

Chess Calculation Technique – How To Calculate

How to improve chess calculation technique...

Chess calculation training deserves high priority if you are serious about improving your chess. As is the case with any other skill – calculation should be trained. And should be trained the right way. This brings us to the main problem we often face – knowing just how we should go about to improve this important skill.

In this article I will give you advice that will put you on the right track.

Chess calculation starts with knowing when to calculate

In many positions you don't even need to calculate a lot of variations. You should mainly focus on calculation when there are forcing moves in the position. There are 3 types of forcing moves:

1. Checks,
2. Captures and
3. Threats.

When there aren't such forcing moves between the pieces then there is no need to fry your brain thinking about moves that don't lead to any concrete outcomes. In fact, you can better spend your time thinking about your plan of action and your strategy.

Find all your opponents' threats before you start calculating!

Make it a habit to find your opponent's threats before you start calculating your own ideas.

One of the most common calculation errors is to ignore your opponent's threats. Information about your opponent's threats will help you to avoid wasting a lot of time on moves which are clearly mistakes in the light of the opponent's threats.

Find ALL the candidate moves before you start calculating!

Once you found your opponent's threats, the second step should be to find **all** the candidate moves (all the forcing moves. ie. checks, captures and threats).

If you skip this step, you will risk calculating random moves and jumping from one idea to the next – without making proper progress. This only tires your brain and in the end you make a move without doing proper calculation anyway.

- Candidate moves with the queen: 1) Qxh7+ (a capture); 2) Qxg5 (a capture); 3) Qd4+ (a check) 4) Qxb5 (a capture).
- Candidate moves with the rooks: 1) Rc1 (threat to c3 pawn)
- Candidate moves with the bishops: 1) Bh3 (a threat to f5 pawn); 2) Bxd5 (a capture)
- Candidate moves with the knights: 1) Nc6 (a threat); 2) Nxd5 (a capture); 3) Nxf5 (a capture) 4) Ng6+ (a check).
- Candidate moves with the pawns: 1) f4 (threat); 2) g4 (threat)
- Candidate moves with the king: None.

Of course – a quick look at all the candidate moves will reveal that many of these moves can simply be discarded. For example – the move 1) Rc1 threatens black's pawn – but it is clearly not enough since the threat is not strong enough given the fact that black has an extra rook. Also moves like 1) Qxh7+ loses the queen and gives white nothing – we don't need to spend more than a few seconds on such moves. Yet, following this process will help you to not miss some opportunities.

In the above example you might spend a lot of time calculating the moves Ng6+ or Qxg5 (which don't lead to much). Instead, if you followed the process to first find **all** the candidate moves, you would quickly find the move 1) Qd4+ (which wins the game instantly).

I hope you can see the power of training your chess calculation skill this way. I suggest you always follow this process when you play and when you solve tactical puzzles.

Your calculation skill depends quite heavily on your ability to visualize different positions in your mind. I suggest you train regularly to improve this important part of your chess skills.

This article is not a complete guide on chess calculation but can have a positive impact on the effectiveness of your chess calculation technique. You can start training right away by solving tactics puzzle using this method (<http://chesstempo.com> is a great source of tactics puzzles or www.chess.emerald.net).