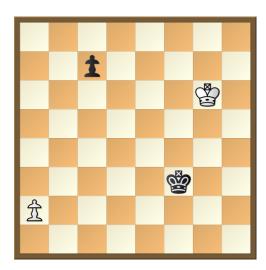
## How to Solve a Study



White to play and win

Suppose you're presented with this position and told it's a composed endgame study – how would you try to solve it? I'm going to go through it with you, and tell you some 'tricks of the solving trade'. Then, I'll give you another study that you can try to solve yourself.

This first study is a famous one, composed by Nikolai Grigoriev, and published in Shakhmaty v SSSR in 1932. Many composers have produced pawn endgame studies, but there are two who are generally acknowledged as the greatest masters of the pawn study art, Grigoriev, and Zinar, who composed the study I'll give you to solve.

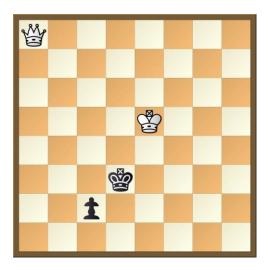
So, you know it's a composed study and that gives you a lot of useful information. It tells you that there will be a main line in which each of White's moves is unique, meaning is the only one that wins. Also unlike in a game, you know what the correct result is: it's written below the diagram. You know too that the play will be both elegant and surprising. It might, for example, end with an unusual mate, or an underpromotion, or there might be stalemate tricks. There will often be a strong theme to the study; for example, two or more manoeuvres that echo each other.

Anyway, your first task is to do what you'd do with an over-the-board position. Count up the pieces to see who's ahead; give the position a quick look to see if one of the players seems to be easily winning; see if one of the kings is in danger; see if any of the pieces are under attack; and have a glance at any forcing lines, such as checks. Sadly, in this particular study, most of that doesn't help hugely, but it's a good habit to get into! It does help in one way: you'll notice that the Black king is 'in the square' of White's a-pawn, so just pushing the a-pawn won't do the job.

So, next, try a move to see what happens. In this study, knowing that 1.a4 doesn't work, the only reasonable move is to bring your king over. Move it to f5, so it stays in range of the Black pawn, so if that pawn is pushed, you'll walk over and snaffle it. Black will do the same. So we've got **1.Kf5 Ke3** and you continue your plan with **2.Ke5**. Now you see the variation 2...Kd3 3.Kd5 Kc3 4.Kc5 and White will then push his pawn (5.a4) and win. Maybe you paused for a moment and looked at 3...c6+ and noticed that 4.Kc5 wins then too. Job done? Except... it was way too easy for a composed study, so

you've definitely missed something. You go back through all that and try various obviously hopeless moves, and finally realise you've missed Black's clever defence 2...c6. Now you pretty much know you're finding the correct solution, because that's a real study-like move. You notice that 3.Kd6 Kd4 4.a4 c5 will be a draw, so you continue with confidence, and decide that the solution goes 1.Kf5 Ke3 2.Ke5 c6 3.a4 Kd3 4.a5 c5 5.a6 c4 6.a7 c3 7.a8=Q c2. You're sure that must all be correct (and indeed it is), but what now? Stop and assess. If you know your queen against pawn theory, you know that when Black has a bishop's pawn he has a stalemate trick; in a position with Black king b1 and pawn c2, if White plays Qb3+, then Black plays Ka1. So, to win you need to keep the Black king on the other side of the pawn, or have your own king very near, so you can mate, or be able to get your queen to c1 to definitely stop the pawn.

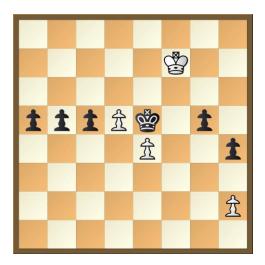
Here's the position after 7...c2:



White has lots of options here, and I won't work through them all, but only 8.Qd5+ works. If Black now plays 8...Kc3, you have 9.Qd4+ Kb3 10.Qa1 and your queen will get to c1. If Black plays 8...Ke3 you have the wonderful move 9.Qg2; that move is followed either by a skewer if Black promotes (9...c1Q 10.Qg5+), or by 9...Kd3 10.Qg5 and wins, as the queen will get to c1. 9.Qg2 is *really* hard to foresee. If, however, you do succeed in seeing those lines, you regain your confidence – this MUST be the right solution – and so you look for an answer to 8...Ke2. Eventually, you find 9.Qa2. The final moves of the study are **8.Qd5+ Ke2 9.Qa2 Kd2 10.Kd4** and 10...Kd1 11.Kc3 (or 11.Ke3, but not 11.Kd3 c1=N+oops!) c1Q+ 12.Kd3 and wins.

A splendid composition; with only two pawns, in a totally natural position, Grigoriev included multiple surprise moves, and even had an underpromotion as a trap.

Solving that would be a challenge to even the best solvers in the world. *Your* solving task is the next study, which isn't so hard:



White to play and win

This was published in L'Italia Scacchistica in 1982. It's by Mikhail Zinar, who died this year; he was the second of our duo of the greatest composers of pawn studies. Most studies have only one main line, but this one has five Black defences that all have the same thematic finish – once you've found one, it shouldn't be tough to find the others.

The solution is given at .......

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## Solve a Study! - solution

(Zinar) **1.Ke7** and then... remember that skewer in the Gregoriev study? In this Zinar study, there are five ways in which White can skewer the new Black queen diagonally:

1...a4 2.d6 a3 3.d7 a2 4.d8Q a1Q 5.Qh8+

1...b4 2.d6 b3 3.d7 b2 4.d8Q b1Q 5.Qd6+ Kxe4 6.Qg6+

1...c4 2.d6 c3 3.d7 c2 4.d8Q c1Q 5.Qd5+ Kf4 6.Qf5+ Ke3 7.Qxg5+

1...g4 2.d6 g3 3.d7 gxh2 4.d8Q h1Q 5.Qd6+ Kxe4 6.Qc6+ and

(1...g4 2.d6 g3 3.d7) **g2 4.d8Q g1Q 5.Qd5+ Kf4 6.Qf5+ Ke3 7.Qxc5+**