THE EIGHT RANKS METHOD

RANK 4 OF 8

GREEN BELT

STUDENT BOOK

THE EIGHT RANKS METHOD™

Twelve weeks. Three moves deep, a trap designed and tested. A fourth rank, earned.



1 2 3 4 5 6 7 8

BOOK 4 OF 8 · BUILDER TIER

Written by Moheb Girgis, FIDE National Instructor

Chess that produces evidence.

eightranksmethod.com

THE EIGHT RANKS METHOD

Eight ranks. One board. Total mastery.

THE EIGHT RANKS METHOD™

Green Belt

Student Book

Builder · Rank 4 of 8 · Book 4 of 8



LOOK INSIDE

Written by Moheb Girgis, FIDE National Instructor · FIDE ID 39935400

The Eight Ranks Method · New York

This book belongs to _____

Site _____

Cycle _____

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Green Belt Student Book
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First edition, 2026 · Version 1.2
10 9 8 7 6 5 4 3 2 1

Every chess position in this book has been checked by a chess engine (Stockfish) or is completely solved.

The Eight Ranks Method is designed to produce evidence aligned to the six attributes of the New York State Portrait of a Graduate.
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How to read a diagram

Every diagram is drawn from White's side: White's pieces start at the bottom, Black's at the top. The letters a to h name the files (the columns) from left to right; the numbers 1 to 8 name the ranks (the rows) from bottom to top. A square is its file letter and its rank number, so the bottom-left corner is a1 and the top-right corner is h8. The small square beside the board shows whose move it is: a white square at the bottom right means White to move, a black square at the top right means Black to move.

Piece	Letter	Symbol
King	K	♔ ♚
Queen	Q	♕ ♛
Rook	R	♖ ♜
Bishop	B	♗ ♝
Knight	N	♘ ♞
Pawn	(no letter)	♙ ♟

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A move is written as the piece letter and the square it goes to: Nf3 means a knight moves to f3; e4 means a pawn moves to e4. x means a capture (Bxe5), + means check, # means checkmate, O-O is castling on the king's side and O-O-O on the queen's side, e8=Q means a pawn promotes to a queen. Sometimes the starting square is written too, with a dash: d7-d5 means the pawn on d7 moves to d5, and a plan written b2-b4-b5 means the b-pawn goes from b2 to b4 and then to b5. This is standard algebraic notation, the notation of Appendix C of the FIDE Laws of Chess; the Laws print castling with the figure zero (0-0 and 0-0-0) and promotion without the equals sign (e8Q), and this book uses the letter O and the equals sign, as most English chess books do.

Chess piece drawings by Colin M. L. Burnett, used under the BSD license.

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How to use this book

Green belt finishes the Builder tier. You calculate three moves deep and prune what does not matter; you measure your own development; you survey your own pawn structures; you re-tally your Blunder Log and measure the change; you learn key squares and the knight's one weakness. Exercises end each chapter, with answers. Your exhibit this belt is Design a Trap, described in this book on the Exhibit of Evidence pages.

This book runs for twelve weeks. Take one chapter every two weeks. In the first week, read the chapter and do the exercises. In the second week, do the STEM lab for that chapter. Each chapter has a Review box. It brings back ideas from earlier chapters and from Orange belt. Answer it before you go on. The Help box is for you if the chapter felt hard. The Stretch box is for you if it felt easy. Use one or both. Write your own games on the Game Lab pages. You need three games, three key moments each, and one calculated line three moves deep. The family corner has one question for someone at home to ask you. Answer it out loud. The progress check at the end of each chapter tells you if you are ready. Try it with the book closed. Rank Day comes in week 12. Bring this book, your labs, your Game Lab pages and your exhibit, Design a Trap. Start now, and keep every page.

LOOK INSIDE

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Everything for one cycle

One book carries one twelve-week cycle. Here is what is inside it, counted.

Chapters	5, one for each pillar, each with its exercises, a Help box, a Stretch box and a progress check
Review boxes	4, one at the start of Chapters 2 to 5
STEM labs	5, one for each chapter, each with its seven parts and its standards footer
Diagrams	85, every one drawn from a verified position
Model games	2, real games played through move by move with questions
Puzzle practice and endgame drills	59 positions: 53 completely solved, 6 engine-verified (Stockfish)
Game Lab pages	3 game records to fill in with your own games
Family corners	5, one question for each chapter (one every two weeks) for the adult at home
Glossary	58 chess words explained
Practice quiz	20 questions in the four Rank Day forms, with answers
Exhibit of Evidence	Design a Trap

The licensed site provides: the instructor, the boards and sets, the clocks, the Rank Day papers (the Knowledge Quiz and the Puzzle Set, seen only on Rank Day), the scoring, the Rank Progress Report within two weeks of Rank Day, and the certificate and rank at the ceremony. This book is yours to write in and keep.

LOOK INSIDE

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LAUNCH

CHAPTER 1 · PILLAR 1 · OPENINGS AND DEVELOPMENT

The development score

By the end of this chapter you will be able to

- Score a position at move ten for development.
- Say which four things earn a point in the score.
- Test an opening change with ten games before and ten games after.

Launch This chapter ends with STEM Lab G1.1: Development Score, Before and After.

I can: score a position at move ten for development; explain why a repertoire change should be measured before and after.

1.1 The score

At move ten, give each side one point for each minor piece developed, one for castling, one for a rook connected to the other rook, and one for a pawn in the center (d4, e4, d5, e5). A healthy Orange or Green belt opening scores five or six by move ten. Diagram 1.1 (1.e4 e5 2.Nf3 Nc6 3.Bc4 Bc5 4.Nc3 Nf6 5.d3 O-O 6.O-O) is only move six, and already both sides have castled, both have two knights and a bishop developed, and both have a center pawn.



Diagram 1.1. An Italian Game after 6.O-O. Black to move. Score each side.

LOOK INSIDE

1.2 Changing a line is an experiment

If you change your opening, keep the old scores and compare: ten games before, ten games after, average development score and result. The lab for this chapter (G1.1) is that comparison. A change that does not raise the score or the results goes back.

1.3 Exercises

1. Score Diagram 1.1 for White and for Black.

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2. Give one move for Black in Diagram 1.1 that helps development, with a reason, and one that wastes a tempo.
3. From your own games: your average development score at move ten in your last five games.

Answers: 1. White: knights c3 and f3 (2), bishop c4 (1), castled (1), rooks not yet connected (0; the bishop on c1 and the queen on d1 stand between them), center pawn e4 (1) = 5. Black: knights c6 and f6 (2), bishop c5 (1), castled (1), rooks not connected (0), center pawn e5 (1) = 5. 2. ...d6 opens the diagonal of the bishop on c8 so it can come out next; ...Nd4 or ...Ng4 moves a developed knight again with no lasting threat and wastes a tempo. 3. From your Game Lab.

HELP · IF THIS FELT HARD

Reread section 1.1 and count the four items on your fingers. Then score your side only at move ten in one of your own games.

STRETCH · IF THIS FELT EASY

Score both sides at move ten in your last five games. Name the move that cost you a point, and the repertoire move that would have kept it.

LOOK INSIDE

PROGRESS CHECK · CHAPTER 1

1. What four things earn a point in the development score?
2. In Diagram 1.1, why does White not get the rook point?
3. In your own words, why is changing an opening an experiment?
4. In Diagram 1.1, name one Black move that wastes a tempo, and say why.
5. Score White at move ten: knights c3, f3; bishops c4, e3; castled; queen d2; rooks a1, f1; pawns d3, e4.

Answers are in the back of the book.

FAMILY CORNER · WHAT TO ASK YOUR LEARNER THIS WEEK

Can you show me how you score an opening at move ten?

A good answer sounds like: They count out loud: one point for each knight or bishop that is out, one for castling, one for a center pawn, one for connected rooks. Five or six is healthy.

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CHAPTER 2 · PILLAR 2 · TACTICS AND CALCULATION

Three deep, with pruning, and removal of the defender

By the end of this chapter you will be able to

- Calculate three moves deep, with checks, captures and threats first.
- Prune a branch and write the one-sentence reason.
- Ask what each enemy piece defends, then remove the defender.

Strike This chapter ends with STEM Lab G2.1: Three Deep, With Pruning.

REVIEW · THREE QUESTIONS FROM EARLIER

1. **Chapter 1 of this book** What development score is healthy at move ten?
2. **Chapter 1 of this book** How do you test a change to your opening?
3. **Orange Belt, Chapter 2** Which moves go first on a calculation tree?

Answers are in the back of the book.

LOOK INSIDE

I can: calculate three moves deep with checks, captures and threats first, prune a branch with a reason, and find removal-of-the-defender tactics.

2.1 Pruning

A branch is pruned when you can say why it fails in one sentence: “loses the queen,” “walks into mate,” “allows a fork.” Write the sentence on the tree, then stop calculating that branch. The skill at Green belt is not seeing more lines; it is seeing fewer and the right ones.

2.2 Removal of the defender

If a piece guards something important, capture it, chase it or deflect it, and the thing it guarded falls. Ask of every enemy piece: what does it defend? Then ask: what can I do to that piece?

Worked example. Take the Lab G2.1 position (White: Kg1, Rd1, Nd5; Black: Kg8, Qd8, Ra8, Nc8, pawns e7, f7, g7, h7). Checks first: 1.Nf6+ and 1.Nxe7+. Branch 1.Nxe7+: Black answers 1...Qxe7 and the knight is gone. Prune it with one sentence: “the queen takes the knight.” Branch 1.Nf6+: the knight leaves the d-file, and whatever Black does (1...gxf6, 1...exf6, 1...Kh8 or 1...Kf8), 2.Rxd8 takes the queen. Chosen: 1.Nf6+ (engine-verified).

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