd3 , Ke4 , and Rd5 . I hope I would have found the drawish way there if my opponent had played this. But luckily, he didn't see this regrouping. **57.♔e3** [ 57.♖d3 ♖a5 58.♔e4 ♖b5 59.♖d5 ♖b4+ The check is forced due to the ... Rg5 check. 60.♔e5 ♔xg3 61.f5 This was the position I calculated and where I failed to see the saving line. Can you find it? ♖xh4! ( I saw only the capture with the King. 61...♔xh4?? 62.♖d4+ ♖xd4 63.♔xd4 ♔g5 64.♔e5 h4 65.f6 ♔g6 66.♔e6 h3 67.f7 h2 68.f8♔ h1♔ 69.♔g8+ ♔h5 70.♔h7+ ♔g4 71.♔xh1 ) 62.f6 ♖h1 62...Rh2 was also enough for a draw. The rook moves to the f-file to take the pawn while the King supports the h-pawn. ( 62... ♖f4?? 63.♖d3+ ♔g4 64.♖d4 ) 63.f7 ♖f1 64.♔e6 ♖xf7! ( 64...h4?? 65.♖f5 ) 65.♔xf7 h4 66.♔g6 h3 67.♔g5 h2 68.♖d3+ ♔g2 69.♔g4 h1♔ 70.♖d2+ ♔g1 71.♖d1+ ( 71.♔g3?? Never repeat this in your game! The Queen can stop the checkmate idea. ♔h5 ) 71...♔g2 72.♖xh1 ♔xh1 ] **57... ♖a5 58.♔d2** I was much relieved when I saw my opponent moving the King to the first rank. I just move my rook along the 2nd rank. ♖a2+ **59.♔c1 ♖g2** White has no plan. **60.♔d1 ♖a2 61.♖e3 ♖g2 62.♔e1 ♖a2 63.♔f1 ♖b2 64.♔e1 ♖a2 65.♔d1 ♖g2 66.♖b3 ♖a2 67.♔e1 ♖g2 68.♔f1 ♖a2 69.♔g1 ♖c2 70.♖a3 ♖b2 71.♖c3 ♖a2 72.♖b3 ♖c2 73.f5** The last try. The rook endgame ' g3 , h4 vs. h5 ' does not contain any tricky moments for the defending side. ♔xf5

74. | b4 | c1+ 75. ♖g2 | c2+ 76. ♖h3  
 ♖g6 77. | b1 | a2 78. | g1 ♖f5 79. | b1  
 ♖g6 80. | b6+ ♖g7 The King should be  
 below the pawn (I explained this in detail in  
 the comments to the Ushenina-Huang game,  
 see the comment to White's 62nd move).  
 The opponents agreed to a draw.  
 [ This was the last trap. 80... ♖f5??  
 81. | h6 ]

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Valeriy Aveskulov vs. Miklos

XI								Y
8-	+	-	+	-	+	k	+	0
7R	-	+	-	+	-	+	p	0
6-	+	-	+	-	+	p	+	0
5P	-	+	-	+	-	+	-	0
4-	+	-	+	P	P	-	P	0
3+	p	+	-	+	K	+	-	0
2-	t	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

In the starting position, White has an extra pawn, and the black King is cut off on the last rank. Usually, these two factors are enough to win the game. Though, I worried about evaluating the position after a possible exchange of the Queenside pawns. After some thinkKing, I understood that it would be good to play h4 - h5 . If Black takes that pawn, two connected passed pawns in the center should easily decide the game; if Black does not take the h-pawn, White can push the pawn to h6 or leave it on h5 as a distracting factor. This thesis was correct, so, it is especially upsetting that I knew what I should have done and haven't done this. After realizing this moment, I began thinkKing about how to do this better. But all my calculations went in the wrong way. Moreover, I didn't look at

the King's move with an idea to liquidate the b-pawn (it would be the easiest).  
 46. ♖e3 This is the easiest winning way.  
 | a2 47. ♖d3 Black can't simultaneously save his pawn and stop the a-pawn. If the rook defends the pawn from the a-file, the King can attack the rook. If the rook defends the pawn along the b-file, White advances his passed pawn to a7 and forces the rook to leave the b2 -pawn undefended.

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Valeriy Aveskulov vs. Miklos

XI								Y
8-	+	-	+	-	+	k	+	0
7+	R	+	-	+	-	+	p	0
6-	+	-	+	-	+	p	+	0
5t	-	+	-	P	-	+	-	0
4-	+	-	+	-	P	-	P	0
3+	-	+	-	+	K	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

50...h5 The saddest part of my next blunder is that I often showed this trick to my students and needed to remember to apply it in practice. 51.e6 Not only creating a direct threat ( Rb8 and e6 - e7 that secures the pawn promotion, this is what I forgot about) but also preparing a luft on f6 to hide the King from the side checks. Black is helpless.

□ 8) Many-Pawn Rook Endgames Wi  
 ■ Valeriy Aveskulov vs. Miklos, Budapest 2022)

The following endgame is one of those that you usually want to forget as quickly as possible. But a chess player (if willing to become stronger) can't leave their mistakes

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	k	+	0
7R	-	+	-	+	-	+	p	0
6-	+	-	+	-	+	p	+	0
5P	-	+	-	+	-	+	-	0
4-	+	-	+	P	P	-	P	0
3+	p	+	-	+	K	+	-	0
2-	t	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
	a	b	c	d	e	f	g	h

without analysis. So let's take a look together at what went wrong for me. In the starting position, White has an extra pawn, and the black King is cut off on the last rank. Usually, these two factors are enough to win the game. Though, I worried about evaluating the position after a possible exchange of the Queenside pawns. After some thinKing, I understood that it would be good to play h4 - h5 . If Black takes that pawn, two connected passed pawns in the center should easily decide the game; if Black does not take the h-pawn, White can push the pawn to h6 or leave it on h5 as a distracting factor. This thesis was correct, so, it is especially upsetting that I knew what I should have done and haven't done this. After realizing this moment, I began thinKing about how to do this better. But all my calculations went in the wrong way. Moreover, I didn't look at the King's move with an idea to liquidate the b-pawn (it would be the easiest). 46. | b7  
[ This is the line that illustrates my ideas from the preface part of this game. 46.a6 | b1 (Similar variations happen after 46... | a2 47.h5! b2 48. | b7 | xa6 49. | xb2 The pawn is on h5 , and White can slowly improve his position. The only constructive idea that Black can offer is to attack this pawn with the rook. | a5 Now White has many winning ideas. However, I like the following one more of all. 50.h6!

Forcing the rook to the worst square on the board. | h5 51.♠g4 | xh6 52.♠g5 | h3 53.♠f6 White wins the g6 -pawn and then the whole game. ) 47. | b7 b2 48.a7 | f1+ 49.♠e3 | a1 50. | xb2 | xa7 51.h5!

The only winning in this situation. ( 51.e5? h5 As we will see from the game text, this pawn structure is equal unless White immediately has something concrete. )

51... | a5 52.h6! Again provoKing the rook to come to h6 . | h5 53. | b8+ ♠f7

54. | b7+ ♠g8 55.e5 This passed pawn is enough for a win. | xh6 56.♠e4 | h1

57.e6 Threatening Rb8 and e6 - e7 . | a1

58.♠e5 The King aims to invade on f6 .

| a4 59.f5! MaKing a shelter for the King on the f-file. gx f5 ( 59... | a5+ 60.♠d6

| a6+ 61.♠d7 ) 60.♠f6 | a8 61. | g7+ ♠h8 ( 61...♠f8 62.e7+ ♠e8 63. | g8+ )

62.e7 The rook goes to the bottom of the board, the King moves to f7 , and the e-pawn becomes the Queen that costs Black the rook. ; This is the easiest winning way.

46.♠e3! | a2 47.♠d3 Black can't simultaneously save his pawn and stop the a-pawn. If the rook defends the pawn from the a-file, the King can attack the rook. If the rook defends the pawn along the b-file, White advances his passed pawn to a7 and forces the rook to leave the b2 -pawn undefended. **A)** 47... | a4 48.a6 b2

( 48... | b4 49. | b7 ) 49.♠c2 | b4

( 49... | xe4 50. | b7 a6 - a7 , Rb8 , and a7 - a8=Q is unstoppable. ) 50.♠b1 | b6

51. | a8+ ♠g7 52.a7 | a6 ( 52... | b7

53. | g8+! ♠xg8 54.a8♠+ ) 53.♠xb2

Actually, White does not need his King to win the game; pushing the e-pawn is enough because the black King is stuck to the g7 -square (see the six squares for the King position from the theoretical part); once it moves to f7 , White can use the Rh8 - Rxh7 - Rxa7 maneuver. ; **B)** 47...b2

48.♠c2 h5 49.a6 ♠f8 50.♠b1 ] 46... | a2

[The first time, my opponent forgave me.

The instant blocKing of the h4 -pawn

would have led to an equal position (we will see more about that in the following text). 46...h5! 47.a6 | a2 48.a7 b2 | 47. | xb3 | xa5 48. | b8+ ♠f7 49. | b7+ ♠g8 50.e5 h5 The saddest part of my next blunder is that I often showed this trick to my students and needed to remember to apply it in practice. 51. | d7 [ 51.e6! Not only creating a direct threat ( Rb8 and e6 - e7 that secures the pawn promotion, this is what I forgot about) but also preparing a luft on f6 to hide the King from the side checks. Black is helpless. ♠f8 52.♠e4 | f5 53. | d7 | a5 Other lines are relatively simple; Black can't stop the decisive improvement of the white pieces. ( 53... | f6 54.♠e5 | f5+ 55.♠d6 | xf4 56. | d8+ ♠g7 57.e7 ; 53...♠g8 54. | d8+ ♠g7 55.e7 ; 53...♠e8 54. | g7 | f6 55.♠e5 | f5+ 56.♠d6 ) 54. | d5 | a4+ 55.♠e5 | b4 56. | d4! Defending on f4 and preparing Kf6 . | b5+ 57.♠f6 ] 51... | a4 I kept playing for almost 40 moves, but my opponent was precise, and I was far from winning this. 52.♠e3 ♠f8 53. | d4 | a1 54.♠e4 | e1+ 55.♠d5 ♠e7 56. | a4 | d1+ 57. | d4 | e1 58. | d3 | a1 59. | c3 | d1+ 60.♠e4 | e1+ 61.♠d5 | d1+ 62.♠e4 | e1+ 63. | e3 | h1 64. | e2 | a1 Miklos didn't even consider taKing the h4 -pawn. He was fine without these complications. 65. | d2 | e1+ 66.♠f3 | f1+ 67.♠g3 | g1+ 68.♠f3 | f1+ 69.♠e3 | e1+ 70. | e2 | a1 71. | g2 ♠f7 72. | c2 | e1+ 73.♠f2 | a1 74. | c7+ ♠f8 75. | c8+ ♠f7 76. | c7+ ♠f8 77.e6 It was time to do at least something. | a6 78. | f7+ ♠g8 79. | f6 ♠g7 80. | f7+ ♠g8 81. | f6 ♠g7 82.e7 | a8 83. | e6 ♠f7 84. | e5 | e8 85.f5 | xe7 86.fxg6+ ♠f6 87. | xe7 ♠xe7 88.g7 ♠f7 89.g8E+ ♠xg8 90.♠g1 A draw. I should have been more confident in conducting my plans.

## □ 9) 4-Rook Endgames

### ■ Four Rooks on the Board

Endgames with four rooks. Z0

## □ 9) 4-Rook Endgames

### ■ Sergey Karjakin vs. Liviu-Die

XI								Y	
8-	+	-	+	-	+	k	+	0{	
7t	-	+	-	+	-	p	p	0	
6P	+	-	+	-	+	-	+	0	
5+	-	+	-	+	-	+	-	0	
4-	+	r	+	-	+	-	+	0	
3R	-	+	-	+	-	K	P	0	
2-	+	-	+	-	+	P	+	0	
1+	R	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

In the following endgame, we will see the mating net without control over the 7th rank. At first sight, a simple attack on the pawn should bring an easy draw. But in fact, Black should have calculated a long line and seen the important in-between check on move 45 to be sure that Rc6 was good. Can you see the main line before seeing the next comment? 41... | c6 42. | b8+ ♠f7 43. | b7+ | xb7 44.axb7 | b6 45. | a7 The black King is in a bad position. White threatens to promote the pawn (discovered check) if the King remains on the 7th rank, to play Ra8 (check) and b7 - b8=Q if the King moves to the back rank, or to play Ra6 (pin and deflection) if the King moves to the 6th rank. How to save the game? | b3+ This is the in-between move that Black should have foreseen on move 41. But it is still not the end of the forcing line since the white King runs to help the rook and the pawn. 46.♠f4 ♠f6 Moving the King to e6 is also fine, but I prefer the opposition.

☐ 9) 4-Rook Endgames

■ Sergey Karjakin vs. Liviu-Die

```

Xl | | | | | | | Y
8- + - + - + k + 0{
7t - + - + - p p 0
6P + - + - + - + 0
5+ - + - + - + - 0
4- + r + - + - + 0
3R - + - + - k P 0
2- + - + - + P + 0
1+ R + - + - + - 0
x a b c d e f g h y

```

41... | cc7 This solid-looking move surprisingly appears to be a decisive mistake. Karjakin failed to find the correct winning path, but it was challenging.

42. | b8+ First, he should have pushed the King out of the corner; after that, the Rb7 - exchange (of all rooks) idea would have put Black in a hopeless situation. ♖f7 43. | f3+ ♕e7 44. | b6 | d7 45. | fb3 | dc7 46. | b7 White does not even need to bring the King closer - the g3 -square is close enough to win the Kingside pawns in the upcoming pawn endgame.

☐ 9) 4-Rook Endgames

■ Sergey Karjakin vs. Liviu-Die

(Diagram)

43. ♖f4 What should Black do here? | e7 Of course, Black should use a chance to cut off the opponent's King. 44.h4 The defense becomes more challenging because Black should handle two problems simultaneously. Black has two main defending strategies in this endgame. The first is connected with the perpetual check mechanisms. The second is about playing actively - alternate

```

Xl | | | | | | | Y
8- + - + - + k + 0
7t - t - + - p - 0
6P R - + - + - p 0
5+ - + - + - + - 0
4- + - + - + - + 0
3R - + - + - k P 0
2- + - + - + P + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

attacking the a-pawn and cutting off the opponent King on the Kingside. For these purposes, Black should place his rooks on different ranks to avoid the Rb7 idea (which will enforce the fatal exchange/exchanges) and enable the doubling on the a-file to attack the a6 -pawn. But an immediate ... Ra8 fails due to the back rank position of the black King. ♕h7 45.h5 | a8 That's why Black should have first put his King on h7 and then played ... Ra8 . Black is ready for active counterplay.

☐ 9) 4-Rook Endgames

■ Sergey Karjakin vs. Liviu-Die

(Diagram)

45. | a4 This moment is difficult, even for the engine (it hesitates for a long time). But from the further events in the game, it is easy to conclude that the third rank control was more important for White. ♖h7 One piece is placed well! The position is again closer to a draw.

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	k	+0
7	+	-	t	-	t	-	p	-0
6	P	R	-	+	-	+	-	p0
5	+	-	+	-	+	-	+	-0
4	-	+	-	+	-	k	-	P0
3	R	-	+	-	+	-	+	-0
2	-	+	-	+	-	+	P	+0
1	+	-	+	-	+	-	+	-0
x	a	b	c	d	e	f	g	h
								y

- ☐ 9) 4-Rook Endgames  
☒ Sergey Karjakin vs. Liviu-Die

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+0
7	t	-	+	-	t	-	p	k0
6	P	R	-	+	-	+	-	p0
5	+	-	+	-	+	-	+	P0
4	R	+	-	+	-	k	P	+0
3	+	-	+	-	+	-	+	-0
2	-	+	-	+	-	+	-	+0
1	+	-	+	-	+	-	+	-0
x	a	b	c	d	e	f	g	h
								y

47... | **ac7** It is easy to understand (after all we discussed above) that the best for Black was to play ... Ra7 - a8 to place the rooks perfectly for playing against both the a6 - pawn and the white King. But it is much harder to understand the mechanism of White's win after the move Nisipeanu played. 48. | **a3** White should aim for one of a few things - exchange of one of the rooks (after that, Black will not have any counterplay, and the white King simply comes to the Queenside) , building the mating net with the rooks on the 8th rank, or bringing the King to the Queenside (with 4 rooks on the board, this is also possible).

BUT White can't allow one of the black rooks to appear behind the a-pawn and be careful about perpetual and stalemate motifs. Let's see how all this works in practice. | **cd7** The most stubborn is to keep the rooks on the open files (to have more possible checks and maneuvers). 49. **cf3** The black rooks are perfectly placed to meet the Re3 -move, so White needs one more waiting move before playing Re3 . | **c7** 50. | **e3** Finally!

- ☐ 9) 4-Rook Endgames  
☒ Sergey Karjakin vs. Liviu-Die

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+0
7	+	-	t	-	t	-	p	k0
6	P	R	-	+	-	+	-	p0
5	+	-	+	-	+	-	+	P0
4	R	+	-	+	-	k	P	+0
3	+	-	+	-	+	-	+	-0
2	-	+	-	+	-	+	-	+0
1	+	-	+	-	+	-	+	-0
x	a	b	c	d	e	f	g	h
								y

48. | **d6** After seeing the engine's winning lines, I'm not surprised Karjakin didn't play them. Many nuances can be described like this. | **c8** Black realized (not too late) how to place his rooks and noted the idea of locking down the white King on the Kingside.

- ☐ 9) 4-Rook Endgames  
☒ Sergey Karjakin vs. Liviu-Die

(Diagram)

52... | **b6** White had a concrete winning way

X	I	I	I	I	I	I	I	Y
8	-	+	-	R	-	+	-	+ 0{
7	+	-	+	-	t	-	p	k 0
6	P	+	-	+	-	+	-	p 0
5	+	-	+	-	+	-	+	P 0
4	-	t	-	+	-	+	P	+ 0
3	+	-	R	-	+	-	k	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h
y								

that required a precise calculation. Can you solve this? 53. | cc8

- ☐ 9) 4-Rook Endgames  
☒ Sergey Karjakin vs. Liviu-Die

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	R R	0{
7	+	-	+	-	t	-	k	- 0
6	P	t	-	+	-	+	-	p 0
5	+	-	+	-	+	-	p	P 0
4	-	+	-	+	-	+	P	+ 0
3	+	-	+	-	+	-	k	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h
y								

55... ♠f7 56. | b8 We saw this trick in the comment to White's 53rd move.

- ☐ 9) 4-Rook Endgames  
☒ Sergey Karjakin vs. Liviu-Die

(Diagram)

64... | xf7 What move wins here? 65. | c2  
 The only winning move. White places the rook behind the pawn and, at the same time,

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+ 0{
7	+	-	+	-	+	R	k	- 0
6	P	+	R	+	-	+	-	p 0
5	+	-	+	-	+	-	+	- 0
4	-	+	-	+	-	+	P	+ 0
3	+	-	+	-	+	-	+	- 0
2	-	+	-	+	-	+	-	k 0
1	+	-	+	-	+	r	+	- 0
x	a	b	c	d	e	f	g	h
y								

disturbs Black to do the same (with the check on f2). h5 This is the last trick that might have helped Black if White carelessly took the pawn. 66. | a2  
 Black resigned because there was no saving chance with the rook on a7.

- ☐ 9) 4-Rook Endgames  
☒ Sergey Karjakin vs. Liviu-Die, Medias 2011)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	k	+ 0{
7	t	-	+	-	+	-	p	p 0
6	P	+	-	+	-	+	-	+ 0
5	+	-	+	-	+	-	+	- 0
4	-	+	r	+	-	+	-	+ 0
3	R	-	+	-	+	-	k	P 0
2	-	+	-	+	-	+	P	+ 0
1	+	R	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h
y								

In the following endgame, we will see the mating net without control over the 7th rank. At first sight, a simple attack on the pawn should bring an easy draw. But in fact, Black should have calculated a long line and seen the important in-between check on move 45 to be sure that Rc6 was good. Can you see the main line before seeing the next comment? 41... | cc7 [This solid-looking



move surprisingly appears to be a decisive mistake. In the comment to White's 42nd move, we will see why, but now it is time to return to the problem of the 41...c6! move. 42.b8+ (The white rooks and King remain without any plan in the case of passive defense of the pawn. 42.ba1 f6!) 42...f7 43.b7+ xb7 44.axb7 b6 45.a7 The black King is in a bad position. White threatens to promote the pawn (discovered check) if the King remains on the 7th rank, to play Ra8 (check) and b7 - b8=Q if the King moves to the back rank, or to play Ra6 (pin and deflection) if the King moves to the 6th rank. How to save the game? b3+! This is the in-between move that Black should have foreseen on move 41. But it is still not the end of the forcing line since the white King runs to help the rook and the pawn. 46.f4 f6! Moving the King to e6 is also fine, but I prefer the opposition. The 46...Ke6 line explains why I do so. (46...f6 47.b8f b8 48.xg7 This position looks too suspicious for Black. Not many players (even from the elite) can convincingly say that Black holds after ...h5. h5 You can check this position on your own to see how Black holds this.) 47.f4 f6! 48.f4 (Now the exchange of the b7 - and g7 - pawns is less scary for Black because White has no Kf4 - g5 threat.) (48.b8f b8 49.xg7 h8 The black King simply approaches the h7 - pawn.) 48...f6! 49.b8f+ xb8 50.xg7 h8 ... Kd6 - e6 - f6 secures Black a draw. ] 42.b6 Karjakin failed to find the correct winning path, but it was challenging. First, he should have pushed the King out of the corner; after that, the Rb7 -exchange (of all rooks) idea would have put Black in a hopeless situation. [ 42.b8+! f7 43.f3+! **A)** The Kingside is deadly dangerous. 43...f6?? 44.b6+ fh5 (44...f5 45.h4+ fh5 46.f5+ g5 47.xg5#) 45.f5+ g5 46.f6

Black can't avoid the checkmate. ; **B)** 43...f7 44.b6 d7 45.f3 dc7 46.b7! White does not even need to bring the King closer - the g3 -square is close enough to win the Kingside pawns in the upcoming pawn endgame. f7 47.xa7 xa7 48.b7+ xb7 49.axb7 f7 50.f4 fb7 51.f5 fc6 52.f6 Winning the g- and h-pawns. ] 42...h6 I'm far from a thought that Nisipeanu had enough time to realize the danger that might have come if Karjakin had played Rb8. I believe he intuitively felt that the best square for the King is on h7, which is correct. 43.f4 e7 Of course, Black should use a chance to cut off the opponent's King. 44.h4 The defense becomes more challenging because Black should handle two problems simultaneously. Black has two main defending strategies in this endgame. The first is connected with the perpetual check mechanisms. The second is about playing actively - alternate attacking the a-pawn and cutting off the opponent's King on the Kingside. For these purposes, Black should place his rooks on different ranks to avoid the Rb7 idea (which will enforce the fatal exchange/exchanges) and enable the doubling on the a-file to attack the a6 -pawn. But an immediate ...Ra8 fails due to the back rank position of the black King. That's why Black should have first put his King on h7 and then played ...Ra8. ac7 [ 44...fh7! 45.h5 a8! Black is ready for active counterplay. 46.ab3 (46.b7 xa6!) 46...f8+ 47.fg3 a7; 44...a8? 45.b7! xa6? This tactic only works with the King on h7. 46.b8+ fh7 47.xa6 ] 45.a4 This moment is difficult, even for the engine (it hesitates for a long time). But from the further events in the game, it is easy to conclude that the third rank control was more important for White. White could continue advancing their own pawns. [ 45.h5! fh7 46.g4 Time is priceless in

this endgame. Everything depends on if Black can find counterplay. Black's problem is that he already can't prevent the approaching of the white King to the a-pawn (White plays Re3 to push the rook away from the e-file, then Ke4, then Rd3 to take control over the d-file, then Kd4, etc.). ] **45...♙h7** One piece is placed well! The position is again closer to a draw. **46.g4** Black could have also coped with the other moves. [ 46.h5 ♖a7! Before going to the 8th rank, Black attacks the a6 -pawn. So, Rb7 will not help White. ( 46...♜c8? 47.♜b7 ) 47.g4 ♖a8 Here, we again see the perfect setup of the black pieces. 48.♜b7 ♜xa6 ; 46.♜e4 This try to bring the King closer to the Queenside does not help here because of the good position of the black rooks. ♜f7+ 47.♙e5 ( 47.♙e3 ♜c3+ 48.♙d4 ♖a3 49.♙c5 ♖a5+ 50.♙c6 ♖a7 ) 47...♜c5+ 48.♙d6 Once the King steps on the 6th, the a6 -pawn becomes vulnerable (no possibility to double the rooks on the 6th rank). ♜a5 With many threats - ... Ra7, ... Rxa6, or ... Rf6 and then ... Rxa6. ] **46...♜a7** Previously we saw how Black should have begun with this move to attack the a6 -pawn and to prepare the ... Ra8 - f8 maneuver (... Rb7 - Rxa6 ! idea). But in this position, we face another tactical moment that switches the evaluations of ... Rc8 and ... Ra7. This motif is the perpetual mechanism that works well with the pawns on g4 and h4 (no hiding square on the Kingside). [ 46...♜c8! **A)** 47.a7? ♜f8+ 48.♙g3 ♜e3+ ; **B)** 47.♜b7? ♜f8+ 48.♙g3 ♜e3+ Black gives the perpetual check on the e1 -, e2 -, and e3 -squares. ; **C)** 47.h5 This move prepares a shelter on h4, but it is not enough for a positive effect. ♜f8+ 48.♙g3 ♜e3+ 49.♙h4 ♜ff3 50.g5 ♜h3+ 51.♙g4 ♜hg3+ 52.♙f5 ♜xg5+ 53.♙f4 Humans might be very confused in this situation. There is no forcing perpetual check, while the a-pawn is ready to move forward. But the engine shows two ideas

that organize the black rooks well for getting sufficient counterplay against the white King. **C1)** 53...♜e7! 54.a7 ( 54.♜b7 ♜xh5! ) 54...♜f7+ 55.♙e3 ♜g3+ Black should not allow the white King to hide on the a-file (the rook on b7 will shelter it there). 56.♙d2 ♜g2+ 57.♙c3 ♜f3+! (Here is the proof the white King can hide on the a-file. 57...♜g3+?? 58.♙b2 ♜g2+ 59.♙a1 ♜g1+ 60.♜b1 ) 58.♙b4 ♜f4+ 59.♙a5 ♜xa4+ 60.♙xa4 ♜a2+ 61.♙b4 ♜xa7 Black is already a pawn up, though the position remains drawish. ; **C2)** 53...♜h3! The g5 -rook controls the fifth rank, while the second rook gives many checks. 54.♜a1 ♜h4+ 55.♙e3 ♜h3+ The white King can't go too far because of the back-rank checkmate. 56.♙d4 ( 56.♙d2?? ♜g2+ ... Rh1 checkmates! ) 56...♜h4+ 57.♙c3?? ♜g3+ 58.♙d2 ♜h2+ 59.♙e1 ♜g1# ; **D)** 47.♜a3 This move prepares a safe place for the King on the third rank, but it slows down the play and allows Black to complete the perfect arrangement. ♜f8+ 48.♙g3 ♜a8 49.g5 the move h4 - h5 leaves fewer opportunities. h5 The only move which works well in this position but will not help Black in the 47.g5 line. ] **47.h5** [ White clearly showed their own intention to double the rooks on the 8th rank and checkmate the black King. But when Black places one of his rooks on the 8th rank, there is no way to improve White's position further. With the King on f4, White should have applied the Re4 -idea to prepare the King's path to the Queenside. So, 47.♜e4 was candidate number 1. But it was even stronger to include g4 - g5 and h6 - h5 to add the g6 Kh6 and Rh8 checkmate idea. g5! h5 The opening of the h-file would have added troubles to the black King (the check along the h-file). Re4! Rf7+ Red7 Which move to begin with - g5 - g6 or Re8 (both are threatening to checkmate the black King)? Re8! It seems like there is no

difference between these moves if one forgets about a simple rule - when you are the strongest side, you should try to avoid the stalemate constructions. g6+?? Kh6 Re8 Ra8!! The black King is in a stalemate situation. So, Black needs to successfully sacrifice the rooks. Black can try to self-stalemate in another way, but then the white King uses Re8 to hide the King on f8 and avoid the perpetual check. Rd4+?? Ke5! Kf5?? Ra8! With the same stalemate motif. Re4+ Rxh4 Kf5+- Rh8 is inevitable. Kxe4 Re7+ Kd5 Re5+ Rd7+ Rd6+- Kc6 Re6+ Rc5+ Kd6 Rd5+ Ke7 Rd7+ Kf8+- Kb5 Re5+ Ka4 Ra5+ Re4+ Rb4+- Kb4 Ra4+ Kb5 Rb4+ Kc6 Rc4+ Kd6 Rd4+ Ke7 Rd7+ Re4+ Re6+- Kf8+- Rxa8 Ree6 Rd1= White can't win this endgame with the pawn on g6 causing permanent problems - White should simultaneously defend it and think of how to avoid the stalemate. Rd4+ Ke3 Rd3+ Ke4 Rd4+ Ke5 Rd5+ The King should go to e6, otherwise Black gives checks from the d1, d2, d3, d4, and d5 - squares. Ke6 Re5+! The only good square for the check. Rd6+?? Rxd6 Kxg6+- The pawn is undefended. Kd6 Kd7 Re7+! Rd5+?? Rd6+- Kc6 Rc7+= 57...Re6 is also good. Rd5+ Kc7 Rd7+! Kb8 Rd8+ Ka7 Rxa8+ Kxa8 Stalemate. Kb7 Rxa6= Rd4+ g6 Reb8+- Again Rb7 wins. Kf5 Rd5+ Ke4+- Black loses. Ke5 Rfe7+ g6 Reb4+- 51.Rb7 wins. Kd4 Red7+ Rad7+ Ke3+- The black rook can't avoid the trade-off. Kc5+- With the King on the Queenside, White easily wins. ] 47... | ac7 It is easy to understand (after all we discussed above) that the best for Black was to play ... Ra7 - a8 to place the rooks perfectly for playing against both the a6 -pawn and the white King. But it is much harder to understand the mechanism of White's win after the move Nisipeanu played. [ 47... | a8 ] 48. | d6 [After seeing the engine's winning lines, I'm not surprised Karjakin didn't play them. Many nuances can be described like

this. White should aim for one of a few things - exchange of one of the rooks (after that, Black will not have any counterplay, and the white King simply comes to the Queenside), building the mating net with the rooks on the 8th rank, or bringing the King to the Queenside (with 4 rooks on the board, this is also possible). BUT White can't allow one of the black rooks to appear behind the a-pawn and be careful about perpetual and stalemate motifs. Let's see how all this works in practice. 48. | a3!! | cd7! The most stubborn is to keep the rooks on the open files (to have more possible checks and maneuvers). ( 48... | c8? Not the best moment for occupying the back rank. 49. | b7 The a6 - a7 move is coming with a win. ; 48... | a7? Now the white rook can successfully accompany the King to the Queenside. 49. | e3! | f7+ 50. ♠e4 | fd7 51. | d3! | e7+ 52. ♠d4 | ac7 53. ♠d5 | ed7+ 54. | d6 | e7 55. | a3 The next step is Rc6 and Kc5, White should slowly win this. ; One rook should stay on the e-file to cut off the white King. 48... | ed7? 49. ♠e5! | e7+ 50. ♠d5 | ed7+ 51. | d6 | e7 52. | c6 Nothing can help Black to stop the King. ) 49. ♠f3! The black rooks are perfectly placed to meet the Re3 -move, so White needs one more waiting move before playing Re3. ( 49. | e3? | d4+ 50. ♠f3 | f7+ 51. ♠g3 | a4 With the King on the Kingside, the result is obvious. ) 49... | c7 50. | e3! Finally! | f7+ 51. ♠g3! Black managed to hold the white King on the Kingside, but the white rooks are ready for the mating attack. (Both moves to the e-file were bad due to the black rook's transfer to the a-file. 51. ♠e2? | c2+ ; 51. ♠e4 | c4+ ) **A**) 51... | c8 52. | b7 There are no saving chances with the pawn on the 7th rank. ; **B**) 51... | c4 52. | f3! Before invading the back rank, it is good to use a chance to drive the black rook away from the f-file. | e7 **B1**) White should

begin with Rb6 because Black can use an absence of defense on the third rank.

53. | f8? | e3+! 54. ♣f2 ( 54. | f3 | ee4 ; 54. ♣h4?? | cc3 Here Black checkmates first. 55.g5 | e4+ 56. | f4 | xf4# )

54... | a3 ; **B2)** 53. | b8 ; **C)** 51... | cd7

52. | f3! | fe7 53. | b8 ; 48. | e4?

An instant try to bring the King to the Queenside allows Black to place his rook behind the pawn. | f7+! 49. ♣e3 | c3+ 50. ♣d4 | a3 It is not obvious, but White can't achieve further progress. Here are a few exemplary lines. **A)** 51. ♣c5 | a5+ 52. ♣b4 ( 52. ♣c6 | a7 Black takes on a6 . ) 52... | a1 53. | be6 | f2 54. ♣b5 | b2+ 55. ♣c5 (The rook protection also does not help to advance. 55. | b4 | ba2

Black threatens to give a check from a5 and take the pawn. ) 55... | ba2 56. ♣b5

There is no other way to defend the pawn.

| b2+ Repetition. ; **B)** 51. | c6 | a4+ **B1)**

52. ♣d5 | a5+ ( 52... | d7+?? 53. ♣e6

White exchanges the rook. ) 53. ♣d6 | a7

Again Black wins the pawn. ; **B2)** 52. ♣d3

| d7+ 53. ♣e3 | a3+ 54. ♣f4 | f7+

55. ♣e5 | a5+ ] **48... | c8** Black realized

(not too late) how to place his rooks and noted the idea of lockIng down the white

King on the Kingside. **49. | a3**

[ Another interesting move was 49. | e4 but Karjakin decided first to cover the third rank (as we saw in the comment to his 48th move) to have a more secured King

position (on g3 ). At the same time, the

pawn advancing would almost guarantee

the draw for Black. a7? Rf8+ Kg3 Ra8

Rda6â-j Rf7= Black can just play ... Kh7 -

h8 - h7 . ] **49... | f8+ 50. ♣g3** We see the

position that is almost completely the same

as in the main line of the comment to

Whiteâ€™s 48th move. The only

difference is that the black rooks cover both

the 7th and the 8th ranks. This difference

provides Black with enough resources to

hold the position. | b8 51. | c3 | b4

For us, there is already no secret that the bla

ck rooks are perfectly placed on the 7th and the 8th ranks. But psychologically, it is difficult not to do anything active. Since during the game, there can't be proven information that the passive play can hold the position, the players often try to find the active play.

[ 51... | f7 ] **52. | d8 | b6** White had a

concrete winning way that required a

precise calculation. Can you solve this?

[ Black had no time to attack the g4 -pawn.

52... | ee4?? 53. | cc8 | xg4+ 54. ♣f3

| gf4+ 55. ♣e3 | fe4+ 56. ♣d3

The checks and the game are over. g6

57. | d7+ | e7 58. | xe7# ; 52...g6 53.hxg6+

♣g7 ( 53...♣xg6 54. | c6+ Transposition. )

54. | cc8 ♣xg6 55. | c6+ ♣g7 56. | dd6

The second extra pawn will be enough for a

win. ] **53. | a8** [ 53. | cc8! **A)** 53... | b3+

54. ♣h4 g5+ 55.hxg6+ ♣xg6 56. | c6+

♣g7 57. | dd6 ; **B)** 53...g6 54. | h8+ ♣g7

55. | hg8+ ♣h7 ( 55...♣f7 56. | cf8+ ♣e6

57. | xg6+ ) 56.hxg6+ | xg6 57. | xg6

♣xg6 58. ♣h4 The threat is Rb8 with an

idea of Rb6 (check to force the King to

move to the 7th rank) and then Rb7 . Black

is hopeless. ; **C)** 53...g5 Black loses the

second pawn in the following line. **C1)**

54.hxg6+? ♣xg6 55. | g8+ ♣h7 56. | h8+

♣g7 57. | cg8+ ♣f7 Black is fine here.

58. | b8 This idea works with the pawns on

h5 and g5 , but now Black has an escape.

| e3+! **C1a)** 59. ♣f4 This looks dangerous

but again we can see how two rooks can

save the game with the perpetual check

mechanism. | be6! 60.a7 ( 60. | b7+ ♣g6

61. | g8+ ♣f6 62. | f8+ ♣g6 63. | b4 | a3 )

60... | 6e4+ 61. ♣f5 | e5+ 62. ♣f4 | 5e4+ ;

**C1b)** 59. ♣f2 | xb8 60. | xb8 | a3 61. | b6

♣g7 62. ♣e2 | a4 63. ♣f3 ♣h7

Black simply waits with a draw. ; **C1c)**

59. ♣h4 | xa6 60. | h7+ ♣g6 This is why

Black does not need the pawns on g5 and

h5 . ; **C2)** 54. | h8+ ♣g7 55. | cg8+ ♣f7

I guess, both of the players missed the

strongest move in this position. Black

wants to take on a6 or to give the perpetual

check (on the b1 -, b2 -, and b3 -squares). How to handle this? 56. | b8!! ( 56.a7?? | b3+ ) 56... | xa6 57. | h7+ ♖e6 58. | xh6+ White wins the rook. ] **53... | f7**

With one of the white rooks on the 8th rank, Black already has no time for such slow moves. It was necessary to free the King from the checkmating net. [ 53...g6! 53...g5 is equally good. **A)** 54.a7

This is harmless for Black because the pawn immediately becomes the target of attack. | a6 55.hxg6+ ♖g7 ( 55...♖xg6?? 56. | g8+ ) 56. | cc8 | a3+! ( 56... | axa7?? 57. | g8+ ♖f6 58. | af8+ ♖e6 59. | h8

Winning on h6 with a win. ; 56...♖xg6?? This fails due to unusual tactics. 57. | c6+! Deflection. | xc6 58. | g8+ ) 57.♖h4 ♖xg6

Now there is no Rc6 -deflection, and White can't organize the pawn promoting. 58. | g8+ | g7 ; **B)** 54. | a3! White wants to play a6 - a7 , check with Ra8 , and then a7 - a8=Q . How to defend against this? | ee6!

Even with the four rooks on the board, the principle of placing the rook behind the pawn still works. 55.a7 | a6 ] **54. | cc8**

[ Another turnover moment in this extra complicated endgame; the position is again equal. But honestly speaking, not many players could have played something different than 54. | cc8 . ;For many weird and hard-to-see reasons, moving the King to h3 was the best way. To make the following lines more clear for you, I will try to explain the key issues of this crazy position. The first point is that 54. | cc8 does not concretely win (we will discuss it in the comments to Black's 54th move). When we try to understand what to play instead, we should notice that Black wants to play ... g7 - g5 to free the King or double the rooks on the 4th rank (to attack g4 ). If White, after ... g7 - g5 , takes en-pa ssant, Black can take back only with the rook (a capture with the King loses to a7 Ra6 and Rg8 followed by a8=Q ). The threat of ... h5 (the King is still on g3 ) giv

es White no time to play the Rb3 - b7 maneuver. For this reason, White should move the King and put Black into a zugzwang. The rook on b6 defends the b-file (against Rb3 - b7 ) , while the rook on f7 is placed perfectly due to the long lines that you can take a further look at yourself (shortly speaking, after Rb7 Black will lose an important tempo to defend it; but this is impossible to see in a real game). But even this reasoning is insufficient because White can play two normal King moves ( Kh4 or Kh3 ). Most of the players would have chosen (without even minimal hesitations) Kh4 . But this move is a mistake due to a fantastic escape that you can see in the following lines. Concluding, Kh3 is a move that prepares White for ... g7 - g5 and puts the black rooks in a zugzwang situation. That is the only winning move! Kh3! **A)**

This is how White exploits the position of the black rook on e7 . 54... | e7 Rcc8 Rb3+ g5 Rh8+ Kg7 Rag8+ Kf7 Rb8! We saw this trick in the comment to White's 53rd move. Rxa6 Rh7+ Ke6 Rxh6+- 55.♖h4 g5+ 56.hxg6+ ♖xg6 57. | cb8! Ra3 Rb6+ ♖g7 ( 57...♖f7 58. | b7 Black has no a defense against the idea of Z0 Rxe7+ Kxe7 a7 Z0 followed by the Rh8 Z0 Rh7+ and 65.Rxa7 maneuver. ) 58. | b7 | f7 59. | aa7 Rxb7 axb7+- ; **B)** 54... | d6 Rb3! It is easier to place the rook on the b-file now since later, White will need the Rb7 motif. 55. | c6 Rbb8 Rc3+ Kh4 g5

The only way to avoid the checkmate. 56.hxg6+ ♖xg6 57. | b6 ♖g7 (Rf6 Rxf6+ 57...♖f6 58.a7 ) 58. | b7! ♖g6 ( Ra3 Raa7! An important trick that helps to promote the pawn. 58... | xb7 59.axb7 ) 59. | xf7 ♖xf7 60.a7 Ra3 Rh8 Rxa7 Rh7+- ; **C)** 54...g5 55.hxg6+ | xg6 Rb3! Rgg7! The most resistant defense. Black does not let the a6 -pawn advance easily. Ra3 h5! That is another good defensive trick. ( 55...♖xg6? 56.a7 | a6 57. | g8+ ) 56.g5! Kg6 a7 The black King

can't hide behind the rooks (from the check by Ra8 ) forever. (Black saves the game in the case of careless capture. gxh5?? Rf5 56.♣h4 ♀f4 57.♣h3 ♀f5 ) 56... ♀b7 Ra6+! Kxg5 Ra3! Rbf7 Rg3+ Kf6 Rf3+! Kg6 Rxf7 Rxf7 Kxf7 Rh8+- 57. ♀g8 ; **D**) Ra3 Rff1 Here, Black is late with this counterplay. Rc8 a7?? Rh1+ Kg3 Rhg1+ Kf4 Rgf1+ Ke4 Rfe1+ Kd4 Red1+ Kc4 Rdc1+ Rc3 Rxc3+ Kxc3 Ra1= Rh1+ This line shows why the stalemate idea does not help Black. Rf7 a7 54... ♀a7 55. ♀xa7 Rh1+ Kg3 Rg1+ Kf4 Rxg4+ Ke5 Rg5+ Ke6 Re5+ Kf7 Rf5+ Ke8 Re5+ Kf8 Rf5+ Rf7+- ; **E**) 54... ♀b1 Kg3 Rhg1+ 55.♣h4 ♀h1+ Rh3 Rxh3+ Kxh3 Ra1 Rc6 This endgame is easily winning due to the optimal position of the white rook (besides defending the a6 -pawn, it controls the situation on the Kingside). Kg8 56.♣g3 Kf7 Kf4 Ke7 Kf5 Kf7 ♀c7 Kg8 57.a7 Kh7 Ke6+- ; 54.♣h4? **A**) With the King on h4 , 54... ♀b4? works badly. 55. ♀cc8 g5+ 56.hxg6+ ♣xg6 57. ♀ab8! The key move. ( 57.a7? ♀a4 58. ♀g8+ ♀g7 ) 57... ♀a4 ( 57... ♀xb8 58. ♀xb8 White threatens Rb6 (to force the black King going to the 7th rank) and then Rb7 . ) 58. ♀b6+ ♀f6 The last critical moment, which might look simple, but it isn't. ( 58...♣g7 59. ♀cc6 Doubling on the 6th rank decides the game. ) 59. ♀g8+! ( After a reflexive exchange of the rook, Black simply keeps his rook on a4 (to keep an eye on the g4 -pawn) and moves with the King back and forth (on g7 and h7 ). 59. ♀xf6+? ♣xf6 60. ♀c6+ ♣g7 61.♣g3 ♣h7 62.♣f3 ♣g7 If White decides to advance his pawn to a7 , Black gets counterplay on the Kingside. 63. ♀c7+ ♣g6 64.a7 ♣g5 ) 59...♣f7 60. ♀xf6+ ♣xf6 61.♣h5 The endgame is winning for White because the black King is on the long side and prevents the side checks technique. ; **B**) 54... ♀b1 55. ♀a3 How to stop a6 - a7 and Rh8 ? (The direct play also does not bring

the desired effect. 55. ♀cc8 g5+ 56.hxg6+ ♣xg6 57.a7 ♀a1 58. ♀g8+ ♀g7 ) 55... ♀ff1! Another perpetual mechanism is prepared. 56. ♀c8! White is ready for the checks (now the exchange of the rook and Ra1 does not help because of Rc6 ); a6 - a7 is prepared. Is this possible to save this? Yes, and this is the moment for another incredible save. I offer you to find it yourself! ♀! It is the moment for another incredible save. I offer you to find it yourself! ( 56.a7? ♀h1+ One rook remains on b3 , and another rook gives the checks. At some point, White will need to block the checkKing rook with Ra3 , then Black takes this rook and plays ... Ra1 with a simple draw. 57.♣g3 ♀hg1+ 58.♣f4 ♀gf1+ 59.♣e4 ♀fe1+ 60.♣d4 ♀ed1+ 61.♣c4 ♀dc1+ 62. ♀c3 ♀xc3+ 63.♣xc3 ♀a1 ) 56... ♀f7!! 57.a7 ♀h1+ 58.♣g3 ♀g1+ 59.♣h2 ♀xa7!! Again a stalemate idea! 60. ♀xa7 ♀g2+ 61.♣h3 ♀g3+ 62.♣h4 ♀h3+ 63.♣xh3 This line explains why the King should have moved to h3 . Without locking down the white King on the h-file, Black couldn't hope for a stalemate with perpetual checks (the King would go somewhere to f8 ). After Rh1 +, the King might have moved to g2 ! Amazing resource! ;One obvious alternative that might have come to one's mind was Ra3 with an idea of a6 - a7 , Ra8 followed by the promotion. But in this case, Black was able to put the rook behind the pawn (we already saw this motif earlier). 54. ♀a3? ♀ff6! The defending technique that allows Black to save this position reminds us of the Vancura Defense (see an appropriate position in the theoretical part of the course). Having two more rooks on the board (the extra white rook defends the pawn from behind; the extra black rook doubles the side pressure on the pawn) does not change anything seriously - the a8 -rook can move between the a7 - and a8 -squares (this is pointless); if the pawn moves forward, Black plays ... Ra6 , and, if White

retreats with the rook along the rank, plays ... Rf7 threatening to take on a7 . The only nuance is that White can try to deliver a checkmate from h8 , but we already have enough experience to defend against this. 55.a7 | a6 56.| d3 | f7 57.| dd8 | a3+ 58.♠h4 Otherwise, Black gives the checks from the a1 -, a2 -, and a3 -squares. g5+! 59.hxg6+ ♠xg6 60.| g8+ | g7 61.| xg7+ ♠xg7 ; 54.| d3? g5 55.hxg6+ | xg6 The threat of ... h6 - h5 helps Black to win time. 56.| b3 ( 56.a7 | a6 ; 56.♠h3 h5! This is not the only saving move, but the clearest one. 57.gxh5 | g5 58.♠h4 | a5 The black rooks are active enough to hold the game. ) 56...h5 57.| b7 | xg4+ 58.♠h3 | gg7 **A)** 59.| xf7 | xf7 60.a7 ( 60.| b8 | f3+ 61.♠h4 | a3 ) 60...| f3+ 61.♠h4 | a3 ; **B)** 59.| aa7 | f3+ 60.♠h4 | f4+ 61.♠xh5 | f5+ Another perpetual. ; The pawn advancing leads to lines similar to what we saw earlier. 54.a7 | a6 55.| cc8 | a3+ 56.♠h4 g5+ 57.hxg6+ ♠xg6 58.| g8+ | g7 ] **54... | b3+ [ 54...g5??** Black loses the rook. 55.| h8+ ♠g7 56.| ag8+ ♠f6 57.| xh6+ ] **55.♠h4 g5+ 56.hxg6+ ♠xg6 57.| c6+** And here is the last crucial moment in this dramatic endgame. h7 or g7 ? One can't answer this question without looking deep in the lines. White's idea is to double the rooks on the 6th rank and win the last black pawn. I offer you to calculate the lines yourself and find the best move in this position. [ 57.| cb8 | a3 58.| b6+ ♠g7 59.| b7 Thanks to the position of the black rook on f7 (not e7 ), Black gets time to bring the King away from the 7th rank and to remain near the corner. ♠f6! 60.| xf7+ ( 60.| aa7 | xb7 61.axb7 | b3 ) 60...♠xf7 61.a7 ♠g7 ] **57...♠g7** I think that Nisipeanu didn't think seriously about this move and played it automatically. [The correct retreat square was h7 . At the end of the forcing lines, Black will need the g-file opened to deliver the rook to g8 or protect the King

from the side check. Incredibly difficult stuff! 57...♠h7! 58.| d8 | b1 59.| dd6 | h1+ 60.♠g3 | g1+ 61.♠h3 | f3+ 62.♠h2 | xg4 63.a7 ( 63.| xh6+ ♠g7 64.| hd6 | a4 ) 63...| f8! ( 63...| a3?? 64.| a6 ) 64.| a6 ( 64.| c7+ | g7 here is the difference showing why 57... Kh7 was more accurate. ) 64...| a8 65.| xh6+ ♠g7 By the way, having the King closer to the corner was the saving idea for Nisipeanu in his endgame against Tomashevsky. Based on these two examples, we can conclude that in the 4-rook endgames, the preferable squares for the King of the defending side are near the corner/edge of the board. ] **58.| d8 | b1 59.| dd6 | h1+ 60.♠g3 | g1+ 61.♠h3 | f3+ 62.♠h2 | gf1** [Other lines are already not difficult. 62...| xg4 63.a7 | f8 ( 63...| a3 64.| c7+ ♠h8 65.| d8+ | g8 66.| xg8+ ♠xg8 67.| c8+ ♠g7 68.a8♠ ) 64.| c7+ Now Black has no ... Rg7 defense against the check. ♠g8 Moving the King to the h-file does not help. ( 64...♠h8 65.| a6 | a8 66.| b6 Black can't stop the Rb8 - threat. | gg8? 67.| xh6# ) 65.| a6 | a8 66.| b7 ♠h8 67.| xh6+ ♠g8 68.| b8+ ♠g7 69.| xa8 ] **63.| d7+ | f7 [ 63...♠g8 64.| c8+ | f8 65.| xf8+ | xf8 66.a7 ] 64.| xf7+ | xf7 65.| c2** The only winning move. White places the rook behind the pawn and, at the same time, disturbs Black to do the same (with the check on f2 ). **h5** This is the last trick that might have helped Black if White carelessly took the pawn. **66.| a2** Black resigned because there was no saving chance with the rook on a7 . [ Here is the possible line of how the game might have continued. 66.| a2 | a7 67.gxh5 ♠h6 68.♠g3 ♠xh5 69.♠f4 ♠g6 70.♠e5 ♠f7 71.♠d6 ;If White takes the pawn, Black gets time to take the pawn on h5 and return to a8 . 66.gxh5?? | f5! 67.| a2 | xh5+ 68.♠g3 | h8 ]

□ 9) 4-Rook Endgames  
 ■ Zoltan Ilincic vs. Gergely Ac

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XI | | | | | | | Y
8- + - + - + - + 0{
7p - t r k p p - 0
6R + - + p + - + 0
5+ - + - + - + p 0
4- + - + - + - P 0
3+ - + - + K P - 0
2R + - + P P - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

29...♙d8 Black ignores the opponent's moves and misses their play. 30.♙f4 ♙c8 31.e4 Ilincic defends the d5 -square to prepare for the King's invasion. ♙b8 32.♙6a5 g6 33.♙g5 ♙d4 34.e5 Black's position became much worse. His King and rooks are passive, while White can prepare the f2 - f3 and g3 - g4 moves to get a passed pawn on the h-file. The defense required a lot of patience from Black. But Aczel wasn't ready for such a change of situation and lost instantly. Continued in the next variation.

□ 9) 4-Rook Endgames  
 ■ Zoltan Ilincic vs. Gergely Ac

(Diagram)

34...♙d5 Continuation of the previous exercise. The correct defending strategy was to direct the King back to the Kingside, wait for White to play g3 - g4 , and then activate the rooks with counterplay. I'm unsure if it would have brought the desired draw, but there already was no choice. 35.♙xd5 exd5 36.e6 This is the strongest continuation that provides White with the

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XI | | | | | | | Y
8- k - + - + - + 0{
7p - t - + p + - 0
6- + - + p + p + 0
5R - + - P - k p 0
4- + - t - + - P 0
3+ - + - + - P - 0
2R + - + - P - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

passed pawns in the fastest way. fxe6 37.♙xg6 White wants to take on h5 and promote the h-pawn. Black is defenseless.

□ 9) 4-Rook Endgames  
 ■ Zoltan Ilincic vs. Gergely Ac, Budapest 2022)

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XI | | | | | | | Y
8- + - t - + k + 0
7p - t - + p p p 0
6- + - + p + - + 0
5+ - + - + - + - 0
4R + - + - + - + 0
3+ - + - + - P - 0
2- R - + P P - P 0
1+ - + - + - k - 0[
x a b c d e f g h y

```

I found several exciting 4-rook endgames in my collection, so I decided to dedicate a separate chapter to them in this course. To begin with, I offer to study this example that ended surprisingly. Black had an extra pawn, but overestimated chances resulted in a loss. 25.h4 Similar to the 'usual' rook endgames with only two rooks on the board, the defending side should move the rook pawn forward to avoid any future problems with it (after ... g7 - g5 , it can become weak). h5 26.♙a6 White blocks the a7 -



pawn though it is not compulsory. It was also good to keep the rooks on a2 and a4 . **♣f8** The black King moves to the Queenside. **27.♣g2 ♣e7 28.♭ba2 ♭dd7 29.♣f3 ♣d8** Black ignores the opponent's moves and misses their play. **30.♣f4 ♣c8 31.e4** [Ilincic defends the d5 -square to prepare for the King's invasion. This line shows how Black can use the d5 -square if White does the same without the e2 - e4 move. **31.♭6a5 g6 32.♣e5** After **32.Kg5 Rd5** , the position is also equal, but Black remains with an extra pawn. That's why it is better to lead the King to f6 via the e5 - square. **♭d5+ 33.♭xd5 exd5 34.♣xd5** No one can pretend to win this position. ] **31...♣b8** [It was time to refuse any further tries to win this. **31...♣d8 32.♭6a5 g6 33.♣g5 ♣e7** ] **32.♭6a5 g6 33.♣g5 ♭d4 34.e5** Black's position became much worse. His King and rooks are passive, while White can prepare the f2 - f3 and g3 - g4 moves to get a passed pawn on the h-file. The defense required a lot of patience from Black. But Aczel wasn't ready for such a change of situation and lost instantly. **♭d5** [ The correct defending strategy was to direct the King back to the Kingside, wait for White to play g3 - g4 , and then activate the rooks with counterplay. I'm unsure if it would have brought the desired draw, but there already was no choice. Here is an approximate line in which Black succeeds. **34...♭b4 35.♣f6 ♭bb7 36.♭5a3** ( An unprepared f2 - f3 allows Black to start counterplay. **36.f3 ♭b3 37.♭f2 ♣b7!** ) **36...♣c8 37.f3 ♣d8 38.g4 hxg4 39.fxg4 ♭b4 40.♭a4 a5!** A super important move that unties the second rook. ( **40...♭b1?? 41.♭xa7** ) **41.h5 gxh5 42.gxh5 ♭b1** The position is equal. Black can even checkmate if the pawn keeps moving. **43.h6?? ♭g1** ] **35.♭xd5 exd5 36.e6** This is the strongest continuation that provides White with the passed pawns in the fastest way. **fxe6**

**37.♣xg6** White wants to take on h5 and promote the h-pawn. Black is defenseless. **d4 38.♣xh5 d3 39.♭d2 ♭d7 40.♣g6 a5 41.h5 e5 42.h6 ♭d6+ 43.♣h5** The e5 -pawn disturbs its own rook to give more side checks. Now it is the turn of the g-pawn. **e4 44.g4** Black resigned because he had nothing to offer against the pawns' march.

#### □ 9) 4-Rook Endgames

##### ■ Levon Aronian vs. Anish Giri

X	I	I	I	I	I	I	I	Y	
8-	+	r	t	-	+	k	+	0{	
7+	-	+	-	+	-	p	p	0	
6-	+	-	+	-	+	-	+	0	
5+	p	+	p	P	p	+	-	0	
4-	+	-	P	-	P	-	+	0	
3+	-	+	-	+	-	R	P	0	
2-	+	-	+	-	+	P	k	0	
1+	R	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

Anish Giri miscalculated something and gave his opponent (Levon Aronian) a chance to demonstrate how powerful two rooks on the 7th rank and a pawn can be. The starting position is better for White, thanks to the defended passed pawn and pressure on b5 . Luckily Black has a chance to exchange his weakness. **33...♭c4 34.♭xb5 ♭xd4** Now Black faces a new problem - the white rook invades the 7th rank.

#### □ 9) 4-Rook Endgames

##### ■ Levon Aronian vs. Anish Giri

**37.♭aa7** The h7 -pawn is hanging, and Black has a choice - to defend it passively or to counterattack the e5 -pawn. How

XI	I	I	I	I	I	I	I	Y
8-	+	-	t	-	+	k	+	0
7+	R	+	-	+	-	+	p	0
6-	+	-	+	-	+	p	+	0
5+	-	+	p	P	p	+	-	0
4-	+	-	+	-	t	-	+	0
3R	-	+	-	+	-	+	P	0
2-	+	-	+	-	+	P	K	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

XI	I	I	I	I	I	I	I	Y
8-	+	-	t	-	+	k	+	0{
7R	R	+	-	+	-	+	p	0
6-	+	-	+	-	+	p	+	0
5+	-	+	p	P	p	+	-	0
4-	+	-	+	-	t	-	+	0
3+	-	+	-	+	-	+	P	0
2-	+	-	+	-	+	P	K	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

would you solve this problem? | h4

The correct way was to defend the pawn and prepare the safe corner position for the King - White can't create any threats to the King on h8 . 38. | g7+ ♖h8 39. ♙g3

The best White can do is to try bringing the King to the e5 - and f6 -squares (after e5 - e6 ). | h5 White has a choice of what to play first - e5 - e6 or Kf4 . Of course, both moves have their own advantages and disadvantages. But in both cases, Black can cope with the occurring problems.

□ 9) 4-Rook Endgames

■ Levon Aronian vs. Anish Giri

(Diagram)

37... | e4 A decisive mistake. Black neither saves the h7 -pawn nor takes on e5 .

38. | g7+ White wants to take on h7 with a checkmate threat or with a check.

□ 9) 4-Rook Endgames

■ Levon Aronian vs. Anish Giri, Dusseldorf 2023)

XI	I	I	I	I	I	I	I	Y
8-	+	r	t	-	+	k	+	0{
7+	-	+	-	+	-	p	p	0
6-	+	-	+	-	+	-	+	0
5+	p	+	p	P	p	+	-	0
4-	+	-	P	-	P	-	+	0
3+	-	+	-	+	-	R	P	0
2-	+	-	+	-	+	P	K	0
1+	R	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

Anish Giri miscalculated something and gave his opponent (Levon Aronian) a chance to demonstrate how powerful two rooks on the 7th rank and a pawn can be. The starting position is better for White, thanks to the defended passed pawn and pressure on b5 . Luckily Black has a chance to exchange his weakness. 33... | c4 [ There was no way to stay passive and save the pawn. 33... | b8? 34. | gb3 White wins the pawn and gets the winning position. ] 34. | xb5 | xd4 Now Black faces a new problem - the white rook invades the 7th rank. 35. | b7 g6 There was no other way to defend the g7 -pawn. 36. | a3

[ There was no difference between 36. | a3 and Rc3 . In both cases, White gets the doubled rooks on the 7th rank. ] 36... | xf4 37. | aa7 The h7 -pawn is hanging, and Black has a choice - to defend it passively or to counterattack the e5 -pawn. How would you solve this problem? | e4 [ A decisive mistake. Black neither saves the h7 -pawn nor takes on e5 . The correct way was to defend the pawn and prepare the safe corner position for the King - White can't create any threats to the King on h8 . 37... | h4 **A)** Another option for White is to push the pawn immediately. 38.e6 | e8 39.e7 ( 39. | g7+ ♣h8 Leads to the 38.Rg7 line. ) 39...♣f7 The e7 -pawn is weak. ; **B)** 38. | g7+ ♣h8! (White checkmates the King if it goes left. 38...♣f8?? 39. | af7+ ♣e8 40.e6 This mating construction is worth memorizing. Lone rooks usually cannot checkmate the King (if there is a defending rook near). But if the pawn is coming and defending one of the rooks, the rank mate is often inevitable. ) **B1)** There is not much sense in exchanging the rook on d8 . 39. | gd7 | xd7 40. | xd7 | e4 41. | xd5 ♣g7 ; **B2)** The pawn does not pose serious problems for Black. 39.e6 | e8 40. | gd7 | h6 41. | xd5 g5! The easiest. Black gives up the pawn and goes to the drawish endgame with two pawns against one. ( 41... | xe6?? 42. | d8+ | e8 43. | xe8# ) 42. | xf5 | hxe6 43. | xg5 | g8 44. | h5 | g7 45. | a8+ | g8 ; **B3)** 39.♣g3! The best White can do is to try bringing the King to the e5 - and f6 -squares (after e5 - e6 ). | h5 White has a choice of what to play first - e5 - e6 or Kf4 . Of course, both moves have their own advantages and disadvantages. But in both cases, Black can cope with the occurring problems. **B3a)** 40.e6 | e8 41. | ge7 ( 41.♣f4 | xe6 ) 41...f4+! 42.♣xf4 | f5+ 43.♣e3 ( 43.♣g3 | xe7 44. | xe7 | f6 ) 43... | e5+ 44.♣d4 | xe6 45. | xh7+ ♣g8 ; **B3b)** 40.♣f4

Black can stop the e5 - e6 idea by playing ... Rh4 or ... Re8 . But only one of them is correct. I offer you to calculate and find which is best. | h4+! This decision looks risky since the white King reaches the f6 - square. But the ... f5 - f4 , ... Rf5 idea make s White's arrangement disharmonious - the King and pawn disturb each other while the d5 -pawn is ready to run forward. ( 40... | e8? loses crucial tempo and gives White enough time to prepare the King and pawn advancing. 41. | ge7 ) 41.♣g5 | h5+ 42.♣f6 f4! 43. | gd7 (A stubborn desire to advance the pawn can turn into a catastrophe. 43.e6?? | e8! The ... Rf5 - checkmate threat ends the game. 44.e7 | f5+ 45.♣e6 ♣xg7 ) 43... | f5+ 44.♣e6 ( 44.♣e7?? | xd7+ 45. | xd7 | xe5+ Black wins with two extra pawns. ) 44... | e8+ 45. | e7 | xe7+ 46. | xe7 d4 47. | d7 f3 48.gxf3 | xf3 49. | xd4 The e5 -pawn is more dangerous than the Black's majority, but Black has enough time to stop it even with capture on h3 . Though, switching to the idea from the stop the pawn at the 7th rank position (see the theoretical part) helps Black (the h- and g-pawns do not change the situation). | a3 50.♣e7 ♣g7 ;Of course, Giri did not need to have seen all this to choose correctly between 37... | e4 and Rh4 . It was enough to see that after Re4 , he gives up the h7 - pawn for nothing, while Rh4 gives more security to the King. ] 38. | g7+ White wants to take on h7 with a checkmate threat or with a check. ♣f8 39. | af7+ ♣e8 40. | xh7 | h4 If Black could have traded off the rook, it would be a big relief for him. But White's plans differ. [Giri probably forgot that with the rooks on f7 and h7 , he couldn't take on e5 . 40... | xe5? 41. | a7 The Rh8 -checkmate threat ends the game. ] 41. | e7+ ♣f8 42. | hf7+ ♣g8 43. | g7+ ♣h8 [ 43...♣f8 44.e6 With a threat of a checkmate in 2 ( Ref7 and Rg8 ). | h8 45. | gf7+ ♣g8

46. | d7! | xd7 47. | xd7 Black can't defend against the Rd8 , e7 - e8=Q threat without giving up his rook. ] 44. | **xg6 d4** 45. | **d6 c8** [ 45... | xd6 46.exd6 Black can't stop the pawn. ] 46. | **f7 f4** 47.e6 ♠g8 48. | **dd7** Black resigned because there was no way to defend against multiple threats.

## 9) 4-Rook Endgames

### Evgeny Tomashevsky vs. Liviu-

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	k	+	0{
7R	-	+	-	+	R	+	-	0
6-	+	-	+	-	+	r	+	0
5p	-	+	-	+	-	+	K	0
4-	+	-	+	-	+	-	+	0
3+	-	+	-	+	-	+	P	0
2r	+	-	+	-	P	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

40... | **a6** It is essential to understand the following nuance about positions with two rooks on the 7th rank here. For the defending side, the best saving chance usually is connected with keeping the King closer to the corner. The trick is that the rooks can't push the King to the central files. For example, the first rook gives the check from h7 - Black plays ... Kg8 . After that, the second rook gives the check from g7 - the King goes to f8 , and if the second rook goes to f7 , the King can go to g8 . These squares are safer for the King than the squares of the central lines ( d8 and e8 ) because, with the King on e8 , the rooks can organize the rank checkmate motif from both sides. For example, with the rooks on g7 and f7 (the King is already on e8 ), we play Rh7 with a deadly threat of Ra7 followed by Ra8 or Rh8 . Black's move became a fatal mistake because it enabled

the pushing of his King to the central lines. It became possible because of the pawn on a5 (at the critical moment, Black remained without ... Ra5 +) . 41. | **g7+** Tomashevsky began the operation of pushing the black King to the e8 -square. ♠f8 42. | **af7+** ♠e8 In the game White repeated the position - there was no need for a hurry. Rb7 Kf8 Rbf7+ 43. | **h7** The pawn on a5 takes the last defending opportunity (the check from a5 ). Black is hopeless.

## 9) 4-Rook Endgames

### Evgeny Tomashevsky vs. Liviu-,Moscow 2012)

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	k	+	0{
7p	-	R	-	+	p	+	-	0
6-	+	-	+	-	+	-	+	0
5+	-	+	-	+	R	+	-	0
4-	+	-	+	-	+	-	+	0
3+	-	+	-	+	-	K	P	0
2r	+	-	+	r	P	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

The next game shows us how difficult it is to defend against two rooks on the 7th rank, even if the engine tries to convince you that it is '0.00'. 31...a5 [You rarely find a chess player who has studied the 4-rook endgames with the rook and bishop pawns. For this reason, most of us would like to save the a-pawn to avoid the endgame down two pawns. But the defense of the a-pawn makes our rooks passive, and if we remain greedy for too long, from some point, the rooks can't return to secure a draw. In fact, it is easier to give up the last pawn and bring the rooks to the optimal squares before it becomes too late. What are the best squares for the rooks? For one rook, it should be a square on the h-file (to

prevent the Rh7 -check). For the other rook, the best square will be the 8th rank (to stop the 8th rank checks). Such an arrangement will make the King's life on h8 comfortable. When we put the rooks on these squares, there is a big chance to take the h-pawn. Additionally, we can hope to exchange one pair of rooks and switch to the theoretical position we know ( Stop the pawn at the 7th rank ). Let's see how we can implement these words in concrete variations. 31... | e6 32. | fxf7 | g6+ 33. ♣h4 | aa6 34. f4 ( White can't disturb us from reaching our setup. 34. | fd7 | h6+ 35. ♣g4 | ag6+ 36. ♣f5 ♣h8 ) 34... | h6+ 35. ♣g4 | ag6+ 36. ♣f5 ♣h8! 37. | xa7 | g8 The mission is completed. Now we need to get convinced Black can save this position. This looks simple - White can hardly create something challenging for Black. 38. ♣e5 | xh3 39. f5 | h1 40. ♣e6 | e1+ 41. ♣f6 f6 is the only square where White can hide his King from the 1st rank checks. | h1 42. | fb7 | f8+ 43. ♣e6 | e1+ 44. ♣d6 | f6+! We saw many in-between checks that helped to take the pawn under good circumstances. ( 44... | xf5?? 45. | b8+ ) 45. ♣d7 | xf5 ] 32. | fxf7 | e6 33. | g7+ ♣h8 34. | h7+ ♣g8 35. | cg7+ ♣f8 36. | a7 ♣g8 37. | hg7+ ♣h8 38. | gf7 It is easy to admit there was no reason to refuse the Kg8 move (a similar position already was on the board a few moves ago). But it is much harder to understand why the engine does not like the move Nisipeanu played. | g6+ [White can't prevent the construction described in the first comment. 38... ♣g8! 39. ♣g4 | a1 40. f4 | g1+ 41. ♣f5 | h6! 42. | fc7 ♣h8 ] 39. ♣h4 ♣g8 [The following line shows the time Black wasted on the 31st move turns into serious trouble. 39... | c2? 40. f4 | cg2 Black is ready to regroup his rook, but it is too late now. 41. | f8+ | g8 42. | f5 | 8g7 43. | h5+ ♣g8 44. | g5! Changing the pawn formation from the weak 'f' and 'h' to

unstoppable 'g' and 'h.' A naive capture on a5 (with either rook) would lead to a rather objectively drawish position. | 2xg5 45. | a8+! Tactical justification of the previous move. ♣h7 46. fxf5 ] 40. ♣h5 It is essential to understand the following nuance about positions with two rooks on the 7th rank here. For the defending side, the best saving chance usually is connected with keeping the King closer to the corner. The trick is that the rooks can't push the King to the central files. For example, the first rook gives the check from h7 - Black plays ... Kg8 . After that, the second rook gives the check from g7 - the King goes to f8 , and if the second rook goes to f7 , the King can go to g8 . These squares are safer for the King than the squares of the central lines ( d8 and e8 ) because, with the King on e8 , the rooks can organize the rank checkmate motif from both sides. For example, with the rooks on g7 and f7 (the King is already on e8 ), we play Rh7 with a deadly threat of Ra7 followed by Ra8 or Rh8 . Black's next move became a fatal mistake because it enabled the pushing of his King to the central lines. It became possible because of the pawn on a5 (at the critical moment, Black remained without ... Ra5 +). | a6 [It was necessary to have access to the 5th rank. Here is the line that shows where it makes a difference. 40... | b6 41. | g7+ ♣h8 You remember that the King should stay closer to the corner. 42. | gd7 | b5+ First, Black needs to drive the white King away from the black King. 43. ♣h6 ( 43. ♣g6 | b6+ 44. ♣f7 | xf2+ ) 43... | b6+ 44. ♣g5 | b5+ 45. ♣g4 | b4+! 46. f4 | g2+ 47. ♣f3 | g1 The white King can't help its rooks while the black rooks become active, guaranteeing Black the desired result. 48. | xa5 | b3+ 49. ♣f2 | gg3 ] 41. | g7+ Tomashevsky began the operation of pushing the black King to the e8 -square. ♣f8 [Here you can see why keeping the King in the corner does not work. 41... ♣h8

42. | h7+ ♖g8 43. | ag7+ White needs to avoid the rook exchange. ♜f8 44. | c7 ♜g8 45. | hg7+ ♜h8 In the game, we will see how White uses the King's position on e8. 46. | gd7 No ... Ra5 check! | a8 And now White wins thanks to another couple of checks which prepare Kh6. 47. | h7+! ♜g8 48. | hg7+! A shelter against ... Ra6 is ready. ♜h8 49. ♜h6! | a6+ 50. | g6 | xg6+ 51. ♜xg6 The black rook can't help the King (the a5 - pawn again disturbs). ] 42. | af7+ ♜e8 43. | b7 ♜f8 44. | bf7+ ♜e8

White repeated the position - there was no need for a hurry. 45. | h7 The pawn on a5 takes the last defending opportunity (the check from a5). Black is hopeless. | b2 46.f4 The pawn's run to f6 follows two purposes. The first is the checkmating net (with the rook defended on e7). The second is to cover the King from the side checks. a4 47.f5 | b3 48.h4 a3 49.f6 Black resigned because the only way to prevent the checkmate (Re7 and Rh8) was to give up the rook on f6.

#### □ 9) 4-Rook Endgames

■ Viswanathan Anand vs. Ian Nep

(Diagram)

31. | a5 Black can defend the pawn or sacrifice it. What would you choose? | b8 The only satisfactory move was ... Rb8. The passiveness of this rook would not disturb Black from committing his Kingside advancing plan.

X	I	I	I	I	I	I	I	Y	
8-	+	r	+	-	+	-	+	0	
7+	-	+	-	+	p	k	-	0	
6R	+	-	+	-	+	p	+	0	
5+	p	+	-	+	-	+	-	0	
4-	+	-	+	-	+	-	p	0	
3+	-	P	-	+	-	+	P	0	
2P	P	-	+	r	+	P	+	0	
1+	K	+	-	+	-	R	-	0	
x	a	b	c	d	e	f	g	h	y

#### □ 9) 4-Rook Endgames

■ Viswanathan Anand vs. Ian Nep

X	I	I	I	I	I	I	I	Y	
8-	+	r	+	-	+	-	+	0{	
7+	-	+	-	+	p	k	-	0	
6-	+	-	+	-	+	p	+	0	
5R	-	+	-	+	-	+	-	0	
4-	P	-	+	-	+	-	p	0	
3+	-	+	-	+	-	+	P	0	
2P	P	-	+	r	+	P	+	0	
1+	K	+	-	+	-	R	-	0	
x	a	b	c	d	e	f	g	h	y

32... | cc2 How does White prevent ... Rxb2 ? 33.b3 It is hard to say what exactly Nepomniachtchi missed here. As we already saw in the previous endgames, a good way to defend against the doubled on the 7th (2nd) rank rooks is to put the King in the corner and defend both edge lines that arise from this corner (in this case, these lines are the a-file and the first rank). Such an arrangement leaves no active opportunities for the rooks. At the same time, Anand has two pawns on the b-file - one runs forward, while another one prevents an attack from behind. White is winning.

## □ 9) 4-Rook Endgames

## ■ Viswanathan Anand vs. Ian Nep

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	+	p	k	- 0
6	-	+	-	+	-	+	p	+ 0
5	R	-	+	-	+	-	+	- 0
4	-	P	-	+	-	+	-	p 0
3	+	P	+	-	+	-	+	P 0
2	P	t	-	+	r	+	P	+ 0
1	K	-	+	-	+	-	R	- 0
x	a	b	c	d	e	f	g	h

34... | xg2 35. | xg2 | xg2 36.b5 | e2  
 37.b6 | e8 38.b7 | b8 39. | b5 f5  
 40.♣b2 The white King should enter the square of the f-pawn. Black resigned because there was nothing to do against the march of the a-pawn.

## □ 9) 4-Rook Endgames

## ■ Viswanathan Anand vs. Ian Nep, Saint Louis 2017)

X	I	I	I	I	I	I	I	Y
8	-	+	r	+	-	+	-	+ 0
7	+	-	+	-	+	p	k	- 0
6	R	+	-	+	-	+	p	+ 0
5	+	p	+	-	+	-	+	- 0
4	-	+	-	+	-	+	-	p 0
3	+	-	P	-	+	-	+	P 0
2	P	P	-	+	r	+	P	+ 0
1	+	K	+	-	+	-	R	- 0[
x	a	b	c	d	e	f	g	h

To avoid giving you the impression that the rooks on the 7th (2nd) rank guarantee their owner an easy life, I want to show you how Ian Nepomniachtchi overestimated the power of his rooks. White has a free pawn, but the difference between the rooks on e2

and g1 should provide Black with sufficient compensation. White can create a passed pawn on the Queenside, but with only one rook's support, it should not be a problem for Black. At the same time, Black can push his Kingside pawns forward to create a passer there. 31. | a5 Black can defend the pawn or sacrifice it. What would you choose? b4 [The only satisfactory move was ...Rb8 . The passiveness of this rook would not disturb Black from committing his Kingside advancing plan. Here is how the game might have continued after this. 31... | b8 32.b4 f5 33.a4 bxa4 34. | xa4 | c8 35. | a3 ♠f6 Black has enough compensation due to more active pieces. ]

32.cxb4 | cc2 33.b3 It is hard to say what exactly Nepomniachtchi missed here. As we already saw in the previous endgames, a good way to defend against the doubled on the 7th (2nd) rank rooks is to put the King in the corner and defend both edge lines that arise from this corner (in this case, these lines are the a-file and the first rank). Such an arrangement leaves no active opportunities for the rooks. At the same time, Anand has two pawns on the b-file - one runs forward, while another one prevents an attack from behind. White is winning. [It is worth mentioning that White had another instructive winning way. He could give up the pawn on b2 and then play Rb1 to support the pawn from the back. 33.b5 | xb2+ 34.♣a1 Black can't do anything against the Rb1 -idea. The pawn is unstoppable. g5 ( 34... | xg2 35. | xg2 | xg2 36.b6 | g1+ 37.♣b2 | g2+ 38.♣c3 | g1 39. | b5 ) 35. | b1 | xb1+ 36.♣xb1 | xg2 37.b6 | g1+ 38.♣b2 | g2+ 39.♣c3 | g1 40. | b5 ] 33... | b2+ 34.♣a1 | xg2 35. | xg2 | xg2 36.b5 | e2 [White has many winning ideas if Black pins the pawn. 36... | g5 37.b4 Unpinning the pawn. ( 37.a4 Protecting the b5 -square and in such a way preparing a little tactic Z0 b6 Rxa5 b7 )] 37.b6 | e8 38.b7 | b8 39. | b5

**f5 40.♙b2** The white King should enter the square of the f-pawn. Black resigned because there was nothing to do against the march of the a-pawn. [ 40.a4?? f4 ]

□ 9) 4-Rook Endgames

■ Viktor Bologan vs. Nils Grand

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XI | | | | | | | Y
8- + - + - ♖ - + 0
7+ ♖ + - + ♗ ♘ ♙ 0
6R + - + - + - + 0
5+ - + - ♙ - + - 0
4- + - + - + - + 0
3+ ♙ + - + - ♚ - 0
2- + - + - ♚ - ♙ 0
1+ - + - + ♖ ♗ - 0[
x a b c d e f g h y

```

This endgame should be more or less easily drawish, but Bologan managed to out-trick his opponent. Of course, if White had placed his rook on a3 and b1 (to defend the pawn) , there would have been no chances to win the endgame. So, first, Bologan used a little tactic (connected with the power of the rooks on the 7th rank) to place the rooks along the 3rd rank. **28.♙c1 ♙g8 29.♙c3 ♙fb8 30.♙a3**

□ 9) 4-Rook Endgames

■ Viktor Bologan vs. Nils Grand

(Diagram)

**38.♙g4** The white King came to attack the e4 -pawn. Does it hang? How to defend with minimal effort? **♙8b7** Black could have stayed in place and waited. **39.♙f4 ♙b4** White can't take on e4 without giving up the b3 -pawn. At the same time, a King's

```

XI | | | | | | | Y
8- ♖ - + - + - + 0
7+ - + - + - ♙ ♗ 0
6- + - + - + - ♙ 0
5+ ♖ + - + - + - 0
4- + - + ♙ + - ♙ 0
3R ♙ + - ♖ - ♙ ♗ 0
2- + - + - ♙ - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

attempt to approach the Queenside will be met with the side checks that will force it to return to f4 .

□ 9) 4-Rook Endgames

■ Viktor Bologan vs. Nils Grand

```

XI | | | | | | | Y
8- + - + - + - + 0{
7+ ♖ + - + - ♙ ♗ 0
6- + - + - + - + 0
5+ ♖ + - + - + ♙ 0
4- + - + ♙ + - ♙ 0
3R ♙ + - ♖ - ♙ - 0
2- + - + - ♙ - + 0
1♗ - + - + - + - 0
x a b c d e f g h y

```

**48... ♙b8** How to free up a rook? **49.♙b2** The rook on a3 is free, and a new stage of the game begins. **♙f5 50.♙a4 ♙xf2+ 51.♙a3** White achieved progress, but Black still can hold the position. Though, now it requires more preciseness. Continued from Black's perspective in the next variation.



□ 9) 4-Rook Endgames  
 ■ Viktor Bologan vs. Nils Grand

X	I	I	I	I	I	I	I	Y
8	-	t	-	+	-	+	-	+ 0
7	+	-	+	-	+	-	p	k 0
6	-	+	-	+	-	+	-	+ 0
5	+	-	+	-	+	-	+	p 0
4	R	+	-	+	p	+	-	P 0
3	+	P	+	-	R	-	P	- 0
2	-	k	-	+	-	t	-	+ 0
1	+	-	+	-	+	-	+	- 0
	x	a	b	c	d	e	f	g h y

51. ♖a3 Continuation of the previous variation. White achieved progress, but Black still can hold the position. Though, now it requires more preciseness. ♗f1  
 52. ♗axe4 ♗g1 53. ♖b2 Black has a free tempo compared to the game text. But it is not easy to make use of it. ♖h6 54. b4  
 ♗g2+ 55. ♖b3 ♗g1 Threatening to give check from b1, with a permanent pursuit of the white King.

□ 9) 4-Rook Endgames  
 ■ Viktor Bologan vs. Nils Grand

(Diagram)

57...g5 The decisive mistake, though Black's position is already dubious even after better moves. 58. hxg5+ ♖xg5  
 59. ♗c5+ ♖g4 The g3 -pawn is indirectly defended (the pawn on h5 is also hanging); this means that Black does not even have a threat, and White can slowly advance on the Queenside. 60. ♗c4+ [ 60. ♗e4+ was also winning, but Bologan was in no hurry to simplify. ]

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+ 0 {
7	+	-	+	-	+	-	p	- 0
6	-	t	-	+	-	+	-	k 0
5	+	-	+	-	+	-	+	p 0
4	-	+	-	+	-	+	-	P 0
3	k	P	+	-	R	-	P	- 0
2	-	+	-	+	-	+	r	+ 0
1	+	-	R	-	+	-	+	- 0
	x	a	b	c	d	e	f	g h y

□ 9) 4-Rook Endgames  
 ■ Viktor Bologan vs. Nils Grand, Bremen 2011)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	t	-	+ 0
7	+	r	+	-	+	k	p	p 0
6	R	+	-	+	-	+	-	+ 0
5	+	-	+	-	p	-	+	- 0
4	-	+	-	+	-	+	-	+ 0
3	+	P	+	-	+	-	P	- 0
2	-	+	-	+	-	P	-	P 0
1	+	-	+	-	+	R	k	- 0
	x	a	b	c	d	e	f	g h y

Now let's see which difficulties the defending side can face when the opponent has a passed pawn on the Queenside with an equal number of pawns on the Kingside. This endgame should be more or less easily drawish, but Bologan managed to out-trick his opponent. Of course, if White had placed his rook on a3 and b1 (to defend the pawn), there would have been no chances to win the endgame. So, first, Bologan used a little tactic (connected with the power of the rooks on the 7th rank) to place the rooks along the 3rd rank. 28. ♗c1 ♖g8  
 [ The pawn was indirectly defended.  
 28... ♗xb3?? 29. ♗c7+ ♖g8 30. ♗aa7

Thanks to a checkmate threat, White wins both of the pawns on the 7th rank. ] **29.** | **c3** | **fb8 30.** | **a3** From now the long back-and-forth play begins. We will be stopping only at the important moments. **e4**

The e4 -pawn fixes the f2 -pawn and restricts the rook on c3 . There is no reason to consider this pawn as a weakness. Black defends it with an attack on b3 . The exchange of these two pawns will lead to the '3 vs. 2' endgame, which is drawish.

**31.** | **f1 h6** This pawn move secures a good square for the King (on h7 ). From now Black can just wait for White's actions.

**32.** | **e3 c h7 33.h4** | **b5** It was not required but Black still decided to prevent h4 - h5 . **34.** | **ce2** | **8b7 35.** | **cf1** | **b8**

**36.** | **g2** | **8b7 37.** | **ch3** | **b8 38.** | **cg4**

The white King came to attack the e4 - pawn. Does it hang? How to defend with minimal effort? **h5+** This pawn can't be called a weakness, but the pawn move was not required. [Black could have stayed in place and waited. **38...** | **8b7 39.** | **cf4**

( Placing the pawns on h5 and g4 does not change anything in Black's defending setup. **39.h5** | **b8 40.** | **ch4** | **8b7 41.** | **g4**

| **b8 42.** | **cg3** | **8b7 43.** | **cf4** | **b4** ) **39...** | **b4**

White can't take on e4 without giving up the b3 -pawn. At the same time, a King's attempt to approach the Queenside will be met with the side checks that will force it to return to f4 . (The engine says that even the exchange of e4 - and f2 -pawns leads to the position with a '0.00' evaluation. But for the human mind, it is less obvious. **39...** | **f7+** **40.** | **cx4** | **xf2 41.** | **cd4** | **b8**

The frontal checks strategy helps Black to prevent the advancing of the b3 -pawn. ) **40.** | **ce5** | **7b5+** ] **39.** | **ch3**

Bologan understood that there was no way to win the e4 -pawn. So, he decided to move the King back to the Queenside.

| **8b7** Black is waiting. **40.** | **cg2** | **b8**

**41.** | **cf1** | **8b6 42.** | **ce2** | **b7 43.** | **c3** | **b8**

**44.** | **cd1** | **8b6 45.** | **cc1** | **b7 46.** | **e3** | **b8**

**47.** | **cb1** The King has come to the Queenside, so it was a good moment for Black to begin active play on the opposite flank. But Grandelius preferred to stay passive, which is also acceptable. | **8b7**

[ **47...** | **g5!? 48.** | **hxg5 c g6 49.** | **cb2** | **f5** ]

**48.** | **ca1** [For unclear reasons, Bologan decided to go to b2 via a1 , though a direct **48.** | **cb2** was stronger and more logical. ]

**48...** | **b8** [The ...g7 - g5 idea was still ok for Black. **48...** | **g5! 49.** | **hxg5 c g6** ] **49.** | **cb2**

The rook on a3 is free, and a new stage of the game begins. | **f5 50.** | **a4** | **xf2+**

**51.** | **ca3** White achieved progress, but Black still can hold the position. Though, now it requires more preciseness. | **f1 52.** | **axe4**

| **a1+** This natural check appeared a serious mistake. The white King is better placed on b2 because, from there, it prevents the black rook from giving checks from the back.

[ **52...** | **g1!** **A)** Unluckily for White, he

can't advance the b3 -pawn without allowing a forced draw. **53.** | **b4?** | **b1**

**54.** | **ca4** | **a8+** **55.** | **cb5** | **b8+** **56.** | **cc5**

| **c1+** **57.** | **cd6** ( **57.** | **c4??** | **c8+** ) **57...** | **b1**

**58.** | **cc5** | **c1+** Repetition. ; **B)** **53.** | **cb2!**

Black has a free tempo compared to the game text. But it is not easy to make use of it. **ch6 54.** | **b4** | **g2+!** **55.** | **cb3** | **g1**

Threatening to give check from b1 , with a permanent pursuit of the white King. ]

**53.** | **cb2** | **g1 54.** | **e5** [Bologan found an interesting idea to bring the rook to c1 and solve the problem of the g1 -rook (that is annoying with its checks from the back), but it remains unclear why he decided to give Black a tempo back. It was more

logical to begin with the direct **54.** | **c4** . ;

White could have also pushed the pawn forward, which might be a big problem for Black. **54.** | **b4!** **g5** The best according to the

engine, but in my opinion, it is near impossible to play this in a real game (especially if we recall that Black didn't play ... g7 - g5 in the more comfortable situation on moves 47 and 48). Otherwise,

White slowly improves his position and advances the pawn. (Here is the line that shows how White uses the tempo that the opponent presented to him. 54... | g2+ 55.♠c3 | g1 56. | e5 Attack on h5 ! ♠h6 57.♠c4! | c1+ 58. | c3 | c8+ 59. | c5 )) 54...♠h6 55. | c5 | b6 56. | c1 | g2+ [ We can suppose that Black, unfortunately, had insufficient time to calculate the consequences of the rook exchange. Otherwise, Grandelius could have found a direct way to force favorable simplifications. 56... | xc1 57.♠xc1 g5! White can't simultaneously defend the Kingside pawns and advance the b-pawn. Black makes a draw with a big reserve. **A)** 58.♠b2 gxh4 59.gxh4 | b4 60. | h3 ♠g6 61.♠a3 | e4 62.b4 ♠f5 63. | b3 ( 63.♠a4 ♠g4 64. | h1 ♠g3 65.♠a5 ♠g2 ; 63.b5 ♠e6 ) 63... | xh4 64.b5 | g4 65.b6 | g8 66.b7 h4 67.b8♠ | xb8 68. | xb8 h3 ; **B)** 58.hxg5+ ♠xg5 59.♠b2 | b8 Preparing for the back rank checks (see the frontal checks (Cheron) position from the theoretical part). 60.♠c3 | c8+ 61.♠d4 | d8+ 62.♠c5 | c8+ 63.♠d6 | b8 It is hard to even advise some idea for White. ] 57.♠a3 g5 The decisive mistake, though Black's position is already dubious even after better moves [ 57... | g6 58. | cc3 | a6+ 59.♠b4 | a8 60. | c6+! Preparing a shelter from the frontal checks. g6 61.♠b5 ] 58.hxg5+ ♠xg5 59. | c5+ ♠g4 The g3 -pawn is indirectly defended (the pawn on h5 is also hanging); this means that Black does not even have a threat, and White can slowly advance on the Queenside. 60. | c4+ 60.Re4 was also winning, but Bologan was in no hurry to simplify. [ 60. | e4+ ♠xg3 ( 60...♠f3 61. | h4 ) 61. | xh5 It is worth mentioning that the presence of one extra rook pair on the board (compared to the 'normal' rook endgames) does not change the evaluation of this endgame - White is winning. ] 60...♠g5 [ 60...♠h3?? 61. | h4# ] 61.b4

| g1 [If Black creates no counterplay, White will finally advance his passed pawn with a win. So, Black should have taken the last chance to create counterplay. 61... | a6+ 62.♠b3 | g1 63. | c5+! ♠g4 64.b5 | b1+ This moment might be a hard one for White. The most natural forward move by the King misses a win (for far from apparent reasons). **A)** 65.♠c4? | h6!! The rook defends the last pawn and disables the doubling on the 5th rank. ( 65... | a8 66. | ee5 White takes the h5 -pawn and wins a one-pawn endgame. ; 65... | a4+? 66.♠d5 ) 66. | c6 ( 66. | ee5? | c1+! Black exchanges the rook and wins the g3 - pawn. 67.♠d5 | xc5+ 68.♠xc5 ♠xg3 ) 66... | h8 67.b6 Black's position looks scary, but in fact, the further advancement of the b-pawn is very complicated. The main thing that Black should avoid in any case is allowing the white King to come to a6 . Here is how it can continue. | d8! 68. | e5!? ( 68.♠c5?? | c1+ 69.♠b5 | d5+ It is never late to lose the game. ) 68... | b8 69.♠c5 | b3 70. | g6+ ♠f3 71. | xh5 | c8+ 72.♠d4 | b4+ 73.♠d3 | b3+ Black gives a perpetual check. ; **B)** 65.♠c2! Our chess education says the King should go to the center and be active. But a concrete analysis shows that winning the tempo with an attack of the black rook is essential. | aa1 66. | ee5! ♠xg3 67. | xh5 Even with the King on c2 White can win this. ] 62. | c5+ ♠g4 63.b5 The rule that the rook is a bad blockade piece works in both 2-rook and 4-rook endgames. The rest is simple. | b8 64.♠b4 | b1+ 65. | b3 | g1 66. | c4+ ♠g5 67. | c6 ♠g4 68.b6 | xg3 The 'rook vs. pawn' endgame was Black's last chance, and Grandelius used it. 69. | g6+ ♠h4 70. | bxg3 The black King is in a stalemate box, but there is no way to give up the rook without destroying the box. | xb6+ 71. | xb6 ♠xg3 72. | g6+ [ 72.♠c3 was also enough for a win, but Bologan uses the trick described in the time-

gaining check position (see the theoretical part) to win the tempo (for some cases). ]

72...♙f3 73.♚h6 ♙g4 74.♙c3 h4  
75.♙d2 h3 76.♙e1 ♙g3 77.♙f1 h2  
78.♚h8 Black resigned.

#### □ 9) 4-Rook Endgames

##### ■ Viswanathan Anand vs. Levon A

X	I	I	I	I	I	I	I	Y
8	r	+	-	+	-	+	-	0{
7	+	-	p	k	r	-	p	0
6	-	p	-	p	-	p	R	p0
5	p	P	+	P	+	-	+	- 0
4	P	+	-	R	P	P	-	+ 0
3	+	-	+	-	+	K	+	- 0
2	-	+	-	+	-	+	P	P0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h y

37...♚ae8 The problem with this move is that Black leaves the Kingside pawns without the King's support. As we will see in the comments to Black's next move, ... Rh8 (with an idea of ... Ke8 - f7) was good even with the King on g4. 38.♙g4 ♚xe4 A decisive mistake. White smashes out the opponent's Kingside and gets strong passed pawns there. Anand made one inaccuracy, but after that, he made all precise moves to give Aronian no real chance to escape. 39.♚xg7+ ♙c8 40.♚d2 It is easy to under-evaluate such a back-move. The threat of Rc2 creates more problems than Aronian could expect when he took on e4.

#### □ 9) 4-Rook Endgames

##### ■ Viswanathan Anand vs. Levon A

41...♚c8 What is White's plan here? 42.♚a2

X	I	I	I	I	I	I	I	Y
8	-	k	-	+	r	+	-	+ 0{
7	+	-	p	-	+	-	R	- 0
6	-	p	-	p	-	p	-	p0
5	p	P	+	P	+	-	+	- 0
4	P	+	-	+	r	P	K	+ 0
3	+	-	+	-	+	-	+	- 0
2	-	+	R	+	-	+	P	P0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h y

White wants to play Kf5 and take the f6 - pawn. ♚d4 43.♙f5 ♚xd5+ 44.♙xf6

#### □ 9) 4-Rook Endgames

##### ■ Viswanathan Anand vs. Levon A

X	I	I	I	I	I	I	I	Y
8	-	k	-	+	-	+	-	+ 0{
7	+	-	p	-	+	-	+	- 0
6	-	p	-	p	-	+	K	p0
5	p	P	+	-	+	r	+	- 0
4	P	+	-	+	-	P	-	+ 0
3	+	-	+	-	+	-	+	- 0
2	R	+	-	+	-	+	P	P0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h y

47...♚xf4 48.g3 Securing two connected passed pawns. ♚c4 49.♙xh6 d5 50.♙g5

#### □ 9) 4-Rook Endgames

##### ■ Viswanathan Anand vs. Levon A, Moscow 2016)

(Diagram)

The next endgame attracted me with its atypical (for the rook endgames) pawn structure and (of course) the names of the

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XI | | | | | | | | Y
8r + - + - + - + 0{
7+ - p k t - p - 0
6- p - p - p R p 0
5p P + P + - + - 0
4P + - R P P - + 0
3+ - + - + K + - 0
2- + - + - + P P 0
1+ - + - + - + - 0
x a b c d e f g h y

```

opponents. White has more space, but Black's position looks solid enough. Let's see where Black went wrong. **37...** | **ae8** The problem with this move is that Black leaves the Kingside pawns without the King's support. As we will see in the comments to Black's next move, ... Rh8 (with an idea of ... Ke8 - f7) was good even with the King on g4. **38.♙g4** | **xe4** A decisive mistake. White smashes out the opponent's Kingside and gets strong passed pawns there. Anand made one inaccuracy, but after that, he made all precise moves to give Aronian no real chance to escape. [ It is easy to understand why Aronian preferred to take the pawn. After the ...Re8 - h8 move, he should have led a passive defense without a guarantee of success. **38...** | **h8!** Objectively this position remains much better for White, but there is no clear winning way. Let me mention just a few possible lines. White should combine threats of attacking the c7 -pawn and invading the g6 -square. **A)** **39.♙f5** The ... h6 - h5 option leaves Black with extra opportunities. ♙e8! **40.h4** ( **40.** | **g3 h5** ) **40...** | **h5!** **41.g4** hxg4 **42.♙xg4** | **h7 43.h5** ♙d7 The black rooks are ready for any active action. ; **B)** **39.♙h5!**? Evidently, this blocking move is the best. ♙e8 The King goes to defend the g7 -pawn. **B1)** **40.f5** ♙f7 **41.** | **g3** ♙g8! The King goes to h7 to leave three squares for the

rooks on the 7th rank ( d7 , e7 , and f7 ) to defend the c7 -pawn without zugzwang perspectives. **42.** | **c3** ( **42.♙g6??** h5 With a checkmate in 1. ) **42...** | **♙h7** **43.g4** ( **43.** | **dc4** | **he8** **44.** | **xc7** | **xc7** **45.** | **xc7** | **xe4** **46.** | **c6** | **xa4** **47.** | **xb6** | **b4 48.** | **xd6** | **xb5** ) **43...** | **he8** **44.** | **cc4** g6+! A temporary pawn sacrifice. **45.fxg6+** ♙g7 **46.h3** | **e5+** **47.♙h4** | **8e7** ; **B2)** **40.** | **g3 g5!**? (With the King on f7 , Black experiences large problems with space because he can't defend the c7 -pawn indirectly with an attack of the e4 -pawn ( Rxc7 will be a check or a pin). **40...** | **♙f7 41.** | **c4** ) **41.f5** | **hh7** The King on h5 is placed nicely, but its further invasion can turn into big problems for the King itself. **42.** | **h3!**? White can try to play Kg4 , Rh5 , Kf3 , g2 - g3 , and prepare h2 - h4 . It is hard to say if it will be enough for a win. ; **B3)** **40.** | **c4** ♙f8! ( **40...** | **♙f7?** **41.** | **g3** Transferring to the **40.Rg3** line. White is much better. ) **41.h4** Preventing ... g7 - g5 . ( **41.** | **g3 g5!** ) **41...** | **♙g8** **42.** | **g3** ♙h7 **43.♙g4** Then White plays h4 - h5 , Kf5 , and Rgc3 with excellent winning chances, but still, the whole fight is ahead. ] **39.** | **xg7+** ♙c8 **40.** | **d2** It is easy to underestimate such a back-move. The threat of Rc2 creates more problems than Aronian could expect when he took on e4 . ♙b8 [ The engine considers the following line. **40...** | **xa4** **41.** | **c2** c5 **42.bxc6** | **e5!** **43.** | **d2** h5+ **44.♙f3** | **a3+** **45.♙f2** | **e4 46.g3** But even these computer tricks do not help Black to hold the endgame. ] **41.** | **c2** [ Another winning line was connected with a defense of the f4 -pawn. **41.♙f5!** | **xa4 42.g3!** | **f8** **43.** | **c2** | **d4** **44.** | **cxg7** | **xd5+** **45.♙e6** We already know how much two rooks doubled on the 7th rank can achieve. Anand's move was not worse. ] **41...** | **c8 42.** | **a2** White wants to play Kf5 and take the f6 -pawn. | **d4** **43.♙f5** | **xd5+** **44.♙xf6** | **f8+** **45.** | **f7** [ **45.♙e6** was also fine, but Anand did not want to

leave four rooks on the board. It seems a rational decision if we recall how many defending tricks two rooks presented in the Karjakin - Nisipeanu endgame. ] 45... | **xf7+** 46. **xf7** | **f5+** 47. **g6** | **xf4** 48. **g3** Securing two connected passed pawns. [ 48. **fxh6?** | **h4+** ] 48... | **c4** 49. **fxh6** **d5** 50. **h5** [Probably Anand felt a bit relaxed at this moment. Otherwise, it is hard to explain why he chose to push the g-pawn forward. The h-pawn is more distant, and the King on the g-file will disturb the opponent's King to approach it. 50. **g5** But even this impreciseness didn't help Aronian to save the game. Anand felt that he made a wrong move (he mentioned this at the press conference) and concentrated on avoiding more mistakes. ] 50... **d4** 51. **g4** **d3** 52. **h4** | **d4** 53. | **d2** **cc8** 54. **g5** **cd7** 55. **g6** Black's problem is that even after the exchange of the d- and h-pawns, the g5 - pawn will secure White a win (the black King is on the long side, and the pawn has already crossed the middle of the board). | **xh4** [Here are a few other lines to show how White wins if Black defends differently. 55... **ce7** 56. **h5** **cf8** ( 56... | **d6+** 57. **g7** | **d5** 58. **g6** | **xh5** 59. | **xd3** ) 57. **cf6** **A**) 57... **cg8** 58. **g6** | **d6+** 59. **ce5** **cg7** 60. **ce4!** | **e6+** ( 60... **ch6** 61. | **xd3** | **e6+** 62. **cf5** ) 61. **fxd3** **ch6** 62. | **g2** | **e8** 63. **g7** | **g8** 64. **cd4** **fxh5** 65. **cd5** ; **B**) 57... | **d5** 58. **h6** | **d6+** 59. **ce5** **cf7** 60. **ce4** **cg6** 61. | **xd3** ] 56. | **xd3+** **ce8** 57. | **a3** White is in no hurry to give up on a4 . Before that, he can advance the g-pawn further. | **c4** [Probably here, Black could pose the biggest problems. 57... **cf8** 58. | **c3!** | **xa4** 59. | **xc7** | **b4** **A**) 60. **cf6?** | **f4+** 61. **ce5** ( 61. **cg6** **a4** ) 61... | **b4** 62. | **b7** **a4** 63. | **xb6** **a3** White can't stop the a-pawn without losing the b5 -pawn. ; **B**) 60. | **b7!** A tactical motif - Black can't take on b5 because, from there, the rook can't give a check after **Kf6** . | **xb5** 61. **cf6**

**ce8** 62. **g6** | **b1** 63. | **b8+** **cd7** 64. **g7** The white King is well placed for stopping the opponent's passed pawns in the future. ] 58. **cg7** **cd7** 59. **g6** **c6** 60. **cf6** **cxnb5** 61. **g7** | **g4** 62. **axb5** | **g1** [ 62... **cd6** Here, the most precise is to cut off the King along the c-file. 63. | **c3** ] 63. | **d3+** **ce8** 64. | **e3+** **cd7** 65. | **e5** A good old 'bridge.' White wants to play **Rg5** . | **xg7** 66. | **d5+** [ One more technical decision at the end. A simple 66. **fxg7** was also enough for a win, but Anand preferred to push the King back first. Black resigned. ]

#### □ 9) 4-Rook Endgames

#### ■ Valeriy Aveskulov vs. Viaches

X	I							Y	
8-	+	r	+	-	<del>k</del>	-	+	0	
7+	-	+	-	+	p	p	-	0	
6	p	t	-	+	-	+	-	p 0	
5+	-	+	-	p	-	+	-	0	
4-	<del>P</del>	-	+	P	+	-	+	0	
3	R	-	<del>P</del>	-	+	-	+	0	
2-	+	-	R	-	+	P	P	0	
1+	-	+	-	+	-	<del>k</del>	-	0	
x	a	b	c	d	e	f	g	h	y

42. **cf2** It is worth mentioning that Black has the pawn majority on the Kingside, and White should be careful about it. First, both opponents improve their pieces. | **bc6** 43. | **d3** **ce7** 44. **ce3** **h5** Black uses the old endgame rule - in the endgame, it is usually helpful to advance the pawns; it makes them closer to the promotion square. In this case, the h-pawn advancing should help Black to fix the g2 -pawn.

□ 9) 4-Rook Endgames  
 ■ Valeriy Aveskulov vs. Viaches

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	-	+	-	+	-	+	-	0
6p	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	-	+	0
3+	+	-	+	-	+	-	+	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h

49... | h6 It wasn't late to return to a solid position, but Dydyshko decided to continue bringing the rook to the g-file. 50.c4 | g6 51.g3 | g4 52. | e3 The rook on g4 is locked out, and the evaluation becomes critical for Black.

□ 9) 4-Rook Endgames  
 ■ Valeriy Aveskulov vs. Viaches

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	-	+	-	+	-	+	-	0
6p	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	-	+	0
3+	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h

56...a5 With the only rook fighting against the white army on the Queenside, this undermining had no chance of success. 57.♣c4 axb4 58.♣b5 Black resigned because there was no way to stop the c-pawn.

□ 9) 4-Rook Endgames  
 ■ Valeriy Aveskulov vs. Viaches, Minsk 2006)

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6p	+	-	+	-	+	-	+	0
5+	-	+	-	+	-	+	-	0
4-	+	-	+	-	+	-	+	0
3R	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h

The next game is one of the most memorable for me. The win in it provided me with the final GM norm. The starting position is about equal. White has a passed pawn (c3), but the black rooks put much pressure on it. At the same time, the white rooks are also well placed - one pushes on the weak a6 -pawn, while the second rook occupies the only open file. Also, it is worth mentioning that Black has the pawn majority on the Kingside, and White should be careful about it. First, both opponents improve their pieces. 42.♣f2 | bc6 43. | d3 ♣e7 44.♣e3 h5 Black uses the old endgame rule - in the endgame, it is usually helpful to advance the pawns; it makes them closer to the promotion square. In this case, the h-pawn advancing should help Black to fix the g2 -pawn. 45.♣d2 I have directed my King to b3 to free the a3 -rook from its duties to defend c3 -pawn, and to be ready to play c3 - c4 (when there is a chance). h4 46. | a5 Black was ready to play ... Rg6 to attack my g2 -pawn, so it was a good moment to attack the e5 -pawn. Any defense would disable ... Rg6 . f6 47.♣c2 | h8 The start of the wrong plan. Black decided to bring his rook to the g4 -square (to attack both g2 - and e4 -pawns), but for White, it is not a problem at all - the

moves g2 - g3 and Re3 will solve all issues on the Kingside. At the same time, the absence of the second rook on the Queenside will be effectively used for pushing the pawn. [The engine says that Black is fine in the following line. 47... | c4 48.♠b3 | xe4 49. | xa6 | e2 But seeing '0.00' on the screen in this position does not guarantee that the game will end with a draw. The presence of 4 rooks and many passed pawns on the board rather promises us a lot of mistakes and up-and-downs. ; More human advice for Black might be the solid 47...♠e6 followed by ... g7 - g6 waiting for the moment for ... f6 - f5 . 48.♠b3 g6 ] **48. | ad5 | c7**

[ Players usually make such moves automatically, but there also was an idea of ignoring the Rd7 -threat. For this, Black needed to return the rook from h8 , which wasn't his intention. 48... | hc8! 49. | d7+ ♠e6 50. | xg7 | c4 A double attack on b4 and e4 wins the pawn back with an unclear position. ] **49.♠b3 | h6** [It wasn't late to return to a solid position, but Dydysko decided to continue bringing the rook to the g-file. 49... | hc8! Surprisingly such a passive construction was sufficient. White does not have any dangerous plans for improving his position. 50.g4 hxg3 51.hxg3 g6 52.g4 g5 ] **50.c4 | g6 51.g3 | g4 52. | e3** The rook on g4 is locked out, and the evaluation becomes critical for Black. ♠e6 Here, I failed to find a decisive continuation. Can you do this instead of me? **53.♠c3** There was nothing to do on c3 . Moreover, this move strengthened the a6 - a5 undermining (after c4 - c5 ) since the possible Rxc5 will be with a check. [ Instead, White should have pushed the pawns forward without paying much attention to the destiny of the e4 -pawn. 53.c5! | xe4 54. | d6+ ♠f5 55. | xe4 ♠xe4 56. | xa6 The white pawns are much faster in this race. ] **53...hxg3 54.hxg3 g6** The weakening of the f6 -pawn helped me

to realize that Rxe4 (after c4 - c5 ) was not so scary. Instead, Black could stay in place. [ 54... | c8! Seemingly, the best for White is to bring the King back to b3 . **A)**

This line shows why the King on c3 benefits Black. 55.c5? a5!! Undermining the c5 -pawn helps Black to equalize the position. (A capture on e4 was still bad. 55... | xe4 56. | d6+ ♠f5 57. | xe4 ♠xe4 58. | xa6 ) 56.b5 ( 56.bxa5 | xe4 57. | d6+ ♠e7! 58. | xe4 | xc5+ Already White should look for equality. 59.♠d3! ♠xd6 60. | a4 ) 56... | xe4 57. | ed3 | b4

The pawns look strong, but unexpectedly there is no way to advance them when the black rooks are on b4 and c8 . Moreover, the e5 -pawn also can move forward. 58.c6 e4! 59. | d1 e3 (The c4 - c5 advancing with the rook on a5 makes ...f6 - f5 possible (the e5 -pawn not hanging after e4xf5 ).) Ra5 Rc6 c5? f5! exf5+ Kxf5= ; **B)** 55.♠b3!? | c6! This move prevents c4 - c5 . 56. | a5 Black has trouble with the next moves. ( 56.c5? | xe4 No Rd6 check. )] **55.c5 | c6** [ 55... | xe4 56. | d6+ ♠f5 57. | xe4 ♠xe4 Which pawn should White take? 58. | xa6 Leaving the a6 -pawn on the board would allow Black to disconnect the white Queenside pawns. ( 58. | xf6?? a5 )] **56. | d8 a5** With the only rook fighting against the white army on the Queenside, this undermining had no chance of success. [The central undermining was more tricky. If White reacts incorrectly, the black pieces can reunite. 56...f5!? 57. | e8+! ( 57.exf5+? gxf5 58. | e8+ ♠d7 59. | 8xe5 | cg6 ) 57...♠f6 58.♠c4! f4 ( 58... | xe4+ 59. | xe4 fxe4 60.♠d5 | c7 61. | e6+! White takes both e-pawns and wins the game on the Queenside. ) 59.gxf4 exf4 60. | d3 | g3 61. | d7 | e6 62. | d6! | xd6 63.cxd6 The d6 -pawn is unstoppable. ] **57.♠c4 axb4 58.♠b5** [Black resigned because there was no way to stop the c-pawn. 58.♠b5 | c7 59.♠b6 | h7 60.c6



This game shows that it is much easier to fight against separated rooks. ]

### □ 9) 4-Rook Endgames

■ Hikaru Nakamura vs. Samuel Se

```

XI | | | | | | | Y
8r + - ♔ - + k + 0
7+ - ♙ - + p p p 0
6p + p p r ♖ - + 0
5+ - ♟ - + - + - 0
4- + - ♜ P + - + 0
3+ - + - + Q + P 0
2P ♟ - + - ♟ P + 0
1+ - + R + R ♞ - 0[
x a b c d e f g h y

```

To end the practical part of the course, I want to show the recent game played by Hikaru Nakamura at the American Cup 2023. In it, he masterfully exploited the disadvantages of the opponent's pawn structure. 19. ♗xf6 ♜xf6 20. ♜xf6 gxf6 I don't know what Sevier's reasoning behind his decision to weaken the pawn structure was (he definitely had something on his mind), but from aside (especially after seeing how the game continued), this move looks like a serious mistake. 21. f3

### □ 9) 4-Rook Endgames

■ Hikaru Nakamura vs. Samuel Se

(Diagram)

25...c4 There was no hope that Nakamura would exchange the c4 - and b2 -pawns because this would give the black rooks too much activity (2nd rank!). 26. ♙f2 ♚b6 27. ♙e3 ♙g7 Black prepared the ... Rd6 - d8 - b8 maneuver to get at least some

```

XI | | | | | | | Y
8- + - + - + k + 0{
7+ - ♞ - + p + p 0
6p + p ♞ - ♟ - + 0
5+ r ♟ - + - + - 0
4- + - + P + - + 0
3+ - + - + P + P 0
2P ♟ R + - + P + 0
1+ - + - + - ♞ - 0
x a b c d e f g h y

```

counterplay. But Nakamura remained attentive to the opponent's ideas even in such a dominating position. 28. ♚a7 A good prophylactical decision against the ... Rd6 - d8 - b8 idea.

### □ 9) 4-Rook Endgames

■ Hikaru Nakamura vs. Samuel Se

```

XI | | | | | | | Y
8- + - + - + - + 0{
7R - + - + p ♞ p 0
6p ♞ p + - ♟ - + 0
5+ - + - + - + - 0
4- + p + P ♞ - + 0
3+ - + r + P + P 0
2P ♟ R + - + P + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

29... ♚d4 How does White make use of the paralyzed rooks? 30. h4 White improves the Kingside position. ♙g6 31. h5+ ♙xh5 If Black took the pawn, there would be an unexpected play for a checkmate. 32. ♚a8 Rg8 is inevitable; after that, Rc2 will easily achieve the h-file with a mate.

□ 9) 4-Rook Endgames

■ Hikaru Nakamura vs. Samuel Se

```

XI | | | | | | | | Y
8- R - + - + - + 0{
7+ - + - + p k - 0
6p + r + - p - p 0
5P - p - + - + P 0
4- + p t P k - + 0
3+ - + - + P + - 0
2- P R + - + P + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

35...♙h7 Nakamura found the clearest winning plan - to exchange the d4 -rook.

This exchange will weaken the black Queenside pawns (even after ... c5xd4 ).

36.♙e3 ♙g7 37.♙e2 ♚e6 38.g4

Of course, no ... f6 - f5 is needed for White.

♚c6 39.♚d2 ♚c7 40.♚b6 The rest is simple.

□ 9) 4-Rook Endgames

■ Hikaru Nakamura vs. Samuel Se,2023)

```

XI | | | | | | | | Y
8r + - ♙ - + k + 0
7+ - p - + p p p 0
6p + p p r ♙ - + 0
5+ - P - + - + - 0
4- + - ♙ P + - + 0
3+ - + - + Q + P 0
2P P - + - P P + 0
1+ - + R + R k - 0[
x a b c d e f g h y

```

To end the practical part of the course, I want to show the recent game played by Hikaru Nakamura at the American Cup-2023. In it, he masterfully exploited the

disadvantages of the opponent's pawn structure. 19.♙xf6 ♙xf6 20.♙xf6 gxf6

I don't know what Sevan's reasoning behind his decision to weaken the pawn structure was (he definitely had something on his mind), but from aside (especially after seeing how the game continued), this move looks like a serious mistake. 21.f3 ♚b8 [Here and on the next move, the engine stubbornly suggests Black take the c5 -pawn. Sevan will come to this idea too late. 21...dxc5! 22.♚c1 ♚e5 This is smart. Black wants to play f6 - f5 which might have solved at least one problem. But White blocks this. 23.g4! ♚b8 24.♚f2 ♚b4 The black rooks are active, and the plan of White's improvement is not obvious. ]

22.♚f2 ♚b5 [ 22...dxc5! 23.♚d7 ♚b7 24.♚d8+ ♙g7 25.♚c2 ♚d6 26.♚a8 ♚b6 27.♚a7 **A**) The engine shows a fantastic resource on how the c7 -pawn can be defended. But even this does not change the negative for Black's evaluation. 27...c4!! 28.♙h2 (Here is the point of Black's idea. 28.♚xc7? ♚d8! Then ... Rdb8 and ... Rxb2 .

The game approaches equality. ) 28...♚d8 29.♙g3 ♚db8 30.♚xc4 ♚xb2 31.a4

The difference between the pawns is enormous. ; **B**) 27...♚d7 28.b3

Comparing this position with the final position of the 21...dxc5 line, we see that Ra7 creates many problems for the black rooks. ] 23.♚c2 dxc5 Now, this capture gives nothing to Black. [The King's centralization helps White to win in the following line. 23...♚xc5 24.♚xc5 dxc5 25.♙f2! ♚d6 26.♙e2! ♙f8 (The pawn endgame is hopeless due to the Kc4 idea, Black will lose both c5 - and c6 -pawns. 26...♚xd1 27.♙xd1 ♙f8 28.♙c2 ♙e7 29.♙b3 ♙d6 30.♙c4 ) 27.♚c1

White takes on c5 and then chooses between the Ra5xa6 and Rh5xh7

maneuvers. ] 24.♚d7 ♚d6 25.♚xc7 c4

There was no hope that Nakamura would exchange the c4 - and b2 -pawns because

this would give the black rooks too much activity (2nd rank!). **26.♙f2 ♚b6 27.♙e3 ♙g7** Black prepared the ... Rd6 - d8 - b8 maneuver to get at least some counterplay. But Nakamura remained attentive to the opponent's ideas even in such a dominating position. [The problem with the instant ... Rd8 is that the f6 -pawn is undefended. 27... ♙d8 28. ♙xc4 ♙xb2 29. ♙4xc6 ♙g7 30. ♙xa6 ♙xg2 31. ♙a7 ♙f8 Here, White can throw the h3 -pawn away and push the a-pawn forward with a win. 32.a4 ♙h2 33.a5 ♙xh3 34.a6 ♙h2 35. ♙ab7 ♙a2 36.a7 The most vital threat is to move the c7 -rook to c1 - g1 (to disconnect the black King and the rook on f8 ) and then to play Rb8 with a win of the rook. Black is hopeless. ] **28. ♙a7** A good prophylactical decision against the ... Rd6 - d8 - b8 idea. ♙d3+ [ 28... ♙d8 29.a4! ♙db8 30. ♙xc4 ♙xb2 31. ♙xc6 This is the point of 28.Ra7 , White is ready to double his rooks on the 7th rank in the shortest way. ] **29.♙f4 ♙d4 30.h4** The black rooks are paralyzed, so White improves his position on the Kingside. **♙g6 31.h5+ ♙g7** [ If Black took the pawn, there would be an unexpected play for a checkmate. 31... ♙xh5 32. ♙a8 Rg8 is inevitable; after that, Rc2 will easily achieve the h-file with a mate. ( 32. ♙xf7 A primitive capture on f7 was also enough for a win. ) ] **32. ♙a8** [ Evidently, the further advancing of the h-pawn would win the game faster, but Nakamura's way was also ok. 32.h6+! ♙xh6 (Ignoring the pawn would lead to an already-known to us mating motif. 32... ♙g6 33. ♙a8 ) 33. ♙xf7 ♙g6 34. ♙a7 ] **32...h6** The situation on the Kingside became less dangerous for the black King, but the bad point is the King likely is stuck in the corner for a long time. **33.a4 c5 34.a5 ♙c6 35. ♙b8 ♙h7** Nakamura found the clearest winning plan - to exchange the d4 -rook. This exchange will weaken the black Queenside pawns (even after ... c5xd4

). **36.♙e3 ♙g7 37.♙e2 ♙e6 38.g4** Of course, no ... f6 - f5 is needed for White. ♙c6 **39. ♙d2 ♙c7** [ 39... ♙cd6 40. ♙xd4 cxd4 41. ♙c8 ] **40. ♙b6** The rest is simple. ♙cd7 [Here is another possible line. 40... ♙a7 41. ♙c6 ♙b7 42. ♙xa6 One a5 -pawn is enough for a win. ♙xd2+ 43. ♙xd2 ♙xb2+ 44. ♙c3 ♙b3+ 45. ♙xc4 ♙xf3 46. ♙b6 ] **41. ♙xd4 cxd4 42. ♙xa6 ♙c7** [ 42... ♙b7 43. ♙b6 ♙a7 44.a6 The King comes to c2 (to defend the b2 - pawn), then the rook takes both black pawns in the center. ] **43. ♙d6 ♙b7 44. ♙b6 ♙c7 45.a6 c3 46.bxc3 ♙xc3** [ 46...dxc3 47. ♙d1 ] **47.a7 ♙a3 48. ♙b7** The black King is in a zugzwang position. If it goes to the 8th rank, the white rook checks, and a7 - a8=Q is coming. If the King goes to h7 , White takes the f7 -pawn. ♙e3+ **49.♙d2 ♙a3 50. ♙c7** The black rook is also in a zugzwang now. The King inevitably reaches the d3 -square. **f5 51.e5 fxg4 52.fxg4** Black resigned.

## □ 10) Exercises A

### ■ Exercises

In this section, you can find the exercises extracted from the main part and from other games. I have just divided them into two parts. In the first half of the section (part "A") , you will see simpler puzzles; the second half (part "B") contains more difficult positions for solving. Z0

## □ 10) Exercises A

### ■ Anna Ushenina vs. Qian Huang,Batumi

(Diagram)

How to save the g3 -pawn? **64. ♙b3** Surprisingly, the King finds a stalemate square almost in the very center of the

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	<del>k</del>	-	0
5	+	R	+	-	+	p	+	0
4	-	+	-	+	-	+	p	0
3	+	-	+	-	<del>k</del>	-	<del>P</del>	0
2	-	+	-	+	-	+	r	0
1	+	-	+	-	+	-	+	0
	x	a	b	c	d	e	f	g
								h
								y

board. | **xg3+** [ 64...♔g5 65.♔d4  
 Black can't win this position. ] **65.♔f4**  
 | **xb3** Stalemate. [ 65...|g1 66.|b6+ ♔g7  
 67.♔xf5 ]

□ 10) Exercises A

■ Alexandr Predke vs. Daniil Du,Moscow

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	<del>p</del>	k	<del>p</del> 0
5	+	-	R	-	+	-	<del>p</del>	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	P	+	P0
2	-	<del>t</del>	-	+	-	+	K	0
1	+	-	+	-	+	-	+	0
	x	a	b	c	d	e	f	g
								h
								y

Where to move the King? **42.♔g3**  
 Alexandr Predke didn't dare to place the King on g3 because his King could be under checkmate threats there. But the mating threats were not strong - h3 - h4 would secure the King's position.  
 [ The game continued 42.♔g1?? ♔h5!  
 43.|c4 f5 with energetic play, Dubov uses the opponent's mistake. His idea is to play ... f4 and to deliver the King on g3 . White is losing. ] **42...h5** [ 42...f5 43.h4 ] **43.h4**

The only move and enough to save the game. | **b4 44.hxg5 h4+ 45.♔h3**  
 Other retreats are also fine. **fxg5**

□ 10) Exercises A

■ Alexander Morozevich vs. Vlad,Moscow

X	I	I	I	I	I	I	I	Y
8	R	+	-	+	-	+	-	0
7	<del>P</del>	-	+	-	+	-	+	0
6	-	+	-	+	-	+	<del>p</del>	<del>p</del> 0
5	+	-	+	-	+	P	+	0
4	-	+	-	+	-	+	k	0
3	+	-	+	-	+	-	+	0
2	r	+	-	+	-	+	-	0
1	+	-	+	K	+	-	+	0
	x	a	b	c	d	e	f	g
								h
								y

Black can't allow the white rook to give the check. Using that, the f-pawn steps under two attacks and feels quite confident. How to stop it? **48...|a5** Switching to Vancura's idea (see the Vancura Defense position in the theoretical part) right on time.  
 [ 48...♔xf5?? 49.|f8+ ♔e4 50.a8♖+  
 |xa8 51.|xa8 ; 48...gxh5?? 49.|g8+ ♔f3  
 50.a8♖+ |xa8 51.|xa8 ] **49.fxg6** [ 49.f6  
 |d5+ 50.♔c2 |d7 ] **49...|d5+ 50.♔e2**  
 | **d7** The black rook holds the white pawns in both lines.

□ 10) Exercises A

■ Alexander Morozevich vs. Vlad,Moscow

(Diagram)

How to stop the h-pawn? **51...♔f5**  
 Black must hide the King behind the g5 - pawn because the black rook can't move with the King on the f-file. **52.h6 ♔g4**  
 The Vancura mechanism works perfectly

X	I	I	I	I	I	I	I	Y
8	R	+	-	+	-	+	-	0{
7	P	-	+	-	+	r	+	- 0
6	-	+	-	+	-	<del>k</del>	-	+
5	+	-	+	-	+	-	p	P 0
4	-	+	-	<del>k</del>	-	+	-	+
3	+	-	+	-	+	-	+	- 0
2	-	+	-	+	-	+	-	+
1	+	-	+	-	+	-	+	- 0
	x	a	b	c	d	e	f	g h y

now. [Black can begin with the check as well. 52...|d7+ 53.♣c5 ♣g4]

#### □ 10) Exercises A

■ Magnus Carlsen vs. Fabiano Ca, Moscow

X	I	I	I	I	I	I	I	Y
8	-	R	-	+	-	+	-	+
7	+	-	+	-	+	-	+	- 0
6	-	+	-	+	-	+	-	+
5	+	-	+	-	+	-	<del>k</del>	- 0
4	r	+	-	+	-	+	-	+
3	+	-	+	-	+	-	+	p 0
2	-	+	-	+	-	+	-	<del>k</del> 0
1	+	-	+	-	+	-	+	- 0
	x	a	b	c	d	e	f	g h y

Black wins. 59...|e4 Black does not allow the opponent's King to approach the pawn and prepares a cover for the King.

[The most natural move was 59...|a2 But here, White has a nice answer. 60.♣h4! He attacks the pawn and frees the g-file for the check. ♣g2? (60...|a4+! Returning to the game position is required.) 61.|g8+ ♣h1 This is a nice tactical opportunity, but White is not forced to take the pawn. 62.|g3 (62.♣xh3?? |h2+ 63.♣g4 |g2+ 64.♣f5 |xg8) 62...h2 63.♣h3 This is a draw. |a8 64.|b3 |h8+ 65.♣g3

|g8+ 66.♣f2 ; 59...|a1? was not enough because of 60.♣g4! |g1+ 61.♣f3 ] 60.♣f5 [The waiting strategy does not bring the desired effect. 60.|a8 ♣g1 61.|a1+ ♣f2 62.|a2+ |e2 ;The side checks also do not help. 60.|b2+ ♣g1 61.|b1+ ♣f2 62.|b2+ |e2 ] 60...|e2 The 4th rank is finally opened, but it is too late for a draw. 61.|g8 [Other lines are relatively easy - White can't stop the pawn. 61.♣f4 ♣g2 62.|g8+ ♣f1 63.♣f3 (63.|h8 h2 64.♣g3 ♣g1) 63...h2 64.|h8 |f2+ 65.♣e3 (65.♣g3 ♣g1) 65...♣g1 ] 61...|g2 62.|d8 |f2+ [White resigned because of 62...|f2+ 63.♣e4 (63.♣g4 ♣g2) 63...♣g1 64.|g8+ (64.|d1+ |f1) 64...|g2]

#### □ 10) Exercises A

■ Vassily Ivanchuk vs. Laurent, Beijing

X	I	I	I	I	I	I	I	Y
8	R	+	-	+	-	+	-	+
7	+	-	+	-	+	-	<del>k</del>	- 0
6	-	+	-	+	-	p	-	+
5	P	-	+	-	+	-	p	- 0
4	-	+	-	+	p	+	P	+
3	+	-	+	-	P	-	+	- 0
2	r	+	-	+	-	P	K	+
1	+	-	+	-	+	-	+	- 0
	x	a	b	c	d	e	f	g h y

How should Black play in this position? 44...|a1 Black should have locked down the white King on the Kingside. The only thing White can do is to play f2 - f3 and throw the King to the Queenside.

[In the game, the French player made a waiting move. 44...♣h7?? 45.♣f1 The King supports the pawn, and Black can't do anything against this. His main problem is the pawn structure on the Kingside. When the white King begins its

run to the Queenside, and Black takes on f2 , it is still far from real counterplay on the Kingside. ] **45.a6 ♖f7 46.f3** Nothing else to do. | **a2+ 47.♖g3 | a3** [Compared to the 47...exf3 line, Black forces the white pawn's advancement to e4 . ] **48.fxe4 | xe3+ 49.♖f2 | a3 50.♖e2 ♖g7 51.♖d2 | a4 52.♖c3** Sooner or later, White will be forced to sacrifice the e4 - pawn. | **xe4 53. | b8 | a4 54. | b6 f5** Delaying this breakthrough for a while is possible, but there is no reason to do so. **55.gxf5 g4** It is obvious that Black has enough counterplay for a draw. The whole line I mention here is not forced, and Black does not need to see this all when deciding to play 44...Ra1 !

#### □ 10) Exercises A

■ **Bogdan Bilovil vs. Christian,2022**

X	I							Y	
8-	+	-	+	-	+	-	+	0	
7+	-	+	-	+	-	♞	-	0	
6P	R	-	+	-	+	-	p	0	
5+	-	+	-	p	-	p	-	0	
4r	+	-	+	K	+	P	+	0	
3+	-	+	-	+	-	+	-	0	
2-	+	-	+	-	P	-	+	0	
1+	-	+	-	+	-	+	-	0[	
x	a	b	c	d	e	f	g	h	y

Where to move the King? **48.♖d5**

The King should hurry up and help the a-pawn. [ 48.♖f5? | f4+ 49.♖xe5 | xg4 **A)** Moving the pawn to the 7th rank liberates the black King. 50.a7 | a4 51. | b7+ ♖g6 52.♖d6 h5 53.♖c7 h4 54.♖b8 ♖f5 ( 54...g4?? 55. | b5 See the rook stops the pawn position from the theoretical part. ) 55.a8E | xa8+ 56.♖xa8 g4 Black wins the rook back. ; **B)** 50.♖d6 | a4 51.♖c6 | a2! Black takes all white pawns. 52.♖b7

| xf2 53.a7 | f7+ 54.♖a6 | xa7+ 55.♖xa7 g4 The white King is too far from the pawns. ; 48.♖xe5? | xg4 leads to the 48.Kf5 line. ] **48... | xg4 49.♖c6 | a4** [ There is no time to take the f2 -pawn. 49... | f4 50.a7 ] **50.♖b7** With the King cut off along the 6th rank, the passed h-pawn canâ€™t become the game's hero. **h5 51.a7 | xa7+ 52.♖xa7 h4 53.♖b7** White can even allow the black pawn to come to h2 and then play Rb1 - h1 and Rxh2 .

#### □ 10) Exercises A

■ **Alexander Grischuk vs. Maxime,Chess24.com**

X	I							Y	
8-	+	-	+	-	+	-	+	0	
7+	-	+	K	+	-	+	-	0	
6R	+	-	+	-	p	-	+	0	
5+	-	+	-	+	-	+	p	0	
4-	+	-	+	-	+	p	P	0	
3p	-	+	-	+	-	P	-	0	
2-	+	-	+	-	P	K	+	0	
1t	-	+	-	+	-	+	-	0[	
x	a	b	c	d	e	f	g	h	y

The black King just moved to d7 and left the f6 -pawn without defense. How should White react to this? **47. | a5** Capturing the f6 -pawn does not help White to get counterplay on the Kingside, while capturing the h5 -pawn immediately creates a passed pawn. White should carefully calculate if the rook can return to prevent the new Queen from appearing. [ 47. | xf6? Black is winning after this capture but the whole analysis takes a lot of place. For this reason, I mention only the main line here. | b1! 48. | a6 | b3 49. | a5 ♖c6 50. | xh5 Black's task is multifunctional - his King should approach the a-pawn, he needs to complicate the white rook's return, and he

should prevent the f2 -pawn move (in case of the f2 - and g4 -pawns exchanging, white has huge chances to draw the game thanks to a pair of connected pawns). ♖b5! 51. ♖h8 ♔b7! 52. ♖h7+ ♔a6 53. ♖h8 ♖a5!

54. ♖a8+ There is no other way to reach the a1 -square on time. ♔b5 55. ♖b8+ ♔a4! 56. ♖b1 ♖d5! 57. ♖h1 a2 58. h5 ♖xh5! 59. ♖xh5 a1 ♔ 60. ♖f5 The position looks drawish, but the endgame tablebase indicates that Black is winning. The plan is to defend on g4 and bring the King to e2 with the idea to play ... Qf1 and ... Qxf2 to get the winning King and pawn endgame. Here is the exemplary line. ♔d1 61. ♖f4+ ♔b3 62. ♖f8 ♔d5+ 63. ♔g1 ♔c3 64. ♖f4 ♔e6 65. ♔g2 ♔d2 66. ♖b4 ♔f5 67. ♖f4 ♔d5+ 68. ♔g1 ♔e6 69. ♔g2 ♔e2 70. ♔g1 ♔g6! 71. ♔g2 ♔c6+ 72. ♔g1 ♔c1+ 73. ♔g2 ♔f1+ 74. ♔h2 ♔xf2+ 75. ♖xf2+ ♔xf2 You can see even more lines in the main part of the course. ] **47... ♔c6** **48. ♖xh5 ♔b6** **49. ♖h8** The only move to reach the a-file on time. The h-pawn will help to save the game.

#### □ 10) Exercises A

■ Alexander Grischuk vs. Maxime, Chess24.com

(Diagram)

Black wins. **46... ♖a2** The preventive decision! Black prevents the f2 -pawn move (creating a passed pawn for White) and prepares ... Rxb5 - a5 . Black is going to direct the King to the a-pawn. White can try to take on h5 , but it is ineffective here because there is no follow-up after Rxb5 .

[ There is no plan in case of careless 46...a2??? 47. ♔h2 ; 46...♔e6? misses a win due to more than one idea. **A)** Surprisingly, White even has time to pick up both of the black Queenside pawns. 47. ♖xh5 ♖c1 48. ♖a5 ♖c3 49. ♖a4 ♔f5 Black has no

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	-	+	-	+	k	+	-	0
6-	+	-	+	-	+	-	+	0
5R	-	+	-	+	-	+	p	0
4-	+	-	+	-	+	p	+	0
3p	-	+	-	+	-	P	-	0
2-	+	-	+	-	P	K	+	0
1t	-	+	-	+	-	+	-	0
xa	b	c	d	e	f	g	h	y

winning chances after ( 49...♔d5 50. ♖xg4 ) 50. ♖f4+ ♔g5 51. ♖a4 ; **B)** 47.f4! White gets counterplay thanks to a passed pawn on the f-file (if Black does not take en-passant) or on the g-file (if Black takes on f3 and later White takes on h5 ). gxf3+ 48. ♔xf3 ♔d6 49. ♔g2 ♔c6 50. ♖xh5 Right on time. ] **47. ♖xh5 ♖c2** **48. ♖a5 a2** The black King is coming to the Queenside to fix the result, while White can't do anything on the Queenside.

#### □ 10) Exercises A

■ Nihal Sarin vs. Justin Wang #,2020)

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6-	+	-	+	k	+	-	+	0
5+	-	+	p	+	R	+	K	0
4-	+	-	P	-	+	-	P	0
3+	-	+	-	+	-	t	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0[
xa	b	c	d	e	f	g	h	y

White wins. **91. ♖e5+** White needed to organize the King's position on the g-file to free the way for the passed pawn. At first, pushing the King to the d-file was required.

[Nihal left the black King on e6 , and the position became equal. 91. | f4? | g1 ; 91. | g5? | h3 92. | g4 ♖f5 This is why the Re5 check is the correct move. ] 91... ♖d6 92. | g5 At second, kicking off the rook from the g-file. | h3 93. | g4 And finally, defending the h4 -pawn to prepare Kg6 . Black's pieces can't prevent this.

□ 10) Exercises A

■ Nihal Sarin vs. Justin Wang #,2020)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	k	+	-	+	0
6	-	+	-	+	-	+	K	0
5	+	-	+	p	+	-	R	p0
4	-	+	-	P	-	+	P	0
3	+	-	+	-	+	-	t	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h
y								

It seems that White wins both black pawns, but Black has an answer. Black to move.

90... | g4 Black takes on d4 with a draw. [ 90... | d3? 91. | xd5+ with symmetrical variations. ♖e6 ( 91... ♖c6 92. | c5+ ♖d6 93. | c4 ♖d5 94. | b4 ) 92. | e5+ ♖d6 93. | e4 ♖d5 94. | f4 ]

□ 10) Exercises A

■ Nihal Sarin vs. Justin Wang #,2020)

(Diagram)

White prepared Kg6 and the h-pawn pushing idea. How to cope with this? 92... | f1 On the g-file, the white King will not have a hiding square from the side checks. 93. ♖g6 | f6+ 94. ♖h7 ♖f5

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	+	-	+	0
6	-	+	-	+	k	+	-	0
5	+	-	+	p	+	-	K	0
4	-	+	-	P	-	+	R	P0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	t	- 0
x	a	b	c	d	e	f	g	h
y								

The simplest. The King attacks on d4 , and White can't avoid the drawish endgame 'pawn vs. rook.' 95. | g1 ♖e4 96. | d1 | f4 97.h5 | g4 Black is waiting. 98.h6 ♖e3 99. ♖h8 | g2 100.h7 ♖e4

□ 10) Exercises A

■ Nihal Sarin vs. Justin Wang #,2020)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	k	-	P0
5	+	-	+	p	+	-	+	0
4	-	+	-	P	-	+	R	k0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	r	+	0[
x	a	b	c	d	e	f	g	h
y								

The white passed pawn remained without sufficient support. How to help it? 98. | g3 Preparing Rh3 -shelter (from Rh1 ). All arising pawn endgames are losing for Black. | h1+ 99. | h3 | xh3+ [ 99... | g1 100.h7 ♖g7 101. | g3+ ; 99... | e1 100. ♖g4 | e4+ 101. ♖f3 | e8 102.h7 | h8 103. ♖f4 ] 100. ♖xh3 ♖g6 101. ♖g4 ♖xh6 102. ♖f5



☐ 10) Exercises A

■ Valeriy Aveskulov vs. Esteban, Budapest

```

XI | | | | | | | Y
8- + - R - + - + 0
7+ p + - + r p - 0
6p k p + - + - + 0
5P - P - + - + - 0
4- P - + - + - k 0
3+ - + - + - + - 0
2- + - + - + - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

How can White use their active King?

59. | h8+ The necessary check that puts the black King on the road of the g-pawn. ♖g3

60. | b8 g5 61. | xb7 | xb7+ The white King and pawns are ready to win the rook endgame if Black rejects the trade offer.

62. ♖xb7 g4 63. b5 The white Queen will appear on the board first.

☐ 10) Exercises A

■ Valeriy Aveskulov vs. Esteban, Budapest

```

XI | | | | | | | Y
8- + - + - + - + 0
7+ p + - + - p - 0
6- + - + - + k + 0
5P R + - + - + - 0
4- + - + - P K P 0
3t - + - + - + - 0
2- + - + - + - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

White wins. 59. f5+ The only winning path. If the King goes to the center, Black loses both pawns; if the King stays on the h-file, the white King is free to run to the

Queenside. ♖f6 [ 59... ♖h7 60. ♖f4 Going to the Queenside to take the b7 - pawn with the King. ] 60. | b6+ ♖e5 61. | xb7 | xa5 62. ♖g5 | a1 63. | e7+ ♖d6 64. | xg7 The endgame with the h- and f-pawns can be saved only when the King of the defending side is in front of the pawns.

☐ 10) Exercises A

■ Anton Filippov vs. J. Gonzale, Istanbul

```

XI | | | | | | | Y
8R + - + - + - + 0
7P - + - + p + - 0
6- + p + - + p + 0
5+ - + p + - + p 0
4- + - P - + k P 0
3+ - + - + - P - 0
2r + - + - P K + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

White wins. 44. | e8 | xa7 45. | e8 White checkmates in 1.

☐ 10) Exercises A

■ Anton Filippov vs. J. Gonzale, Istanbul

(Diagram)

The white King made a long run from g1 to h6 via b1 . Now it is time to end the game. White wins. 64. | b8 [White gives up the passed pawn to win the Kingside pawns. 64. | c8 with the same idea is also good. ] 64... | xa7 65. | b5+ ♖e6 66. ♖xg6 | a3 White can choose between Rb6 and Rf5 to win the second pawn. Black is lost. 67. | f5

X	I							Y
8	R	+	-	+	-	+	-	0
7	P	-	+	-	+	-	+	0
6	-	+	-	+	-	p	p	k0
5	+	-	+	-	+	k	+	p0
4	r	+	-	+	-	+	-	P0
3	+	-	+	-	+	P	P	-0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
								y

☐ 10) Exercises A

■ Anton Filippov vs. J. Gonzale,Istanbul

X	I							Y
8	R	+	-	+	-	+	-	0
7	P	-	+	-	+	-	t	-0
6	-	+	-	k	-	p	p	+0
5	+	-	+	-	+	k	+	p0
4	-	+	-	+	-	+	-	P0
3	+	-	+	-	+	P	P	-0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
								y

White wins. 60. | b8 | xa7 61. | b5#  
What a checkmate!

☐ 10) Exercises A

■ Magnus Carlsen vs. Fabiano Ca,London

(Diagram)

The game entered the decisive stage. How should Black play? 37... | a2+ This check secures the white King's access to the f3 - square. [ 37...♠xe4? The reflexive move seems ok, but White immediately gets the

X	I							Y
8	-	+	-	+	-	+	-	0
7	+	-	R	-	+	-	p	-0
6	p	+	-	+	-	+	-	0
5	+	-	+	-	k	P	+	p0
4	-	+	-	+	P	+	-	P0
3	t	-	+	-	+	-	P	-0
2	-	+	-	+	-	+	K	+0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
								y

winning position thanks to an in-between check (I guess Caruana just forgot about it). This check drives the black King back and guarantees a good position for the white King. 38. | e7+! This check decided the destiny of the whole match. ♠xf5

Moving to the d-file didn't make any sense. ( 38...♠d5 39. | xg7 ) 39. | xg7 The white King can hide from the checks on h3 . So, Black can't defend against the Rg5xh5 threat. The rest is simple. ] 38. ♠h3

Moving to f3 would have provoked new side checks. With the King on the Queenside (near the c1 -square), White will not have a chance to win because the lone rook cannot win both the g7 - and h5 - pawns (the g3 -pawn will be weak).

[ 38.♠f3 | a3+ 39.♠f2 | a2+ 40.♠e1 | a1+ 41.♠d2 | a2+ 42.♠c1 ♠xe4 43. | e7+ ♠xf5 44. | xg7 | g2 ] 38...♠xe4 39. | e7+ [After 39. | xg7 , Black can take on f5 with the rook. | f2! 40. | e7+ ♠d5! ( 40...♠xf5?? 41. | f7+ ) 41. | f7 ♠e5 ] 39...♠f3 Instead of caring for the pawns, Black begins an attack against the King. 40. | xg7 | a1 41.♠h2 | a2+

☐ 10) Exercises A

■ Valeriy Aveskulov vs. Miklos,Budapest

White wins. 51.h5 In the game, I allowed Black to play ... h7 - h5 and couldn't put

**gxf5** [ 59... | a5+ 60.♔d6 | a6+ 61.♔d7 ]  
**60.♔f6 | a8 61. | g7+ ♚h8** [ 61...♔f8  
 62.e7+ ♔e8 63. | g8+ ] **62.e7** Then the  
 rook goes to the bottom of the board, the  
 King moves on f7 , and the e-pawn  
 becomes the Queen that costs Black the  
 rook.

■ Evgeny Tomashevsky vs. Liviu-, Moscow

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	k	+	0
7R	-	+	-	+	-	t	-	0
6-	+	-	+	-	+	-	+	0
5p	-	+	-	+	-	+	R	0
4-	+	-	+	-	P	-	K	0
3+	-	+	-	+	-	+	P	0
2-	+	-	+	-	+	r	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
							y	

White wins. **44. ♖g5** Changing the pawn formation from the weak f- and h-pawns to unstoppable g- and h-pawns. A naive capture on a5 (with either of the rooks) would lead to a rather objectively drawish position. **♜2xg5** **45. ♖a8+** Tactical justification of the previous move. **♚h7**  
**46.fxg5**

## ■ Viswanathan Anand vs. Levon A, Moscow

(Diagram)

White wins. **60. | b7** A tactical motif - Black can't take on b5 because, from there, the rook can't give a check after Kf6 .  
[ The direct play for a checkmate does not give a good result. 60.♙f6? | f4+! 61.♚e5

■ Valeriy Aveskulov vs. Miklos, Budapest

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	k	+	0{
7+	R	+	-	+	-	+	p	0
6-	+	-	+	-	+	p	P	0
5+	-	+	-	P	-	+	r	0
4-	+	-	+	-	P	-	+	0
3+	-	+	-	k	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h y

55... | **xh6** Continuation of the previous variation. White wins. 56.♙e4 | **h1** 57.e6 Threatening Rb8 and e6 - e7 . | **a1** 58.♙e5 The King aims to invade on f6 . | **a4** 59.f5 MaKing a shelter for the King on the f-file.

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	<del>k</del>	-	+	O
7+	-	<del>R</del>	-	+	-	+	-	O
6-	<del>p</del>	-	+	-	+	K	+	O
5	<del>p</del>	P	+	-	+	-	<del>P</del>	O
4-	<del>t</del>	-	+	-	+	-	+	O
3+	-	+	-	+	-	+	-	O
2-	+	-	+	-	+	-	+	O
1+	-	+	-	+	-	+	-	O
x	a	b	c	d	e	f	g	h
								y

(61.♙g6 a4) 61...♚b4 62.♚b7 a4  
 63.♚xb6 a3 White can't stop the a-pawn  
 without losing the b5 -pawn. ] 60...♚xb5  
 61.♙f6 ♙e8 62.g6 ♚b1 63.♚b8+ ♙d7  
 64.g7 The white King is well placed for  
 future stopping of the opponent's passed  
 pawns.

□ 10) Exercises A

■ Martyn Kravtsiv vs. Dmitry Ko, Alushta

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	O{
7+	-	+	-	+	-	+	-	O
6-	+	-	+	-	+	-	+	O
5	<del>R</del>	-	+	-	+	-	+	O
4	P	+	K	+	-	+	-	O
3+	-	+	-	+	-	<del>p</del>	-	O
2-	+	-	+	-	+	k	+	O
1	<del>t</del>	-	+	-	+	-	+	O
x	a	b	c	d	e	f	g	h
								y

This game is well annotated and explained  
 by John Nunn in 'Nunn's Chess Endings'  
 (vol.2, page 39). Here I offer you to find  
 the win for Black in a position that might  
 have happened in the game. How does  
 Black win? 74...♙f3 The black King  
 should run to help the rook to stop the a-  
 pawn. [White has more than one drawish

way if Black moves the King to f2 .

74...♙f2? Here is just one of them. 75.♚f5+  
 ♙e3 76.♙b5 g2 77.♚g5 g1♙ 78.♚xg1  
 ♚xg1 79.a5 ♙d4 80.a6 ] 75.♙b4

[ From f3 , the black King is closer to the a-  
 pawn and the white rook if it checks.

75.♚f5+ ♙g4 ] 75...♙f4 An excellent  
 move! The King disturbs the rook coming  
 to the b-file and takes a better position for t  
 he run to the Queenside. [This is why  
 Black should put the King on f4 before  
 moving the g-pawn forward. 75...g2?

76.♚g5 g1♙ 77.♚xg1 ♚xg1 78.a5 ♙e4

79.♙c5! The King should shoulder the  
 colleague away. That wins a decisive tempo  
 for White. ( 79.♙b5? ♙d5 80.♙b6

♚b1+ ) 79...♚c1+ ( 79...♙e5 80.a6 ♚a1  
 81.♙b6 ♙d6 Transposition. ) 80.♙b6 ♙d5  
 81.a6 ♙d6 82.♙b7! ♚b1+ 83.♙c8

See the rook vs. pawn (to memorize) from  
 the theoretical part. ] 76.♚a8 g2 77.♚g8

g1♙ 78.♚xg1 ♚xg1 79.a5 ♙e5 80.♙c5  
 Here this trick no longer helps. ♚a1

81.♙b6 ♙d6 82.a6 ♚b1+ Black wins.

□ 10) Exercises A

■ Yu Yangyi vs. Bu Xiangzhi (9t, Danzhou

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	O
7+	-	+	-	+	-	<del>N</del> <del>k</del>	-	O
6-	+	-	+	-	+	P	+	O
5+	-	+	-	<del>p</del>	k	+	-	O
4-	+	-	+	-	+	-	+	O
3+	-	+	-	+	-	+	-	O
2-	+	-	+	-	+	-	+	O
1+	-	+	-	<del>t</del>	-	+	-	O
x	a	b	c	d	e	f	g	h
								y

White is an exchange down but their pawn  
 is more advanced. How to save the game?

66.♙xe5 The knight sacrifice helps White  
 to transfer to the drawish 'rook vs. pawn'

endgame that you can find in the theoretical part ( Underpromotion to the knight ).

[ In the game, Yu Yangyi could not find the right path. 66.♠h6+? ♔e6 67.♠f7 e4 68.♠g5+ ♔e7 69.♔h7 | h1+ 70.♔g8 e3 White resigned. ] 66...♔xe5 [ 66... | xe5 67.♔f7 | a5 68.g7 | a7+ 69.♔f8 ♔f6 70.g8♠+ ] 67.♔f7 | f1+ 68.♔e7 The black King can't help the rook. | a1 69.g7 | a7+ 70.♔f8 ♔f6 71.g8♠+ With a theoretical draw.

#### □ 10) Exercises A

■ Anton Korobov vs. Ian Nepomni, Rogaska Slatina

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	+	p	k	- 0
6	-	+	-	+	-	+	-	0
5	+	-	+	-	P	P	k	- 0
4	-	t	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	-	p	-	+	-	+	-	0
1	+	R	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

A short puzzle from the top-level game.

Black moves and wins. 44...f6+

Black sacrifices the pawn to put White into a zugzwang. 45.exf6+ [In the game, White left the pawn alive. 45.♔h5 fxe5 ]

45...♔f7 White does not have a good move.

46.♔h5 [ 46.♔h6 ♔xf6 47.♔h5 ♔xf5 ]

46...♔xf6

#### □ 10) Exercises A

■ Valeriy Aveskulov vs. Reb (Ch,2010)

This position might have appeared in my daily game on chess.com. White moves and wins. 10.♔d4 A back move that allows White to push the black rook away from the

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	k	0
5	+	P	+	K	+	-	+	p 0
4	-	+	P	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	p	t	-	+	-	+	-	0
1	R	-	+	-	+	-	+	0[
x	a	b	c	d	e	f	g	h
y								

perfect square (where it disturbs the b-pawn, defends the a2 -pawn, and is ready to play Rb1 when the h-pawn reaches the second rank). [ 10.♔c6? h4 11.b6 11.Kb6 is even slower. h3 12.b7 h2 13.♔c7 | b1 14.b8♠ h1♠ The right to move does not help White to win, the rook on a1 is passive. ] 10...h4 11.♔c3 | g2 12.b6 Black should move the rook down to the 8th rank to stop the passed pawns, then White simply takes the a2 -pawn and wins.

#### □ 10) Exercises A

■ Leinier Dominguez Perez vs. V,Thessaloniki

X	I	I	I	I	I	I	I	Y
8	-	+	-	k	-	+	-	0
7	+	-	+	-	+	R	+	0
6	-	P	-	+	p	+	p	0
5	+	-	+	-	+	-	+	0
4	-	k	-	+	-	P	-	0
3	+	-	+	-	+	-	P	p 0
2	-	+	-	+	-	+	-	t 0
1	+	-	+	-	+	-	+	0[
x	a	b	c	d	e	f	g	h
y								

Dominguez didn't have enough time to find the forcing winning way. Can you find it? 53.b7 [In the game, White first put the rook on the h-file, and the position became

equal. 53. | h7? ♖c8 ] 53... | b2+ 54. ♖c3 | b1 55. | h7 h2 White, despite being unable to prevent ... Rxb7, can still win. 56. | xh2 | xb7 57. | h8+ ♖d7 58. | h7+ ♖c6 59. | xb7 ♖xb7 60. ♖d4 ♖c6 61. ♖e5 ♖d7 62. ♖f6 With a win in the pawn endgame.

#### □ 10) Exercises A

■ Andrei Volokitin vs. Tal Baro, 2019)

X	I	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+	0{
7	+	r	+	-	+	p	k	-	0
6	-	+	-	+	-	+	-	p	0
5	+	-	+	-	+	-	+	-	0
4	-	+	-	+	-	+	P	+	0
3	+	P	+	-	+	R	P	-	0
2	R	P	-	+	r	+	P	+	0
1	+	-	+	-	+	-	+	K	0
x	a	b	c	d	e	f	g	h	y

Sometimes, three extra pawns can't even guarantee a draw. Black moves. 37... | e1+ 38. ♖h2 | d7 [Only d7 is a good square for the rook's transfer to the first rank. The problem is that Black can't check (the c3 - square is defended) at the end of the following line. 38... | c7? 39. g5 h5 40. g4 h4 41. | h3 | cc1? (Black can maintain balance by rejecting the idea of checkmating the white King. 41... | c2 ) 42. | xh4 | h1+ 43. ♖g3 ] 39. g5 The white King wants to escape via the g3 - square (after g3 - g4 ). h5 40. g4 h4 The luft is locked down. 41. | f2 [ 41. | h3 | dd1 42. | xh4 | h1+ 43. ♖g3 | d3+ Black wins the rook. ] 41... | dd1 42. g3 | h1+ 43. ♖g2 h3+ 44. ♖f3 | hf1 White resigned because there was no way to stop the pawn promotion.

#### □ 10) Exercises A

■ O. Matveeva vs. Lei Tingjie (,Moscow

X	I	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+	0{
7	+	-	+	-	+	p	k	-	0
6	-	+	-	+	p	+	-	R	0
5	+	-	+	-	P	-	P	-	0
4	p	+	-	r	-	+	-	P	0
3	+	-	+	-	+	-	k	-	0
2	-	+	-	+	-	+	P	+	0
1	+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h	y

Earlier, the white rook made a dangerous journey to pick up the pawn on h6, and now it hopes to return on time to stop the a-pawn. How to destroy this plan? 40... | f4 Black puts a barricade on the rook's way. The pawn is unstoppable. 41. ♖xf4 a3 42. | f6 a2 43. g6 fxg6 44. ♖g5 a1♞ 45. | xg6+ ♖f7

#### □ 10) Exercises A

■ Kassa Korley vs. Andrey Gorov, Charlotte

X	I	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	+	0
7	+	-	+	-	+	-	+	-	0
6	-	k	-	+	-	+	r	+	0
5	p	-	+	R	+	-	+	-	0
4	K	+	-	+	-	+	p	+	0
3	+	-	+	-	+	-	+	-	0
2	-	P	-	+	-	+	-	+	0
1	+	-	+	-	+	-	+	-	0[
x	a	b	c	d	e	f	g	h	y

The game comes to an end. White needs the last accurate decision. 63. b4 [In the game, White took the pawn and lost due to an unexpected King's retreat. 63. | b5+?? ♖a7!

White can't take the a-pawn, and Black wins. 64. | e5 ( 64. ♖xa5 g3 ; 64. | xa5+ | a6 ) 64...g3 White resigned. ] 63...axb4 64. ♖xb4 g3 65. | d1 g2 66. | g1

□ 10) Exercises A

■ Aleksandra Goryachkina vs. Ta,Kazan

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	R	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	+	-	+	-	+	-	+	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
	x	a	b	c	d	e	f	g

How does White proceed? 49.e5+ ♕e6 50. | a6+ ♕f7 51. ♕g5 | g1+ [ Sadly for Black, there is a losing pawn endgame if she takes the f3 -pawn. 51... | xf3 52. | f6+! | xf6 53.exf6 ] 52. ♕h6 Black has no saving chances after losing the g6 -pawn. Here is how the game ended. | h1 53. | xg6 | xh4 54. | f6+ ♕e7 55. ♕g5 | h1 56. | h6 | g1+ 57. ♕f5 | h1 58. | h7+ ♕f8 59.e6 ♕g8 60. | a7 h4 61. | a8+ ♕g7 62.e7 Black resigned.

□ 10) Exercises A

■ Dmitriy Kushko vs. Dmytro Bon,2021)

(Diagram)

How to convert the minimal material advantage into the whole point? 74. | e2+ [ In the game, White got not enough time to find the winning idea. 74. ♕f6? | f1 The f4 - and h2 -pawns exchange leads to

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	+	-	+	-	+	-	+	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
	x	a	b	c	d	e	f	g

the simplest theoretical position. 75. | xh2 | xf4+ 76. ♕e5 | f1 77. | h8+ Agreed to a draw. ] 74... ♕d7 75. ♕e5 Here we can see a good example of the perfect place for the rook. From e2 , it pins the black rook to h1 and disturbs it to give the check. All Black can do now is to exchange the d- and h-pawns which leads to the losing one-pawn rook endgame (the black King is on the long side, and the pawn has crossed the middle of the board). | d1 [ 75... ♕d8 76. ♕e6 ] 76. | xh2

□ 10) Exercises A

■ Eldar Gasanov vs. Mykhailo Ol,Minsk

(Diagram)

To play strongly in the endgames one needs to stay aware of all possible technical tricks. White moves and wins. 77. | e6 It is time to recall the cut off along a rank technique (see the corresponding position in the theoretical part). The black King remains out of the fight, and White advances the pawn. [In the game, White had one more chance to win after the position repeated. 77. | f4? | e8+! 78. | e4 | a8? But still failed to use the chance. ( Black should have prevented Re6 , d5 play. 78... | d8! 79. | e6 ♕f5 ) 79. ♕f3?

X	I	I	I	I	I	I	I	Y
8	r	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	+	-	+	-	+	-	<b>k</b>	0
4	-	+	-	<b>P</b>	<b>R</b>	+	-	0
3	+	-	+	-	<b>k</b>	-	+	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x a b c d e f g h y								

| a3+ 80. | e3 | xe3+ 81. ♖xe3 ♜f5  
 82. ♜d3 ♜e6 Draw. ] 77... ♜f5 78. d5 | a4  
 Using the analogic motif does not help  
 because no one will stop the pawn.  
 [ The side checks technique also can't save  
 Black because there are only two files  
 between the rook and the pawn. 78... | a3+  
 79. ♜d4 | a4+ 80. ♜c5 | a5+ 81. ♜c4  
 | a4+ 82. ♜b5 ] 79. | e8

#### □ 10) Exercises A

■ Abhimanyu Mishra vs. Amin Tab, Wijk aan Zee

X	I	I	I	I	I	I	I	Y
8	-	<b>k</b>	<b>n</b>	+	-	<b>R</b>	-	0
7	+	-	+	-	+	-	+	0
6	<b>K</b>	<b>P</b>	-	+	<b>P</b>	+	-	0
5	<b>P</b>	-	+	<b>p</b>	+	-	+	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	<b>t</b>	-	+	0
x a b c d e f g h y								

White has many passed pawns, but Black  
 has an extra knight and their own passed  
 pawn. Precise calculation is required. White  
 moves and wins. 72. | xc8+ Distracting the  
 black King from the a7 -square decides the  
 game. [In the game, White didn't put any

problems before Black. 72. | f6 d4 73. b7  
 d3 74. bxc8 ♖+ ♜xc8 75. | f8+ ♜c7  
 76. | f7+ ♜c8 77. | f8+ ♜c7 78. | f7+ ♜c8  
 79. | f8+ Draw. ] 72... ♜xc8 73. ♜a7 | b1  
 74. a6 d4 75. b7+ ♜c7 76. e7 ♜d7  
 77. ♜a8 Here and on the following moves,  
 it is possible to include the e8=Q move. d3  
 78. a7 d2 79. b8 ♖ | xb8+ 80. axb8 ♖ d1 ♖  
 81. e8 ♖#

#### □ 10) Exercises A

■ Hannes Stefansson vs. Reynald, Winnipeg

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	<b>R</b>	0 {
7	+	-	+	-	+	<b>p</b>	<b>K</b>	0
6	-	+	-	+	-	<b>P</b>	-	0
5	+	-	+	-	<b>P</b>	<b>k</b>	+	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	<b>r</b>	+	0
1	+	-	+	-	+	-	+	0
x a b c d e f g h y								

White wants to take the f7 -pawn and enter  
 the winning one-pawn endgame. Black  
 moves and saves the game. 79... | a2  
 [ The rook goes for the side checks.  
 79... | b2 and Rc2 are equally good. White  
 has even two lines that look promising, but  
 Black has what to answer to both of them. ;  
 In the game, Black decided to take the e5 -  
 pawn with the rook. 79... | e2?? 80. ♜g7  
 | xe5 81. ♜xf7 Here, both of the rooks are  
 placed ugly but for Black, which is a bigger  
 problem. | a5 82. ♜g7 Nothing can stop  
 the white pawn. ] 80. | e8 Leads to a more  
 challenging puzzle for Black. [ 80. ♜g7  
 ♜xe5 81. ♜xf7 ( 81. | e8+ ♜f5 82. ♜xf7  
 | a6 ) 81... ♜f5 Black wants to check from  
 a7 or to play ... Ra6 (after ... Re8 ). The  
 awkward position of the white rook does  
 not allow White to think up something



smart. ] 80... | g2 81. | e7 | g5

[ The g5 -square is only good for the rook because the King can defend it there after taking the f6 -pawn. 81... | g1?? 82. | xf7 ♖xe5 83. | g7! | h1+ ( 83... | f1 84.f7 ♖e6 85.♖g8 ) 84.♖g6 ] 82. | xf7

[ Moving the King to h5 makes no sense because Black will have there a mating motif. 82.♖h6 | g6+ 83.♖h5 | g1 ]

82...♖xe5 83.♖h6 [ 83. | g7 ♖xf6 Here is the point of placing the rook on g5 ! ] 83... | g1 With the King on h6 , Black has more defending resources. 84. | g7 | f1 85.f7 ♖e6 No Kg8 move! 86.♖g6 | f6+ 87.♖h7 | xf7

#### □ 10) Exercises A

■ Jose Raul Capablanca vs. Savi, New York

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	p	-	p	-	+	-	+	R0
6	-	p	r	+	-	+	p	+0
5	+	-	+	p	+	n	P	-0
4	P	+	-	P	-	P	-	+0
3	+	-	P	L	+	K	+	-0
2	-	+	-	+	-	+	-	+0
1	+	-	+	-	+	-	+	-0
x	a	b	c	d	e	f	g	h
y								

As I promised in the comments to the Gelfand - Wang Hao game, I offer you to recall (or, if you don't know this, to solve) the position from one of the most famous Capablanca's rook endgames. White moves and wins. 34. ♗xf5 gxf5 35. ♖g3

The great Cuban sacrificed two pawns to bring his King to f6 . | xc3+ 36.♖h4 | f3 37.g6 | xf4+ 38.♖g5 | e4 39.♖f6 Black is hopeless. Here is the text of the rest of the game (Tartakower definitely could resign much faster). ♖g8 40. | g7+ ♖h8 41. | xc7 | e8 42.♖xf5 | e4 43.♖f6

| f4+ 44.♖e5 | g4 45.g7+ ♖g8 46. | xa7 | g1 47.♖xd5 | c1 48.♖d6 | c2 49.d5 | c1 50. | c7 | a1 51.♖c6 | xa4 52.d6

#### □ 10) Exercises A

■ Nihal Sarin vs. Justin Wang #,2020

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0{
7	+	-	+	-	+	-	+	0
6	-	+	-	R	-	+	K	+0
5	+	-	+	-	+	-	+	-0
4	-	+	k	p	-	+	-	+0
3	+	-	+	-	+	-	+	-0
2	-	+	-	+	-	+	-	+0
1	+	-	+	-	+	-	+	-0
x	a	b	c	d	e	f	g	h
y								

Analysis position. I guess, this position might have been a subject of some puzzle (but I don't know it). I faced it during the analysis and liked the idea that arose here. Black to move. 106...♖d3 The defending King should disturb (if possible) the opponent's King approaching the pawn. [ The pawn move loses. 106...d3? 107.♖f5 ♖c3 108.♖e4 d2 109.♖e3 ] 107.♖f5 ♖e3 Now, the play transfers to the underpromotion to the knight position from the theoretical part of the course. 108. | h6 [ 108.♖e5 d3 109. | h6 d2 ] 108...d3 109. | h3+ ♖e2 [ 109...♖d4?? 110.♖f4 d2 111. | h1 ♖d3 112.♖f3 ♖c2 113.♖e2 ] 110.♖e4 d2 111. | h2+ ♖e1 112.♖e3 d1 ♗+ White can't win here.

#### □ 11) Exercises B

■ Alireza Firouzja vs. Shakhriy, 2021

How can Black save this position? 48... | f3 Psychologically, it is hard to consider the exchange offer moves in the position

XI	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	R	-	+	O{	
7+	-	+	-	+	-	+	-	O	
6-	+	-	+	-	+	-	+	O	
5+	-	+	-	k	-	+	-	O	
4-	+	-	+	p	+	-	+	O	
3+	r	+	-	+	-	P	-	O	
2-	+	-	+	-	P	-	+	O	
1+	-	+	-	+	K	+	-	O	
x	a	b	c	d	e	f	g	h	y

without a pawn. Often even the grandmasters leave such moves aside. [ Black loses the pawn endgame in the following line. 48...e3? 49. | e8+ ♖d4 50. | xe3 | xe3 51.fxe3+ ♜xe3 52.♙g2 ♜e4 53.♙h3 ♜f5 54.♙h4 ;The game continued 48...♙d4? 49.♙g2 White is winning because Black can't stop the g-pawn march. ] 49. | e8+ The King's retreat is again not a simple choice. [Black easily holds a draw in the pawn endgame without a pawn. 49. | xf3 exf3 50.♙e1 ( 50.♙g1 ♜f5 51.♙h2 ♜g4 ) 50...♙e4 51.♙d2 ♜d4 52.♙c2 ( 52.g4 ♜e4 53.g5 ♜f5 54.♙e3 ♜xg5 55.♙xf3 ♜f5 ) 52...♙c4 ] 49...♙d4 [ 49...♙f5? 50.♙g2 | a3 51. | f8+! White forces the black King to make a choice. ♙g5 ( 51...♙e5 52.♙h3 Again leads to the game text scenario. ) 52. | f4 e3 ( 52... | a4 Here, the white King helps the rook to win the pawn. 53.♙f1 ) 53.f3 White can't win the endgame if allowing one of the pawns to be exchanged. In the main part of the course, I provide a detailed analysis of this position, but for the exercises chapter, it is enough to understand that this position is bad for Black, while the construction with the King on d4 and the rook on f7 holds the position. ] 50.♙g2 | f7 Such a setup allows Black to hold the position. The white King can't move forward because of pressure on the f2 -pawn; the white rook

can't seriously help; the pawn g3 can't go further than g4 not to be lost. 51.g4 ♜d5 52.♙g3 [ 52.g5 | g7 ] 52... | f3+

# 11) Exercises B

Robert Rabiega vs. Pentala Ha,Dresden

XI	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	+	-	+	O	
7+	-	+	-	+	-	+	-	O	
6-	+	-	+	-	+	-	+	O	
5+	-	+	-	+	-	p	-	O	
4-	+	-	k	-	R	-	+	O	
3+	-	+	-	+	-	+	-	O	
2-	+	-	+	-	+	-	+	O	
1+	-	+	-	r	-	+	-	O[	
x	a	b	c	d	e	f	g	h	y

Where to move the rook? 84. | e4  
At first, White provides the King with access to the e-file. [ 84. | f2? ♙g6 Black is winning here because the white King is cut off on the long side, and there are only two ranks between the pawn and the white rook, which is insufficient for the frontal checks (see the frontal checks position in the theoretical chapter). ] 84... | f1 85. | e6 Then the rook cuts off the opponent's King. Black can't win even with the white King on the c-file. | d1+ 86.♙c3 ♜f7 87. | h6 | d8 88.♙c2 White is waiting. Black has nothing to improve. It is time for the pawn. g4 The second key moment in this puzzle. 89. | h4 g3 [The white King comes right on time if Black defends the pawn with the rook. 89... | g8 90.♙d2 g3 91. | h1 ♜f6 92.♙e3 ] 90. | f4+ White loses without this check. [ 90. | g4?? | g8 ] 90...♙e6 91. | g4 White wins the pawn.

☐ 11) Exercises B

■ Alexander Morozevich vs. Vlad,Moscow

```

XI | | | | | | | Y
8R + - + - + - + 0{
7P r + - + - + - 0
6- + - + K + p p 0
5+ - + - + P + - 0
4- + - + - + k + 0
3+ - + - + - + - 0
2- + - + - + - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

The f-pawn runs to the promotion square. How to stop it? 54...♙g5 The black King should stay in touch with the f6 -square. [ 54...g5?? 55.f6 | b6+ 56.♙e7 | b7+ 57.♙e8 ] 55.f6 [ 55.fxg6 | g7 This position would have been drawn even without the h-pawn. See the Vancura Defense position to recall how this works. ] 55... | b6+ 56.♙e5 [With the King on g5 , the march of the white King to the 8th rank can become a catastrophe for White. 56.♙e7 | b7+ 57.♙e8?? ♙xf6 No check from f8 . ] 56... | b5+ 57.♙d6 | b7 White can't make any progress.

☐ 11) Exercises B

■ Magnus Carlsen vs. Wang Hao #,2013)

(Diagram)

How does Black win? 58... | f3 After calling the white King on e4 , Black will have the ... f6 - f5 (check!) threat. 59.♙e4 | a3 The white pieces are horribly placed and can't save the f4 -pawn. 60.f5+ [ 60. | b5 f5+ 61.♙d4 | a4+ 62.♙e3 | e4+ ] 60...♙d6 White has no defense against Ra4 , Ke5 idea.

```

XI | | | | | | | Y
8- + - + - + - + 0{
7+ - + - + - + - 0
6- + - + k p - + 0
5+ - + - + - + R 0
4- + - k - P p P 0
3+ - + - + - r - 0
2- + - + - + - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

☐ 11) Exercises B

■ Magnus Carlsen vs. Wang Hao #,2013)

```

XI | | | | | | | Y
8- + - + - + - r 0
7+ - + - + - + - 0
6- + - + - + - + 0
5+ - + - + - + - 0
4- + - + k p p + 0
3R - + - + - P - 0
2- + - k - + - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

The white King is aside from the main scene but can still return to it on time. How to do this? 76.♙e1 [To understand why 76.♙e1 helps White to save the game we need to see how Ke2? loses. f3! Check! 77.♙f2 | h2+ 78.♙f1 | g2 The black King escapes from the checks. 79. | a4+ ♙f5 80. | a5+ ♙e6 81. | a6+ ♙d5 82. | a5+ ♙c6 83. | a6+ ♙b5 Two extra pawns guarantee Black a win. ; 76. | a4+? ♙f3 77. | xf4+ ♙xg3 The defending side can't hope for a save if the knight's pawn has gone over the middle of the board, and his King is not in the corner. ; 76.gxf4? The trickiest false line is here. | h3! This move is easy to

blunder. (The white King is on time after 76...♙xf4? 77.♙e2 ♔h2+ 78.♙f1 ) 77. ♔a4+ ♙f3 The f4 -pawn does not help in fighting against the g-pawn. 78.f5 g3 79.f6 ♔h5 ] 76... ♔h3 [The black King can't leave the g-pawn alone in case of 76...f3 77. ♔a4+ ♙f5 78. ♔a5+ ♙e6 ( 78...♙f6 79. ♔a6+ ♙f7 80. ♔a7+ ) 79. ♔g5 ♔h1+ 80.♙f2 ♔h2+ 81.♙f1 ; 76...fxg3 77. ♔xg3 ♙f4 **A)** The awkward rook's position helps Black to win in case of careless 78.♙f2?? ♔h2+ 79. ♔g2 ♔h1 80. ♔g3 ( 80.♙e2 g3 ) 80... ♔f1+ ; **B)** 78. ♔a3 ] 77.♙f2

# 11) Exercises B

■ Magnus Carlsen vs. Wang Hao #,2013)

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	-	+	-	+	-	+	-	0
6-	+	-	R	-	+	-	P	0
5+	-	+	-	+	p	+	-	0
4-	+	-	+	-	+	p	+	0
3+	-	+	-	+	-	P	r	0
2-	+	-	p	-	+	K	+	0
1+	-	+	k	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

The black rook is out, the white rook controls the d-pawn and is ready to give checks once the King leaves the d1 -square. Draw? No! Find the win! 71...f4

The mechanism that allows Black to bring the rook into play. The engine shows that the other moves are also winning. But they don't work if Black does not use this idea (sooner or later). 72.gxf4 ♙e2

73. ♔e6+ ♔e3 74. ♔xe3+ ♙xe3

White can promote the pawn but it no longer matters. 75.h7 d1♙ 76.h8♙ ♙f3+ 77.♙g1 ♙f2+ 78.♙h1 ♙f1+ 79.♙h2 g3+ The final touch. Black wins the Queen;

White resigned. [Kxg3 79...♙g1+ Kh4 Qh2+ Kg5 Qxh8-+ ]

# 11) Exercises B

■ Arkadij Naiditsch vs. Erwin L,2011)

X	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0{
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5+	-	+	-	+	p	p	p	0
4-	t	-	+	-	+	-	+	0
3+	P	k	-	+	P	k	P	0
2-	R	-	+	-	+	P	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

Where to move the rook? 46... ♔b6

Here I offer you a quote from Nunn's Chess Endings (Volume 2, page 49): 'One of the most common errors in rook endings with few pawns involves the concept of checkKing distance. In many positions, it is important to have your rook positioned at the maximum possible distance from the enemy King. The reason is that a common method of stopping a barrage of rook checks is for the King to approach the rook. It follows that when you are checkKing from the opposite side of the board, the King has to go a long way to stop the checks. Thus in many positions, having the maximum possible checkKing distance is an advantage. This applies especially in positions of rook and pawn vs. rook, which many textbooks examine quite carefully. The idea of securing the maximum checkKing distance occurs so often that it becomes a reflex to move the rook as far away from the enemy King as possible. The trouble is that in endings where both sides have pawns, there may be reasons why the rook shouldn't go to the far edge of the board, and in this

case, the reflex action can be wrong.' Returning to the game position, the reflexive move would be ... Rb8 (to move the rook as far as possible) followed by ... g5 - g4, ... Kh2, ... g4 - g3, and ... Rf8 - f2. But if Black plays ... Rb8, White can advance the pawn too far to disable the ... Rf8 - f2 maneuver. Black should choose from other squares on the b-file to get enough time for the ... Rf2 idea. [ 46... | b8? 47.b4 g4 48.hxg4 hxg4 49.fxg4 fxg4 50.b5 ♖h2 51.b6 g3 52.b7 And Black doesn't get an opportunity to play ... Rf8 - f2. ♖g1 53.♖d4 ♖h2 54.♖d5 | xb7 ( 54...♖g1 55.♖c6 ) 55. | xb7 ♖xg2 56.♖e4 ; 46... | b7? is also not enough 47.b4 g4 48.hxg4 hxg4 49.fxg4 fxg4 50.b5 ♖h2 51.b6 g3 52.♖d4 | f7 53.b7 ] **47.b4 g4 48.hxg4 hxg4 49.fxg4 fxg4 50.b5 ♖h2 51.♖d4 g3 52.♖c5 | f6** Right on time! **53.b6 | f2 54. | b1 ♖xg2 55.b7 | f8 56.b8♙ | xb8 57. | xb8 ♖f2**

# □ 11) Exercises B

■ David Navara vs. Nikolai Kaba, Khanty-Mansiysk

```

X| | | | | | | Y
8- + - + - + - + 0
7+ - + k + p + - 0
6- + - + - + p + 0
5+ - P - R - k p 0
4- + - + - + - P 0
3+ - + - + - P - 0
2- + r + - P - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

White has an extra pawn and an active King, but what to do with the f2 -pawn? **51. | e4** A fantastic move! Besides leaving the f2 -pawn, White additionally offers Black to take the c5 -pawn. The main goal is to organize the attack on the weakest black

pawn ( f7 ). For this, White needs to have the Rf4 move in the pocket. [ 51.f4? | c3 ; 51.f3? | c3 ] **51... | xc5+ [ 51... | xf2 52. | f4!** The point of the previous move. | g2 White wins all the pawns in the pawn endgame. ( 52... | xf4 53.gxf4! ♖e6 54.c6 ♖d6 55.♖f6 ) 53. | xf7+ ♖e6 54. | f3 ] **52.♖h6 [ 52.♖f6? | f5+ 53.♖g7 | xf2 ] 52... | f5 53.f4** [Even the King and pawn endgame is winning for White after 53. | f4! **A)** After 53... | xf4 54.gxf4 Black has no a defense against the Kg5 , f4 - f5 plan. ♖e6 ( 54...♖e7 55.♖g5 ♖e6 56.f3 ♖e7 57.f5 gxf5 58.♖xf5 ) 55.♖g5 ♖e7 56.f5 gxf5 57.♖xf5 f6 58.♖g6 ; **B)** 53...♖e6 54. | xf5 ♖xf5 55.♖g7 ♖e6 The win is very instructive in this position. I offer you to train in finding it. ( 55...f6 56.♖h6 ) 56.♖f8! ♖f6 Black can't move the f7 - pawn because of Kg7xg6 . 57.f3 ♖e6 58.g4 **B1)** 58...♖f6 59.g5+ ♖e6 60.f4 ♖f5 ( 60...f6 61.♖g7 ) 61.♖xf7 ♖xf4 62.♖xg6 ; **B2)** 58...hxg4 59.fxg4 ♖f6 60.♖g8! The simplest. White plays h4 - h5 against any move. ♖e7 ( 60...♖e6 61.h5 ; 60...g5 61.h5 ) 61.h5 ] **53...♖d6 [ 53... | a5 54. | e3!** The precise move that stops ... Ra3 . White's next moves are Kg7 , Kf8 (if Black plays ... Rf5 ), and Re3 - e7xf7 . ] **54.♖g7 ♖d7 55.♖f8** This is the point; Black can't defend against Re7xf7 . **♖d6 56. | e7 f6 57.♖f7**

# □ 11) Exercises B

■ Alexander Grischuk vs. Maxime, Chess24.com

(Diagram)

At first sight, there is no way to stop the march of the h-pawn. But White has a fantastic defensive resource. Black moves and holds the position. **51.f4** As we will see, it is important to defend the e5 -square. [ 51.f3?? ♖g6 ] **51...♖g6 [ 51...h2?**

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	R	-	+	-	+	-	+	0
4	-	+	-	+	-	+	K	+
3	+	-	+	-	+	-	P	p
2	p	+	-	+	-	P	-	+
1	r	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

A risky move that luckily does not lose. 52. | h5+ ♠g6 53. | xh2 White can't advance forward without the exchange of a2 - and g3 -pawns. ♠f6 54.f5 ♠f7 55.♠g5 | g1! 56. | xa2 | xg3+ ] 52. | g5+ The black King can't avoid the checks without crossing the e-file. ♠f6 53. | f5+ ♠e6 54. | e5+ Here is the point of 51.f4 . ♠d6 55. | e2 Black has no further opportunities to play for a win.

#### □ 11) Exercises B

■ Nodirbek Abdusattorov vs. Jan,2021)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	R	p
6	-	p	-	+	-	+	-	0
5	+	-	p	-	K	-	+	0
4	-	+	P	+	-	+	-	0
3	+	-	+	-	+	P	+	0
2	-	+	-	+	-	K	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

Black wins. 37...♠d4 Black should have led his King forward (to d3 ) to avoid the white King's improvement. The c4 -pawn will be taken with the rook. [In the game, Black took the pawn and allowed his

opponent to escape. 37... | xh4? 38. | b7 ♠d4 39. | xb6 ♠xc4 40.♠e3! White has time to push his last pawn to the 7th rank. This will not give Black a chance to promote his c-pawn. The extra black pawn on h7 does not matter because Black can't push both pawns simultaneously. Let me show you here only the game text. The main part of the course contains a detailed analysis. | h1 41.f4 ♠c3 42.♠e2 c4 43.f5 | h5 44. | f6 ♠c2 45.♠f3 c3 46.♠g4 | h1 47. | f7 ♠b2 48. | b7+ ♠c1 49.f6 | f1 50.f7 h6 51.♠h5 | f6 52. | c7 c2 53. | d7 For 15 moves, Duda was trying to win the game, but Abdusattorov gave him no chances. ] 38. | g4+ ♠d3 Black wins thanks to the ... Rh6 - d6 - d4 idea.

#### □ 11) Exercises B

■ Fabiano Caruana vs. Vladislav,Chess.com

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	K	+
7	+	R	+	-	+	-	+	p
6	-	P	-	+	-	+	-	0
5	+	-	+	-	+	-	p	-
4	-	+	-	+	-	+	P	+
3	+	r	+	-	+	-	+	0
2	-	+	-	+	-	+	K	P
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

How can Black save this position? 44...♠f8 Black plans to bring the King to d8 (!), and then the rook can take the h-pawn. If the King makes one odd move (from d8 to c8 ), White moves the rook to c6 (thanks to a check from c7 ). If the King stops earlier, the white rook moves to c7 , followed by b6 - b7 and Rc8 . Moreover, Black should be quick with this plan because a minimal delay makes it ineffective. [ 44...h6?

Black has no time for this move. 45.♙f2 ♘f8 46.♙e2 ♘e8 47.♙d2 ♙d8 ( 47... ♚b2+ 48.♙c3 ♚xh2 49. ♚h7 ) 48.♙c2 ♚h3 49. ♚c7! It is vitally important not to allow the black King to come to c8 ! ( 49. ♚h7? ♙c8 ) 49... ♚xh2+ 50.♙c3 ♚h1 ( 50... ♚g2 51. ♚c4 ) 51.♙d4 ♚b1 52.♙c5 Then ... Kc6 - b7 and the pawn promotes into a Queen. ] 45.♙f2 ♘e8 46.♙e2 ♙d8 47.♙d2 ♚b2+ Right on time! 48.♙c3 ♚xh2 49. ♚g7 ♙c8

# 11) Exercises B

■ Anton Filippov vs. J. Gonzale,Istanbul

X	I	I	I	I	I	I	I	Y
8	R	+	-	+	-	+	-	0
7	P	-	+	-	+	r	+	0
6	-	+	-	♙	-	+	-	0
5	+	-	+	-	+	k	p	p
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	P	P	-
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

Black defends with the Vancura idea (the rook attacks the pawn from a side). But with the pawn on a7 , it is not so strong because any check will be deadly for Black. White wins. 61.♙d5 [It is easy to find out that the black rook can't move because of Rf8+ . But Black's problem is that the King also can't move back to f6 because of g3 - g4 . So, White should pass a turn to the opponent. For this purpose, 61.♙c6? looks good, but in this case, Black plays h4 62.g4+ ♙f4 63.♙b6 ♚f6+ with counterplay. So, the first move should be near the e6 -square. ] 61... ♚d7+ [ 61...h4 62.g4+ ♙f6 ( 62...♙f4 63.♙e6 ) 63.♙c6! Leads to the main line. ] 62.♙c6 ♚f7 The rook should cover the f-file (to prevent

Rf8 ). 63.♙d6 A zugzwang! h4 [ 63...g4 64.fxg4+ hxg4 65.♙c5! The shortest winning way. The King goes to b6 , avoiding the ... Rf6 check. ♙f6 ( 65... ♚c7+ 66.♙b6 ) 66.♙b6 ; 63...♙f6 64.g4! h4 65.♙c6 Also leads to the main line. ] 64.g4+ ♙f6 [ 64...♙f4 65.♙e6 ] 65.♙c6 h3 66.♙b6 h2 67. ♚h8

# 11) Exercises B

■ Magnus Carlsen vs. Viswanatha,Shamkir

X	I	I	I	I	I	I	I	Y
8	R	+	-	+	-	+	-	0
7	+	-	+	-	+	p	+	0
6	P	+	-	+	-	♙	p	0
5	+	-	+	p	+	-	+	p
4	-	+	-	+	-	+	-	P
3	t	-	+	-	P	-	+	0
2	-	+	-	+	-	P	P	♙
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

Magnus Carlsen didn't allow Anand to apply this idea. Black moves and equalizes.

40... ♚a4 41.g3 d4 This pawn exchange leads to the typical '3 vs. 3 + a-pawn' endgame, where Black has everything well settled to achieve a draw that is well described in the endgame manuals. To see what happens if the d5 -pawn remains on the board, see the annotations to the game in the main part of the course. Speaking briefly, the white King runs to the Queenside and wins the d5 -pawn.

# 11) Exercises B

■ Alexander Beliavsky vs. Pavel,Sibenik

If White takes on h6 without any resistance, he wins. Black moves and saves the game. 58... ♚f2+ [There is no sense in pushing the

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	0{	
7	+	-	+	-	+	-	R	0	
6	-	+	-	+	K	+	-	P0	
5	P	-	+	-	P	-	+	P0	
4	-	+	-	+	-	K	P	+	0
3	+	-	+	-	+	-	+	-	0
2	r	+	-	+	-	+	-	+	0
1	+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h	y

white King to g3 because it goes to h4 from there. 58... | a4+? 59.♔g3 ♔xe5 60. | g6 ] 59.♔g3 | f8 60. | g6+ ♔xe5 61. | xh6 | a8 The journey is over, and the rook is placed perfectly.

#### □ 11) Exercises B

■ Alexander Beliavsky vs. Pavel,Sibenik

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	0{	
7	+	-	+	-	+	-	+	0	
6	-	+	-	+	-	+	R	+	0
5	P	-	+	-	+	-	+	P	0
4	-	+	-	+	P	K	P	+	0
3	+	-	+	-	+	-	+	-	0
2	-	+	-	+	-	+	-	K	0
1	+	-	+	-	r	-	+	-	0
x	a	b	c	d	e	f	g	h	y

White has two extra pawns, and the h5 - pawn is ready to run. How to save the position? 63...a4 [The most natural capture on e4 loses because of the Kh3 , Rf6 idea. 63... | xe4? 64.♔h3! Defending the g4 -pawn and preparing to kick off the black King from the active place. | e1 65. | f6+ ♔g5 66. | f5+ ♔h6 67. | xa5 ] 64.h6 [The ...Rh1 check prevents White from using the same idea of pushing the

black King away. 64.♔h3 | h1+! 65.♔g2 | h4 ] 64... | xe4 Allowing the pawn to go to the 7th rank looks extremely scary. But the bad location of the white King helps Black to find a path to the h-file. 65.h7 | e2+ 66.♔g1 [ 66.♔h3 | e1! 67. | f6+ ♔g5 68. | f5+ ♔g6 69.h8♖+ ♔g7 70.♖f7 a3 White can't stop the pawn without losing the knight. ] 66... | e1+ 67.♔f2 | h1 68. | g7 a3

#### □ 11) Exercises B

■ Samuel Sevian vs. Hans Moke N,2022)

X	I	I	I	I	I	I	I	Y	
8	-	+	-	+	-	+	-	0	
7	P	-	+	-	+	-	+	0	
6	-	+	-	+	-	P	-	R0	
5	P	-	+	-	+	-	+	0	
4	-	+	-	+	-	+	-	K0	
3	+	P	+	-	+	-	+	0	
2	-	K	-	+	-	+	r	P0	
1	+	-	+	-	+	-	+	0[	
x	a	b	c	d	e	f	g	h	y

White has an extra pawn, but how to stop the b3 -pawn? 48. | h5 It was not late to return to the correct plan - to direct the rook to the b-file and to support the f-pawn with the King. [In the game, Sevian defended the h2 -pawn, and it appeared to be a fatal loss of tempo. 48.h3? ♔a2 49. | h7 b2 50. | b7 | g6! The white King cannot support the f-pawn, and Black wins it. 51.f7 | f6 52.♔g5 | xf7 53. | xf7 b1♕ ; White had no hope to save in the case of f6 - f7 . 48.f7? | f2 49. | h7 ♔a2 Black wins both the rook and the f-pawn. ] 48... ♔a2 [ 48... | f2 49.♔g5 The white rook again appears misplaced but the mission of the f-pawn support is completed; it means that White needs only to sacrifice the rook for the b-pawn. ♔a2 50.♔g6 b2 51. | b5 ;



There is an equal pawn endgame in the following line. 48... ♖xh2+ 49. ♔g5 ♗xh5+ 50. ♔xh5 ♔a2 51. f7 b2 52. f8♠ b1♠ ] 49. ♖b5 b2 50. ♔h5 b1♠ 51. ♗xb1 52. f7 ♗xh2+ 53. ♔g6 ♗f2 54. ♔g7 White is on time to lock the black King on the a-file. ♔b2 55. f8♠ ♗xf8 56. ♔xf8 ♔b3 57. ♔e7 ♔b4 58. ♔d6 ♔xa5 59. ♔c5

□ 11) Exercises B

■ Bence Pribelszky vs. Valeriy, Budapest

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XI | | | | | | | Y
8- + - + r + - + 0
7p - + - + - p - 0
6- + - + p + k + 0
5+ - + - + pP - 0
4- P - + - + - + 0
3+ - + - + - + - 0
2P + K + - P - + 0
1+ - + - + - + R0[
x a b c d e f g h y

```

White plays and gets an equal position. 28. ♗h3 Both sides have pawn majorities on opposing sides. Every single tempo (or its loss) can become decisive. That's why it is important to find the shortest way to create the passed pawn and, on the other side, to find the most economical way to fight against the opponent's passed pawns. The rook goes to b3 to support the Queenside pawns and to disturb Black's play on the Kingside as much as possible. Losing the g5 -pawn does not play a crucial role since creating the passed pawn for Black is still a long-term business. [In the game, White played greedily. 28. ♗g1? e5 29. b5 f4 This move would have opened the window for the King to go to f3. ( In the game, I played the weaker 29... ♗d8? )] 28... ♔xg5 29. b5

[ White can begin with 29. a4 as well. ] 29... ♔f4 [ 29... ♗c8+ 30. ♗c3 ] 30. a4 g5 31. ♗b3 The game should end with a draw.

□ 11) Exercises B

■ Bence Pribelszky vs. Valeriy, Budapest

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XI | | | | | | | Y
8- + - + - + - + 0{
7P - K - R - p - 0
6- P - + - + - + 0
5+ - + - + - + - 0
4- + - + - p - + 0
3+ - + - + k + - 0
2r + - + p + - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

How can Black save the game? 44... ♔f2 45. ♔b8 e1♠ It is also fine to begin with 45... f3. 46. ♗xe1 ♔xe1 47. b7 f3 [ Black could have also played 47... ♗xa7 with an analog saving idea. 48. ♔xa7 f3 49. b8♠ f2 ] 48. a8♠ ♗xa8+ 49. bxa8♠ f2 Most of you should know that the endgames 'Queen vs. c2 / f2 pawn' are often drawish due to the stalemate idea with the King in the corner. But the second pawn usually makes the saving chances equal to '0' since there is no stalemate anymore. Luckily for me, the white King is too distant to come to help the Queen. Continued in the next variation.

□ 11) Exercises B

■ Bence Pribelszky vs. Valeriy, Budapest

(Diagram)

50. ♠e4+ Continuation of the previous variation. The Queen should force the black

X	I	I	I	I	I	I	I	Y
8	Q	K	-	+	-	+	-	0
7	+	-	+	-	+	-	P	0
6	-	+	-	+	-	+	-	0
5	+	-	+	-	+	-	+	0
4	-	+	-	+	-	+	-	0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	P	-	0
1	+	-	+	-	K	-	+	0
x	a	b	c	d	e	f	g	h
y								

King to stand before the pawn to give the King time to approach the Kingside. ♔d2 51.♙f3 ♕e1 52.♙e3+ ♕f1 Now it is time for the white King and the g-pawn. Who is faster to help to own forces? 53.♕c7 g5 54.♕d6 g4 The pawn took the f3 -square under control. 55.♕e5 The King lacked one tempo. ♕g2 56.♙e4+ ♕g1 Continued in the next variation.

# 11) Exercises B

■ Bence Pribelszky vs. Valeriy, Budapest

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	+	-	0
7	+	-	+	-	+	-	+	0
6	-	+	-	+	-	+	-	0
5	+	-	+	-	K	-	+	0
4	-	+	-	+	Q	+	p	0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	P	-	0
1	+	-	+	-	+	-	K	0
x	a	b	c	d	e	f	g	h
y								

57.♙xg4+ Continuation of the previous variation. Now we have the classical 'Queen vs. pawn' endgame. The white King is not close enough to win this. ♕h2 58.♙e2 ♕g1 59.♙e3 ♕g2 60.♙d2 The last try. Where should the black King move to?

♕h1 [There was a trap here. 60...♕g1?? 61.♕f4! f1♙+ 62.♕g3 Black can't avoid the checkmate. ] 61.♕f4 [ 61.♙xf2 Stalemate. ] 61...f1♙+ 62.♕g3 With the King on h1 , Black has a check. ♙g1+ 63.♕h3 ♙e3+ [ 63...♙f1+ was also enough, but I wanted to end this extremely intensive game with a stalemate. ; 63...♙e3+ ]

# 11) Exercises B

■ Sergey Karjakin vs. Liviu-Die, Medias

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	R	+	-	0
7	t	-	+	r	+	-	P	0
6	P	R	-	+	-	+	P	0
5	+	-	+	-	+	-	p	0
4	-	+	-	+	-	K	-	0
3	+	-	+	-	+	-	+	0
2	-	+	-	+	-	+	-	0
1	+	-	+	-	+	-	+	0
x	a	b	c	d	e	f	g	h
y								

Black moves and holds the position.

50... ♔a8 The black King is in a stalemate situation. So, Black needs to successfully sacrifice the rooks. [Black can try to self-stalemate in another way, but then the white King uses Re8 to hide the King on f8 and avoid the perpetual check. 50... ♔d4+?? 51.♕e5! ( 51.♕f5?? ♔a8! With the same stalemate motif. ) 51... ♔e4+ ( 51... ♔xh4 52.♕f5 Rh8 is inevitable. ) 52.♕xe4 ♔e7+ 53.♕d5 ♔e5+ ( 53... ♔d7+ 54. ♔d6 ) 54.♕c6 ♔e6+ ( 54... ♔c5+ 55.♕d6 ♔d5+ 56.♕e7 ♔d7+ 57.♕f8 ) 55.♕b5 ♔e5+ 56.♕a4 ♔a5+ ( 56... ♔e4+ 57. ♔b4 ) 57.♕b4 ♔a4+ 58.♕b5 ♔b4+ 59.♕c6 ♔c4+ 60.♕d6 ♔d4+ 61.♕e7 ♔d7+ ( 61... ♔e4+ 62. ♔e6 ) 62.♕f8 ] 51. ♔xa8 [ 51. ♔ee6 ♔d1 White can't win this endgame with the pawn on g6 causing

permanent problems - White should simultaneously defend it and think of how to avoid the stalemate. ] 51... | d4+ 52.♙e3 | d3+ 53.♙e4 | d4+ 54.♙e5 | d5+ The King should go to e6 , otherwise Black gives checks from the d1 , d2 , d3 , d4 , and d5 -squares. 55.♙e6 | e5+ The only good square for the check. [ 55... | d6+?? 56. | xd6 ♙xg6 The pawn is undefended. ] 56.♙d6 [ 56.♙d7 | e7+! ( 56... | d5+?? 57. | d6 ) 57.♙c6 | c7+ 57... Re6 is also good. ] 56... | d5+ 57.♙c7 | d7+ 58.♙b8 | d8+ 59.♙a7 | xa8+ 60.♙xa8 Stalemate. [ 60.♙b7 | xa6 ]

### □ 11) Exercises B

#### ■ Sergey Karjakin vs. Liviu-Die,Medias

X	I	I	I	I	I	I	I	Y
8	-	R	-	+	-	+	-	R0{
7	+	-	+	-	+	K	+	- 0
6	P	r	-	+	-	+	-	p 0
5	+	-	+	-	+	-	+	- 0
4	-	+	-	+	-	K	P	+ 0
3	+	-	+	-	r	-	+	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h y

Black's position looks hopeless - the a6 - pawn is dangerous, and an undesirable rook trade-off is near. But don't lose hope if you have two rooks on the board. Black to move. 59... | be6 The rooks build a perpetual mechanism. 60.a7 [ 60. | b7+ ♙g6 61. | g8+ ♙f6 62. | f8+ ♙g6 63. | b4 | a3 ] 60... | 6e4+ 61.♙f5 | e5+ 62.♙f4 | 5e4+

### □ 11) Exercises B

#### ■ Sergey Karjakin vs. Liviu-Die,Medias

X	I	I	I	I	I	I	I	Y
8	R	+	-	+	-	+	-	0{
7	+	-	+	-	+	r	+	- 0
6	P	+	R	+	-	+	K	p 0
5	+	-	+	-	+	-	+	- 0
4	-	+	-	+	-	+	P	K 0
3	+	r	+	-	+	-	+	- 0
2	-	+	-	+	-	+	-	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h y

h7 or g7 ? Your choice! 57... ♙h7

The correct retreat square was h7 . At the end of the forcing lines, Black will need the g-file opened to deliver the rook to g8 or protect the King from the side check. Incredibly difficult stuff! [ 57... ♙g7?? I think that Nisipeanu didn't think seriously about this move and automatically moved the King to g7 . 58. | d8! | b1 59. | dd6 | h1+ 60.♙g3 | g1+ 61.♙h3 | f3+ 62.♙h2 ] 58. | d8 | b1 59. | dd6 | h1+ 60.♙g3 | g1+ 61.♙h3 | f3+ 62.♙h2 | xg4 With the King on h7 , White can't win this. 63.a7 [ 63. | xh6+ ♙g7 64. | hd6 | a4 ] 63... | f8 [ 63... | a3?? 64. | a6 ] 64. | a6 [ 64. | c7+ | g7 here is the difference showing why 57... Kh7 was more accurate. ] 64... | a8 65. | xh6+ ♙g7

### □ 11) Exercises B

#### ■ Valeriy Aveskulov vs. Viaches,Minsk

(Diagram)

The black rooks are discoordinated, and it looks so that White should win the game. But Black has an interesting tactical idea. You are invited to find it. 55...a5

XI	I	I	I	I	I	I	I	Y
8-	+	r	+	-	+	-	+	0{
7+	-	+	-	+	-	<del>p</del>	-	0
6p	+	-	+	k	<del>p</del>	-	+	0
5+	-	<del>P</del>	R	<del>p</del>	-	+	-	0
4-	<del>P</del>	-	+	P	+	r	+	0
3+	-	<del>k</del>	-	R	-	<del>P</del>	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
y								

Undermining the c5 -pawn helps Black to equalize the position. Both b4 -pawn moves will be met with the capture of the e4 - pawn. [Capturing on e4 was still bad.

55... | xe4? 56. | d6+ ♠f5 57. | xe4 ♠xe4 58. | xa6 ] **56.b5** [ 56.bxa5 | xe4 57. | d6+ ♠e7! 58. | xe4 | xc5+ White should look for equality. 59.♠d3! ♠xd6 60. | a4 ] **56... | xe4 57. | ed3 | b4** The pawns look strong, but there is no way to advance them when the black rooks are on b4 and c8 . Moreover, the e5 -pawn also can move forward.

## □ 11) Exercises B

### ■ Li Di vs. Ortik Nigmatov (FID,2022)

(Diagram)

Seeing this position amongst the exercises might look strange at first, but don't be too quick with your conclusion. Be careful!

White moves and wins. **44. | b7**

Leaving the a7 -pawn on the board does not have any evident reason. But things become clear if you look at how Black can defend himself. [The Chinese player took the pawn in the game, and Black didn't use the chance. Though, there is no surprise because it was a rapid game, and both already were low on time. 44. | xa7? ♠g8!

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	<del>k</del>	-	+	0
7p	-	+	-	R	<del>p</del>	+	-	0
6-	+	-	+	-	<del>P</del>	-	<del>p</del>	0
5+	-	+	-	<del>P</del>	-	+	K	0
4-	+	-	+	r	+	-	<del>P</del>	0
3+	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0[
x	a	b	c	d	e	f	g	h
y								

(Here is the game line. 44... | xe5+?

45.♠xh6 | e8 46.♠h7! If the black King took the g8 -square, the position would become drawish. | b8 47.h5 | c8 48. | a5 ♠e8 49.♠g7 | c4 50. | a8+ ♠d7 51.♠xf7 Black resigned. ) **A) 45. | e7**

Is less ambitious. Black must find the move that will prevent White from winning the f7 -pawn (with the ... Re7 - f7 - f8 moves) or take on h6 for free. | f4! 45... Kf8 is also good. ( 45...♠f8 46. | a7 ♠g8 ) 46. | e8+ ♠h7 47. | f8 | xf6! The shortest way to a draw. ( 47... | f5+ 48.♠g4 | xe5 49. | xf7+ ♠g6 ) 48.exf6 Stalemate. ; **B) 45.♠xh6 | xh4+ 46.♠g5 | e4!** It is vital to force the King on f5 to have a check after f7xe6 . ( 46... | b4? 47. | a8+ ♠h7 48.e6! fxe6 49.f7 ) 47.♠f5 | b4 48. | a8+ ♠h7 49.e6 fxe6+ Check! 50.♠xe6 | b6+ The side checks technique (see the side checks technique position in the theoretical part) helps Black to save the game. ] **44... ♠g8** [ White gets the winning Queen endgame in the following line. 44... | xe5+ 45.♠xh6 a5 46. | b8+ | e8 47. | xe8+ ♠xe8 48.♠g7 a4 49.h5 a3 50.h6 a2 51.h7 a1♠ 52.h8♠+ This is Blackâ€™s best chance, but we are more interested to see why the line, that might have saved him in the game, fails here. ] **45.♠xh6 | xh4+ 46.♠g5 | e4** [ 46... | a4 47. | b8+ ♠h7 48.e6 ] **47.♠f5** The black rook should go to a side to give the checks but none of the available squares

can satisfy Black. | **a4** [ 47... | c4 48. | b8+  
 ♖h7 49.e6 fxe6+ 50.♖xe6 | c6+

There is a short distance between the rook and the pawn (only 2 files). 51.♖e7 | c7+  
 52.♖d6 ] **48. | b8+ ♖h7 49.e6 fxe6+  
 50.♖xe6 | a6+ 51.♖e7** Here, the a7 -  
 pawn disturbs. Black can't stop the pawn.

# □ 11) Exercises B

■ Gregory Kaidanov vs. Alexandre, Tromso

```

XI | | | | | | | Y
8- + - + - + - ♖0
7+ - + - + - + - 0
6- + - + - + ♗ + 0
5+ - + - + - + - 0
4- + - + - ♗k ♖0
3+ - + - + - + ♖0
2- + - + - ♗ - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

The position does not look too hard, but the rook endgames rarely are simple. White to move. **82. | h6** [In the game, Kaidanov attacked the pawn from the other side which allowed Black to defend it with the rook. 82. | g8? | f3+! 83.♖e2 ( 83.♖g2 | g3+ 84.♖h2 ♖xh4 ) 83... | e3+! 84.♖f2 | e6! 85. | h8 White saved the pawn but got a passive rook in return. | a6 Here is how the game ended. 86. | f8 | a2+ 87.♖e1 ♖f3 88. | f6 | a1+ 89.♖d2 | g1 90.♖d3 | g4! 91.♖d2 ♖f2 White resigned. ] **82... | f3+ ♖e2** is also fine, but it is more natural to keep the King in front of the opponent's King and on the short side from the f-pawn. **83.♖g2 | g3+ 84.♖f2** [ There is a long line that proves 84.♖h2?? is a decisive mistake. g5 85.hxg5 | a3 The g5 -pawn disturbs White to give the checks from the back. 86. | e6 | a2+ 87.♖g1 ♖g3 88.♖f1 f3 89.g6 | h2!

90.♖e1 f2+ 91.♖e2 | h1 92. | f6 | e1+  
 93.♖d3 | e7! White can't defend against the ... Kg2 and ... f2 - f1=Q threat. ]  
**84...♖f5 85. | h8** With equal play.

# □ 11) Exercises B

■ Pranav K. Anoop (1718) vs. Ad, 2019)

```

XI | | | | | | | Y
8- + - + - + - ♖0
7+ - + - ♗ - + - 0
6- + - + - + - ♗0
5+ - + ♖ + - ♗ ♖0
4- + - ♗ - + - + 0
3+ - + - + - + - 0
2- + - + - + - + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

White should solve the problem of advancing their h-pawn and stopping the g-pawn. This is not a trivial task and requires precise calculation. White to move. **54.♖g6** Two other squares on the g-file were wrong. [ 54.♖xg5? White needs this pawn since it protects the King from the g-file checks. | xd5+ 55.♖g6 | d1 ;With the King on g7 , White will not have space for a maneuver we can see in the 54.Kg6 line. 54.♖g7? g4 55.h6 g3 56.h7 g2 57. | e8+ Unfortunately, Black is not forced to take the rook. ♖d7 58. | e1 | g4+ 59.♖f6 | h4 60.♖g6 | g4+ 61.♖h5 ( 61.♖f5 | h4 ) 61...g1♞ 62. | xg1 | xg1 63.♖h6 ] **54...g4** [ 54... | xd5 55.h6 g4 56.h7 g3 57. | a8 g2 58. | a1 ] **55.h6** [The move order does not have crucial importance in this position. 55. | h7+! ♖f8 56.h6 ] **55...g3 56. | h7+** [ The g8 -square is mined. 56. | g8?? | g4+ 57.♖h7 | xg8 58.♖xg8 g2 ] **56...♖e8** [ White uses the same idea in the case of other King retreats. 56...♖f8 57. | f7+! ♖e8 ( 57...♖g8 58.h7+ ♖h8 59. | f8# )

58. | f5 58.Rg7 with a transfer to the 56... Ke8 line is also good, but 58.Rf5 is more technical. White defends the d5 -pawn and stops the g-pawn from g5 . ; 56...♠d6 57. | g7! g2 58.♠h7 Black can't do anything against the Kg8 , h7 - h8=Q moves. ] 57. | g7 g2 [ 57... | g4+ 58.♠h7 | d4 59.♠g8 ] 58.♠h7 Continued in the next variation.

# □ 11) Exercises B

■ Pranav K. Anoop (1718) vs. Ad,2019)

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	k	+	-	+ 0{
7	+	-	+	-	+	-	R	K 0
6	-	+	-	+	-	+	P	0
5	+	-	+	P	+	-	+	- 0
4	-	+	-	t	-	+	-	+ 0
3	+	-	+	-	+	-	+	- 0
2	-	+	-	+	-	+	p	+ 0
1	+	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h y

58...♠f8 Continuation of the previous variation. Usually, the strongest side with the King ahead of the rook pawn can't win if the opponent's King is near. But here we can see an exception which is possible due to the bad position of the black rook on d5 . [ 58... | xd5 59.♠g8 ] 59. | xg2 | xd5 60. | f2+ ♠e7 61.♠g6 Black can't give the check but the fight goes on. | d1 62. | g2 ♠f8 63.h7 | h1 An interesting position that is worth memorizing. White wins thanks to the Rg5 - f5 (check first)- h5 idea. [ 63... | d6+ 64.♠h5! | d5+ 65.♠h6! | d6+ 66. | g6 ] 64. | g5 | h2 65. | f5+ ♠e7 66. | h5

# □ 11) Exercises B

■ Bassem Amin vs. Grzegorz Gaje,Reykjavik

X	I	I	I	I	I	I	I	Y
8	-	+	-	+	-	k	-	+ 0{
7	+	-	+	-	+	P	+	R 0
6	-	+	-	+	-	+	-	+ 0
5	+	-	+	-	+	-	+	- 0
4	-	+	-	+	-	+	P	+ 0
3	+	-	+	-	+	-	+	- 0
2	-	+	-	+	-	+	K	+ 0
1	t	-	+	-	+	-	+	- 0
x	a	b	c	d	e	f	g	h y

White has two extra pawns, but his pieces are uncoordinated. Black has a chance to save the game. Try to find it! 45... | e1 Black wants to attack the pawn from the e7 - square (... Ra7 loses on the spot). If the white King will be behind the pawn, the King and pawn endgame (after ... Rxf7 ) will be drawish. So, White's only chance is to place the King ahead of the pawn. But Black can disturb this by keeping the rook on the first rank. In the game, Black decided to cut off the white King. But this allowed White to advance the g-pawn. [ 45... | a3? 46.♠f2! ( 46.g5? | a5! 47.g6 | g5+ 48.♠f3 | xg6 ) 46... | a4 47.♠g3 | a5 48.♠h4 | a4 49.♠h5 ♠e7 50.g5 | a1 51.♠g6 | f1 52. | h8 Black resigned. ; 45... | a7? 46. | h8+ ♠xf7 47. | h7+ ♠g6 48. | xa7 AttackKing the pawn from the f6 - square is less successful. ; 45... | a6? 46.♠g3 | f6 47.♠h4! This is why the black rook should have been on the first rank. | xf7 48. | xf7+ ♠xf7 49.♠h5 ] 46.♠f3 [ 46.g5 | e5! 47. | h5 | f5 ( 47...♠xf7?? 48.g6+ ); 46.♠f2 | e7 ; 46.♠g3 | f1! The white King can't do anything. 47.g5 ( 47.♠h4?? | h1+ ) 47... | xf7 ] 46... | f1+ 47.♠e4 | f2 Just waiting. [ 47... | xf7?? 48. | xf7+ ♠xf7

49.♙f5 ] 48.♙e5 ♚f1 49.♙e6 ♚f6+  
The last trick! 50.♙e5 ♚f1 51.g5 ♚xf7

# □ 11) Exercises B

■ Alexander Morozevich vs. Niki,Eilat

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	O
7+	-	+	-	+	-	+	-	O
6-	+	-	+	-	+	-	+	O
5+	-	+	-	+	K	+	k	O
4P	R	-	+	-	P	-	+	O
3+	p	+	-	+	-	+	-	O
2-	r	-	+	-	+	-	+	O
1+	-	+	-	+	-	+	-	O[
x	a	b	c	d	e	f	g	h
y								

The black King is bad and the black rook is passive. But everything (as usual in the rook endgames) is not simple. White to move. 55.♙e4 It is hard to think about anything else when you have such an attractive move as 55.Rb8 . But the latter was a mistake that gave Black a chance to escape. After 55.Ke4 everything is simple. The white rook defends both pawns while the King goes to win the b-pawn. [ 55. ♚b8? ♙h4!! This is a very hard move that can be played only after precise calculation. ( In the game, Vitiugov moved his King to h6 . 55...♙h6? The resulting position will be the subject of another exercise in this part of the course. ) 56.♙g6 ♚g2+! 57.♙f6 b2 58.f5 ♙h5 Black considers exchanging the Queenside pawn and entering the drawish one-pawn rook endgame. Here are a few lines of how this can happen. 59.♙f7 ♚f2 60.f6 ♙h6 (There is also another long line that ends with a draw. 60...♙g5 61. ♚b5+ ♚f5 62. ♚xb2 ♚xf6+ 63.♙e7 ♚a6 64. ♚a2 ♙f5 65.♙d7 ♙e5 66.♙c7 ♙d5 67.♙b7 ♚h6 The a-pawn is free to go, but the position of the white King leaves

White no chance to win the game. 68.a5 ♙c5 69.a6 ♚h7+ 70.♙b8 ♙b6 ) 61.a5 ♚c2 62.a6 ♚c7+ 63.♙e6 ♙g6!  
( One should be extremely careful when the opponent has two passed pawns on the 6th rank. 63... ♚c6+?? 64.♙f5! Black can't stop both the a6 - a7 and f6 - f7 threats. ♚c5+ 65.♙e4 ) 64. ♚xb2 ♚c6+ 65.♙e7 ♚xa6 66. ♚g2+ ♙h7 ] 55... ♚a2 56.♙d3 b2 57.♙c2 ♙g4 58.♙b1 The position is winning.

# □ 11) Exercises B

■ Aleksander Wojtkiewicz vs. Mi,1998)

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	O{
7+	-	+	-	P	-	p	p	O
6-	+	-	+	-	+	-	+	O
5+	-	+	-	K	-	+	-	O
4-	+	-	+	-	+	-	+	O
3+	-	+	-	+	-	P	-	O
2-	+	-	+	-	+	-	P	O
1+	-	k	r	+	-	+	-	O
x	a	b	c	d	e	f	g	h
y								

The most interesting parts of the game can often be found in the analysis. Here is one such find. Black moves and wins. 48... ♚d2 [The direct ways ( 48... ♚e1+ and Kd2 ) lead to the same position where Black lacks one tempo to win the game. At first sight, Rd2! does not change anything in the position. But by moving the rook to the second rank, the black King can cross the e-file via the e1 -square. This nuance plays a decisive role. ; 48...♙d2? 49.♙e6 g5 50.e8♞ ♚e1+ 51.♙d7 ♚xe8 52.♙xe8 Transposition to the 48...Re1 line. ; 48... ♚e1+? 49.♙d6 ♙d2 50.♙d7 g5 51.e8♞ ♚xe8 52.♙xe8 ♙e3 53.♙f7 ♙f3 54.♙g7 54.Kf6 is also enough for a draw. h5 55.♙g6 ] 49.h3 [ 49.h4 ♚e2+ 50.♙d6

h5 51.♔d7 ♔d2 52.e8♞ ♖xe8 53.♔xe8 ♔e3 54.♔f7 ♔f3 55.♔xg7 ♔xg3 ; 49.♔e6 ♖xh2! 50.♔f7 ♖e2 51.e8♞ ♖xe8 52.♔xe8 h5 53.♔f7 g5 54.♔g6 h4 55.gxh4 gxh4 ] 49... ♖e2+ 50.♔d6 ♔d2 51.♔d7 ♔e1 The point of 48...Rd2 ! Black gives up the rook, but his King is faster in the pawn endgame. 52.e8♞ ♖xe8 53.♔xe8 ♔f2 54.♔f7 [ 54.g4 g5 55.♔f7 ♔g3 56.♔f6 h6 ] 54...♔xg3 55.♔xg7 h5 56.♔g6 h4

### □ 11) Exercises B

■ Anna Muzychuk vs. Aleksandra,2021)

```

X| | | | | | | Y
8- ♖ - + - + - + 0
7+ ♔ + ♕ ♖ - + ♗ 0
6- ♜ - ♞ - + ♝ + 0
5+ - + - + ♞ + ♟ 0
4- + - + - ♞ - + 0
3+ - + - ♞ - + - 0
2- + - + - ♞ - + 0
1+ - ♜ - + - + - 0[
x a b c d e f g h y

```

Black's position looks terrible, but only one continuation allows White to win the game. So, White moves and wins. 40. ♖c8

[ Unfortunately for Anna, it was move 40, and she decided first to exchange the pawn and then think about what to do next. The disappearance of the h5 - and h7 -pawns smoothens White's advantage thanks to a puzzle-like saving idea. 40.hxg6? hxg6 41. ♖c8 ♖e8! 42. ♖xe8 ♔xe8 43.♔g3 The white King goes to g5 to win the Kingside pawns. The black rook is stuck to stop the b7 -pawn. The position looks hopeless, but having the h-file opened helps Black to construct the mating net around the white King (if it arrives at g5). ♔e7 44.♔h4 (In the game, Muzychuk realized

that there is a defense and didn't even try to bring her King to g5 . The opponents agreed to a draw after a few moves. 44. ♖b1 ♔e6 45.♔f3 ♔d7 46.♔g3 ) 44... ♖h8+ Black can also begin with the 44... ♔f7 move. The check is easier to calculate. 45.♔g5?? ( 45.♔g3 ♖b8 ) 45...♔f7 46...Rh5 # is inevitable. ] 40... ♖xc8 [ 40... ♖e8 41. ♖xe8 ♔xe8 42.♔g3 The white King picks up all black pawns on the Kingside if it dares to take on h5 . ♔e7 (The pawn endgame also is hopeless. 42...♔d7 43.♔h4 ♔c7 44. ♖b1 ♖xb7 45. ♖xb7+ ♔xb7 46.hxg6 hxg6 47.♔g5 ) 43.♔h4 ♔f7 44.♔g5 ♔g7 45.hxg6 hxg6 46. ♖xd6 ♖xb7 47. ♖xg6+ ] 41. ♖xd6+ ♔c7 42.bxc8♞+ ♔xc8 43.hxg6 hxg6 44. ♖xg6 With the King on c8 , Black can't organize a normal defense of the f5 -pawn. ♖f7 [ 44... ♖c7 45. ♖d6! The simplest winning plan. White cuts off the black King, then plays ♔f3 and e3 - e4 . The one-pawn endgame is winning for White because the black King is on the long side, and Black can't disturb the pawn from crossing the middle of the board. ♖c5 46.♔f3 ♔c7 47. ♖d3 ♔c6 48.e4 ] 45. ♖e6 ♔d7 46. ♖e5 ♔d6 47.♔g3 ♔d7 48.♔h4 ♔d6 49.♔g5

### □ 11) Exercises B

■ Hikaru Nakamura vs. Magnus Ca,2021)

(Diagram)

To win such an endgame, even Carlsen needs more time than the rapid game can leave at the end. Black moves and wins. 59... ♖e2 Black sacrifices the f5 -pawn to advance the a3 -pawn to the second rank. But it is not the end of the line, because White will stop the a-pawn and try to play g3 - g4 and create their own passed pawn. [ The game continued 59...♔e6? 60. ♖f3 ♔e5 61. ♖e3+ ♔d4 62. ♖f3 ♔e4 63. ♖f4+



XI	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	+	-	+	0{	
7+	-	+	-	+	-	+	-	0	
6-	+	-	+	-	+	-	+	0	
5+	-	+	k	+	p	+	p	0	
4-	+	-	+	-	R	-	P	0	
3p	-	+	-	+	-	P	K	0	
2r	+	-	+	-	+	-	+	0	
1+	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

♙e3 64. ♗xf5 ♗a1 65. ♙g2 ♗a2+ 66. ♙h3 Draw. ] 60. ♗xf5+ ♗e5 61. ♗f3

[ The win is simpler for Black if he gets time to defend the passed pawn with the King. 61. ♗f8 ♙c4 ( 61...a2?? 62. ♗a8 ♗e2 63.g4 ) 62. ♗a8 ( 62.g4 ♗e3+ 63. ♙g2 hxc4 64.h5 ♗h3 65. ♗g8 ♗xh5 66. ♗xg4+ ♙b3 ) 62...♙b3 White can't play g3 - g4 because of Re3 . ] 61...a2 62. ♗a3 ♗e2 63. ♗a8 And here is one more difficult moment that Black should solve to remove all questions about the game result.

[ Unfortunately for White, he needs to make one more move to prepare the g3 - g4 advancing. 63.g4? ♗e3+! 64. ♗xe3 a1♙ ] 63...♙c4 64.g4 ♙b4 Preparing the shelter for the pawn (... Re3 - a3 ). White has no defense. 65. ♗xa2 [ 65. ♗b8+ ♙c3 66. ♗a8 ♗e3+! 67. ♙g2 ♙b2! 68.gxh5 ♗a3 69. ♗b8+ ♙c3 70. ♗c8+ ♙d4 ] 65... ♗xa2 66.gxh5 ♙c5 67. ♙g4 ♙d6 68. ♙g5 ♙e7 69. ♙g6 ♙f8

# 11) Exercises B

■ Daniil Lintchevski vs. Viktor, Moscow

(Diagram)

All rules have exceptions. Black moves and saves the game. 48... ♗b8 An unexpected move that has the only purpose - to prevent

XI	I	I	I	I	I	I	I	Y	
8-	+	-	+	-	+	-	+	0{	
7R	-	+	-	+	-	+	-	0	
6P	+	p	+	-	+	-	+	0	
5+	-	+	-	+	k	+	-	0	
4-	t	-	+	-	+	-	+	0	
3+	-	+	P	+	K	+	-	0	
2-	+	-	+	-	+	-	+	0	
1+	-	+	-	+	-	+	-	0	
x	a	b	c	d	e	f	g	h	y

White from playing Ra8 and a6 - a7 .

[ Black put the rook on the 'correct' square behind the pawn. But here this made no sense. 48... ♗a4?? 49. ♗a8 ♙f6 50.a7 ♙g7 51.d4 Black resigned because his King was stuck in the corner, and there was nothing to do against the march of the white King to b7 that wins the c6 -pawn. ♙h7 52. ♙e3 52.Ke4 also wins but what is the point to calculate extra lines that begin with 52...c5 ? ♙g7 53. ♙d3 ♙h7 54. ♙c3 ♙g7 55. ♙b3 ♗a1 56. ♙b4 ♙h7 57. ♙c5 ♗a6 58. ♙d6 ♙g7 59. ♙c7 ] 49. ♗c7 ♗b6 50.a7 ♗a6 The black King can come to d6 now. 51. ♙e3 ♙e5 52.d4+ Otherwise, the black King will come to b6 (via c5 ). ♙d6 53. ♗h7 ♗a3+ [ 53...c5?? 54. ♗h6+ ♙d5 55. ♗xa6 ] 54. ♙e4 c5

# 11) Exercises B

■ Nodirbek Abdusattorov vs. Sha, Chess24.com

(Diagram)

There is no concrete move order that helps White to hold the balance here (many move orders lead to the same position). The most vital is to find the saving idea. So, what's that idea? 50. ♗e5 [The young Uzbek talent instead played more passively. 50. ♗b2? e5! Black wins because both his King and rook

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6-	+	-	+	<del>p</del>	<del>k</del>	-	+	0
5+	<del>p</del>	+	-	+	-	+	-	0
4-	<del>P</del>	-	<del>t</del>	-	<del>P</del>	<del>p</del>	+	0
3+	-	+	-	+	-	<del>P</del>	-	0
2-	+	-	+	R	+	K	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

are more active. 51.fxe5+ ♔xe5 52.♕f2  
 ♚e4 ] 50... ♚xb4 51.♕f2 The correct  
 defensive idea was connected with the  
 Vancura idea (see the Vancura Defense  
 position in the theoretical part of the  
 course). The black King can't do anything  
 but move on the squares in front of the  
 pawn, while the King can't approach the b-  
 pawn because of the f4 - f5 idea (when  
 Black plays ... Ke7 ). [White has no time to  
 pick up the g4 -pawn. 51. ♚g5? ♚b2+  
 52.♕g1 ♚b4 No Vancura idea anymore!  
 53. ♚b5 Keeping the rook behind the pawn  
 also does not help. ( 53. ♚xg4 ♚b3 54. ♚g5  
 ♚c2 55. ♚b5 ♚b2 ) 53...♕e7 White has no  
 counterplay against Black's plan.  
 ( Here is the only trick that White has.  
 53...♚b3?? 54. ♚b7! Black can't lead his King  
 to the Queenside without losing his e-pawn.  
 e5 55. ♚b6+ ♕f5 56. ♚b5 ♕e4 57.fxe5 )]  
 51... ♚b2+ 52.♕f1 ♚b4 53. ♚e4  
 The rook should pursue the pawn. ♚b3  
 [ 53...♕f5 54. ♚e5+ ♕f6 55. ♚e4 ] 54. ♚e3  
 ♚b1+ 55.♕g2 [The King should stand  
 closer to the corner. 55.♕f2?? ♚b2 56. ♚b3  
 ♚h1 57. ♚xb2 ♚h2+ 58.♕g1 ♚xb2 ]  
 55...♕e7 56.f5

# ☐ 11) Exercises B

■ Alexandr Fier vs. Yuriy Kuzub, Chennai

XI	I	I	I	I	I	I	I	Y
8-	+	-	+	-	+	-	+	0
7+	-	+	-	+	-	+	-	0
6-	+	-	+	-	+	-	+	0
5+	k	<del>P</del>	-	R	<del>P</del>	+	r	0
4-	+	-	+	-	+	K	<del>p</del>	0
3+	-	+	-	+	-	+	-	0
2-	+	-	+	-	+	-	+	0
1+	-	+	-	+	-	+	-	0
x	a	b	c	d	e	f	g	h
								y

The exercise position looks a bit strange.  
 The black rook is attacked and at least the  
 first move is clear. But take your time with  
 the answer, calculate deeply! Black to move.  
 It was important to prevent the f-pawn from  
 advancing to the 7th rank for as long as  
 possible. 67... ♚h7 [ 67... ♚h8?

Let me paste here the quote from John  
 Nunn, in Nunn's Chess Endings (Volume 2,  
 page 49), which explains the nature of the  
 mistake with the following text (you can  
 find the full version of this quote in the note  
 s to the Naiditsch - L'Ami game): 'The idea  
 of securing the maximum checkKing  
 distance occurs so often that it becomes a  
 reflex to move the rook as far away from  
 the enemy King as possible. The trouble is  
 that in endings where both sides have  
 pawns, there may be reasons why the rook  
 shouldn't go to the far edge of the board,  
 and in this case, the reflex action can be  
 wrong.' This case offers us one more proof  
 of this observation. From now, the  
 Brazilian player made everything near  
 perfectly. 68. ♚e2 ♚h3 69. ♚h2 ♕xc5 70.f6  
 A) 70...♕d6 71.♕f5 ♕d7 72.f7 ♕e7  
 73.♕g6 ♚h4 ( 73...♕f8 74. ♚e2 ) 74. ♚e2+ ;  
 B) 70... ♚g8+ 71.♕f5 ♚g3 72.♕f4! ♚g6  
 ( 72... ♚a3 73.f7 ♚a8 74.♕e5 ) 73.♕e5  
 B1) 73... ♚g3 74.f7 ( 74. ♚f2 ♚g2 75. ♚f3

h2 76.f7 | e2+ 77.♣f6 h1♠ 78.f8♠+ )  
 74... | f3 ( 74... | e3+ 75.♣f4 ) 75. | c2+  
 ♣b6 76.♣e6 | f1 77. | e2 ; **B2)** 73... | g5+  
 74.♣e6 | g3 75. | f2 | g6 76.♣f5 | g2  
 77. | f3 h2 78.f7 h1♠ 79.f8♠+ ♣d5  
 80.♠d8+ Black resigned because of an  
 inevitable checkmate. ] **68. | e2** [ 68.♣h3  
 | h5! 69.♣g4 | h7 Repetition. ] **68...h3**  
**69. | h2 ♣xc5 70.f6** [ 70.♣g5 ♣d6  
 71.♣g6 | h4 72.f6 | g4+ Compared to the  
 position from the game, the black King is  
 more active. ; Of course, we should not  
 forget to calculate the pawn endgame.  
 70. | xh3 | xh3 71.♣xh3 ♣d6 72.♣g4  
 ♣e7 73.♣g5 ♣f7 ] **70...♣d6 71.♣f5**  
**♣d7** No f6 - f7 ! **72.♣g6 | h4 73.f7**  
**| g4+ 74.♣f5 | g3 75.f8♠ | f3+ 76.♣g6**  
**| xf8**

#### □ 11) Exercises B

■ David Navara vs. Nikolai Kaba, Khanty-Mansiysk

```

XI | | | | | | | | Y
8- + - + - + - + 0
7+ - + - + - + - 0
6- + K + - ♠ - + 0
5+ - ♠ - + P p p 0
4- + - + - + - + 0
3+ - + R + - ♠ - 0
2- + - + - + r + 0
1+ - + - + - + - 0[
x a b c d e f g h y

```

Doing both - advancing your own pawn and stopping the opponent's counterplay - is one of the hard elements of a rook endgame technique. How can White combine both in this position? **59.♣d5** Only this move perfectly copes with both tasks. The idea is to put the rook on c4 (to cut off the black King and to support the c-pawn). [ There is not much sense in defending the f5 -pawn because it gives nothing

additional to White. The main focus should go to the c-pawn. 59. | f3? h4 60.gxh4 gxh4 ; 59.♣d7? ♣xf5 60.c6 ♣g4! ( The pawn or the King should cross the middle of the board. 60... | c2? 61. | d4 c7 - c8=Q is unstoppable. ; 60...h4 ) 61.c7 | c2 62.c8♠ | xc8 63.♣xc8 h4 ] **59...♣xf5 60.c6 ♣g4** [ 60... | c2 61. | d4 As we have already seen above, the rook on d4 and the g3 -pawn stop the opponent's play on the Kingside. ] **61.c7 | c2 62. | d4+ ♣xg3 63. | c4 | d2+ 64.♣c6**

#### □ 11) Exercises B

■ Levon Aronian vs. Wang Hao (F,2019)

```

XI | | | | | | | | Y
8- + - + - + - + 0{
7+ - + - + - + - 0
6- + - + - + R + 0
5+ - + - ♠ - ♠ - 0
4- + - + - + P P 0
3+ - + - t p + - 0
2- + - + - + - + 0
1+ - + - + - + - 0
x a b c d e f g h y

```

One more example on the topic of the 'checkKing distance' error described by John Nunn in his excellent book. Black to move, how to save the game? **56... | d3**

In the game, the Chinese player moved his rook as far from the Kingside as possible (reflex) , and it appeared a fatal mistake. The problem is that with the rook on a3 , Black gets no ... Rd5 pin motif (see move 59). [ 56... | a3?? 57. | f6 | a8 58. | f5+ ♣e4 59.h5 Black resigned. Here are the possible lines. ♣e3 ( 59... | g8+ 60.♣h4 The King comes to g3 to win the last black pawn. ) 60.h6 f2 61.h7 ♣e2 62.♣h6 Two connected passed pawns supported by the King win the game. ] **57. | f6** [ 57.h5

| d8 ] 57... | d8 58. | f5+ ♖e4 59.h5  
 [ 59. | f4+ ♖e3 60. | f7 | g8+ 61.♖h5  
 | h8+ 62.♖g5 | g8+ White should agree  
 on a draw. 63.♖f5?? f2 ] 59... | d5  
 Here is the point of the first move. Black  
 also promotes the pawn. 60. | xd5 ♖xd5  
 61.h6 f2 62.h7 f1♙ 63.h8♙ ♙c1+  
 Black gives a perpetual check.

## □ 11) Exercises B

■ Andrei Volokitin vs. Lenier D, San Sebastian

```

X| | | | | | | Y
8- + - + - + - + 0
7+ - + - ♙ ♙ ♞ - 0
6♙ ♙ - ♙ - ♙ - + 0
5+ ♙ + ♙ ♞ - + - 0
4- + - + - + ♙ ♙ 0
3♙ - ♙ ♞ + - + ♙ 0
2- ♙ - + - + - + 0
1+ - + - + ♞ + - 0[
x a b c d e f g h y

```

Here the Ukrainian grandmaster found a  
 nice idea that helped him to get the winning  
 rook endgame. White to move. 36. ♙d4  
 | xd5 [ 36... | g5 would have led to a  
 similar position with the same evaluation.  
 37. ♙xf6+ exf6 38. | f5! | g6 39.c4 ]  
 37. ♖e4 | g5 38. ♙xf6+ exf6 39. | f5  
 Packing the black rook. | g6 [ 39... | xf5  
 White wins the pawn endgame after both  
 captures. 40. ♖xf5 or gxf5+- ] 40. ♖d5  
 Black has no way to defend his Queenside  
 pawns.

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