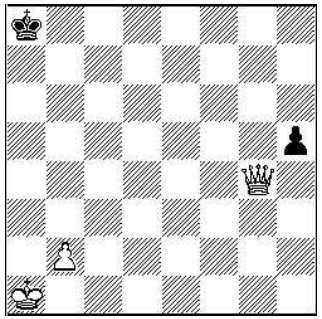
Answers for Chapter 1

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



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

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

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

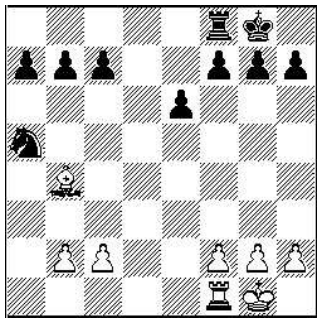
So every time a student answers, "*Because the move piece is not attacked*" or "*Because the moved piece is guarded as many times as it is attacked*," I show this problem. Everyone gets this problem correct, and then I say,

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

Consider another example of where the "piece landing" thought process would fail: suppose the moving piece was guarding an important square or another piece, and by moving away it is not longer doing so. Result: not safe!

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

Answer 1-2
Black to play: Which of the following are safe?
a) 1…Nc4 b) 1…Nc6 c) 1…b6 d) 1…Rd8



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

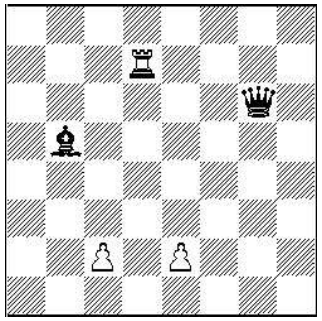
Viewed this way, all three moves that save the knight (1…Nc4, 1… Nc6, and 1…b6) are equally safe (not equally good, but close enough) because on each the continuation will be 2.Bxf8 Kxf8 and, if we use GM Kaufman's material values (see the Introduction), Black has a very slight lead – we could call the position roughly equal. On each of these three moves, Black loses the exchange (rook for bishop or knight) and ends up with a knight and two pawns for a rook. So in a very practical sense, those are the safe moves.

But quite different is 1…Rd8? when after 2.Bxa5 Black loses an entire piece and, instead of being equal, is down two pawns for a bishop and would lose with best play.

Using Kaufman's values, it is easy to see why. After the three safe moves, Black only loses (5.25-3.5) or 1.75 pawns. But after 1…Rd8 2.Bxa5 he loses 3.5 pawns, which is exactly twice as much! Since it only takes about a pawn disadvantage to be losing in most positions, playing

1…Rd8? and losing an additional 1.75 pawns would be disastrous. I have given this problem to hundreds of students and many if not most players rated under 1300 choose 1…Rd8 – one reason I had to include this problem in the book.

Answer 1-3 (kings intentionally removed)
White to play: Is 1.Rd3 safe?



No – 1…Bxd3 wins the exchange.

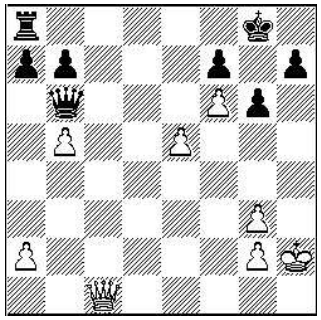
This is another easy puzzle that sometimes traps beginners. There are two important issues to this simple problem:

- Chess is not checkers! You don't have to capture unless you feel it is beneficial. After 1…Bxd3 2.cxd3 (or 2.exd3) Black is under no obligation to make a further capture on d3 with the queen; and

- A move is not safe if the opponent has *any* capturing sequence that wins material by force. Just because most of the lines are good for you doesn't mean there isn't one sequence that is not. If the opponent even has one forcing sequence that wins material or checkmates, then you almost always have to assume that they are going to find it, and that the move is not safe.

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

Answer 1-4
Black to play: Is 1…Qxb5 safe?

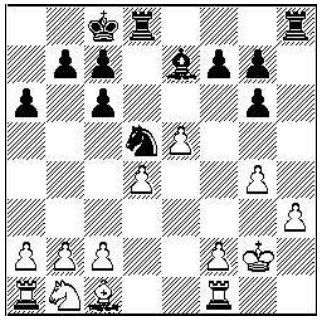


No, 1…Qxb5 is not safe because White can play 2.Qh6 and mate on the next move is unstoppable. This is an important basic example because it illustrates two important points:

- In chess, it is easy to generate unstoppable threats. That means if you don't look for your opponent's checks, captures, and threats that he can make *in reply to* your candidate move, it is entirely possible you will make a move like 1…Qxb5 and your opponent will counter with an unstoppable threat that will win the game. In this case I purposely picked a very familiar mating pattern so that 2.Qh6 would "jump out" at you if I asked about 1…Qxb5. But not every unstoppable threat is so easily spotted…

- It's extremely important and helpful to study basic tactical patterns. That's not news. Pattern recognition should help prevent you from making a move like 1…Qxb5. The more patterns you know, the better. *But you can't rely on only knowing those patterns;* spotting the opponent's tactics in reply to your move often requires careful analysis. And even in well-known positions like this, once you spot 1…Qxb5 2.Qh6, you *still* should double-check to make sure Black would have no defense. Even for common patterns, double-checking – at the very least – with careful analysis is always sensible, except in speed games. There's too much riding on making one huge mistake.

Answer 1-5
White to play: Which of the following are safe?
a) 1.Be3 b) 1.Nc3 c) 1.c4



a) Yes, 1.Be3 is safe. If Black plays 1…Nxe3, then 2.fxe3 protects the d-pawn. Doubling White's pawns, as explained in the Introduction, may not be desirable (here it is fine), but doesn't count as "not safe" unless it causes White to lose material or get checkmated. With the d-pawn already guarded, other knight discoveries such as 1…Nb4 only threatens the c2-pawn, which can be made safe with, say, 2.Na3.

b) 1.Nc3 would be my first candidate move in this position but I would have to reject it because it is not safe. No, it's not because of 1…Nxc3 2.bxc3 where the doubled pawn nicely goes toward the center and guards the important d-pawn. It's because the discovered attack 1…Nb4! hits both the d-pawn and the c-pawn, and the c-pawn cannot be saved.

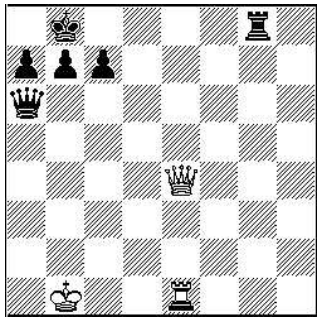
If you failed to find 1…Nb4 when doing the problem, the following is one way that may have helped you find it. After 1.Nc3, identify which white pieces are not guarded by another white piece: Kg2, Ra1, c2, d4. But we don't have to worry about guarded kings, so the other three are "loose" pieces. How many Black moves in reply to 1.Nc3 would attack at least two of these other three (Ra1, c2, d4)? The answer is two: 1…Nb4 and 1…Ne3+. But 1…Ne3+ itself is not safe, so the move to be concerned about is 1…Nb4.

It is very instructive to compare the situation in Position 1-4 with 1…Qxb5 with the one here with 1.Nc3. Both allow unstoppable threats 2.Qh6 and 1…Nb4. While 2.Qh6 in 1-4 is a mate threat and 1…Nb4 here "only" wins a pawn, the principle of not allowing unstoppable threats through careful play on the previous move is the same. What differs, however, is whether or not you can depend on your prior pattern recognition to prevent making the error. The pattern after 1…Qxb5 2.Qh6 is a purposely well-known one, while the pattern here after 1.Nc3 Nb4 is a purposely rare one, and unlikely to be in your mental database of dangerous patterns. Both cases call for analysis, but whereas 2.Qh6 should "jump out" at you to trigger this analysis, usually 1…Nb4 is only found after some care.

c) Having seen the answer to the previous move (b), it should come as no surprise that the "aggressive" 1.c4 also has similar problems after 1…Nb4, hitting c2 and d4. Even though c2 is empty, 2…Nc2 would trap the rook. But any knight move by White would only save the rook – it can't save d4 as well.

Answer 1-6

White to play: Is 1.Qe8+ safe?



This is another easy problem to illustrate a point. Of course 1.Qe8+ is safe, for although it immediately "loses" a queen for a rook with 1…Rxe8, White gets mate on the recapture 2.Rxe8#.

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

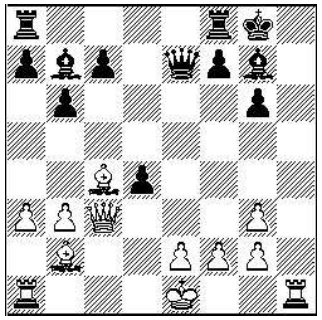
This is another example of basic pattern recognition, but with a specific purpose: to show how to avoid a "*quiescence error*" of stopping too soon in the analysis. Here, to stop after 1.Qe8+ because it loses the queen would be incorrect.

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

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

Answer 1-7

White to play: Is 1.Qxd4 safe?



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

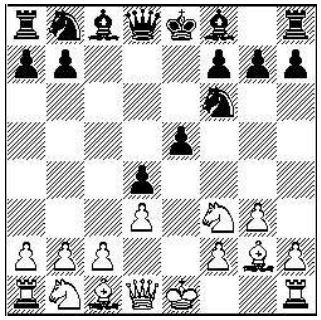
Like the previous problem, this one is meant to illustrate the safety of pseudo-sacrifices, where stopping analysis too soon is a quiescence error. However, unlike the previous problem, which everyone recognizes, this one could more easily be missed by players at intermediate level and below in the heat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

Rather than simply observing that 1.Qxd4 doesn't seem safe because it loses the queen for a bishop after 1…Bxd4 and then abandoning that candidate, a correct continuation of the thought process would be to ask the following question: "*If I play 1.Qxd4 and my opponent wins my queen with 1…Bxd4, are there any other further forcing moves (checks, captures, and threats) that would cause me to believe that further analysis might be fruitful?*"

The answer here is yes: After 1.Qxd4 Bxd4 2.Bxd4 White threatens mate with 3.Rh8#. Therefore, the potential risk is less than the potential reward, and this line must be investigated further to determine whether the mate can be stopped. Black would like to block the diagonal with 2…f6, but that is illegal due to the well-placed bishop on c4 (not there by coincidence). But then it becomes apparent that Black has a major problem and that 1.Qxd4 is indeed worthy. The best Black can do is postpone things with moves like 2…Qxe2+ 3.Kxe2 Rfe8+ 4.Kf1 Kf8, but then 5.Bf6! shuts the door and Rh8# will follow shortly.

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

Answer 1-8
White to play: Is 1.Nxe5 safe?



No, 1.Nxe5 is not safe due to 1…Qa5+ winning the knight.

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

The majority of players spot the easy pin *1…Qe7* as the first candidate move that might make 1.Nxe5 unsafe. There are two key points to spotting *1…Qe7* first:

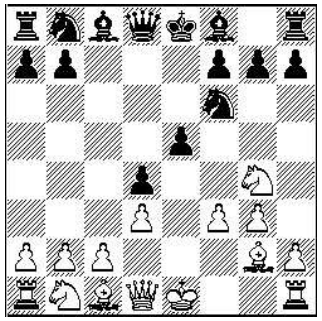
- It's OK. You want as many possible tactical dangers to "jump out" at you as potential reasons why your move might not be safe; and

- It very much matters what you do with the information that *1…Qe7* is a candidate for making 1.Nxe5 unsafe. The proper thing to do is to *put it on a list of potential dangerous candidate replies* to analyze. But, before analyzing, use your tactical vision and consider all of Black's forcing replies (checks, captures, and threats). The purpose is to generate a list of all the moves that might refute 1.Nxe5.

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

  Many lower-rated players start analyzing 1…Qe7 in depth right away. Some spend 20 minutes or more trying to figure out if 1…Qe7 makes 1.Nxe5 unsafe! After that they usually either forget that other moves by Black were possible, or assume there are no others. When I play this out against them and take Black, they are surprised when I whip out 1…Qa5+ in response to their 1.Nxe5. In the 20 minutes they never even considered this move, which is clearly more forcing than the easily spotted 1…Qe7. If they had created the list first and asked, "*Which move on the list is the most forcing?*", they would likely have found that the check 1…Qa5+ should be investigated before the more obvious, but less forcing threat, 1…Qe7.

Answer 1-9
White to play: Is 1.Nxe5 safe?



After 1.Nxe5 the only difference between this problem and the previous one is that the white f-pawn is on f3 instead of f2. But this makes all the difference as now 1.Nxe5 is safe, e.g. 1.Nxe5 Qa5+ 2.K*f2* (the move which was not legal in Problem 1-8) and now Black would lose further material if he tried 2…Qxe5? 3.Re1. Note that this defense is somewhat similar to the line 1.Nxe5 Qe7 2.0-0 in the first problem: the knight is safe if the king can immediately get out of the way and allow the rook to threaten to go to e1, with a saving pin.

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

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

- "Book" positions in the opening where *both* sides have their pieces arranged identically to what was studied. For example, if your opponent has fallen into a "book" trap and you are 100% sure the position is identical plus you double-checked it with at least some analysis, then it *may* be that you can rely on that memory and play the line with the expected result. But it has to be identical or else much more careful analysis is necessary; and

- Late endgame positions, such as a trivial queen and king vs. king checkmate or king and one pawn vs. king position. Again, in these cases the position may be identical to the one studied, and only a little bit of analysis may be required to make sure that is indeed the case.

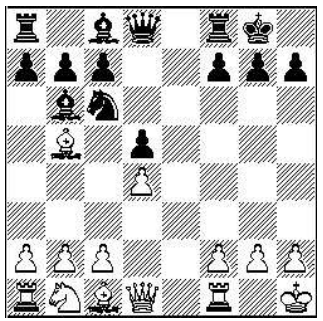
Even the tiniest difference between two positions can cause a candidate to go from safe to unsafe, or vice versa.

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

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

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

Answer 1-10
Black to play: Which of the following are safe?
a) 1…Nxd4 b) 1…Bxd4



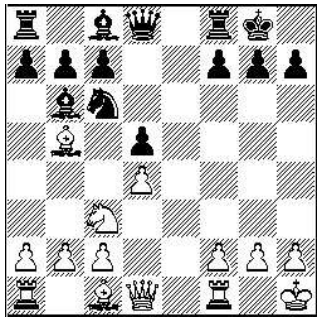
a) Yes, 1…Nxd4 is safe and Black wins a pawn.

b) No, 1…Bxd4 is not safe due to the removal-of-the-guard sequence beginning with 2.Bxc6. At this point Black has the choice of whether to recapture on c6: 2…bxc6 losing a piece to 3.Qxd4, or saving the hanging bishop with, say, 2…Bf6 (2… Bxb2

3.Bxb2 bxc6 also ends up a piece behind) 3.Bxd5 and again White ends up ahead a piece.

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

Answer 1-11
Black to play: Is 1…Bxd4 safe?

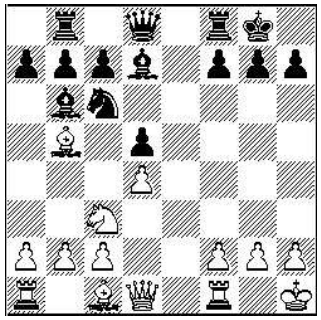


Yes, this time 1…Bxd4 is safe. The position is identical to Problem 1-10, except that White now has his knight on c3 instead of b1. This makes the difference: 1…Bxd4 2.Bxc6 still attempts to remove the guard. The black bishop on d4, as in 1-10, becomes a "desperado" piece. But in 1-10 there was nothing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

Here in 1-11 it is different. The desperado bishop can "sell" itself for something worth the same by playing 2…Bxc3. Only after this equalizing capture has equilibrium been reached. But now it is White with the option of how to conclude. He has nothing better than regaining his pawn with 3.Bxd5, allowing Black to save his bishop with 3…Bf6. Less good for White would be 3.bxc3 bxc6, which regains the piece but not the pawn.

P.S.: Yes, of course 1…Nxd4 is safe, too, and wins a pawn, but that wasn't the issue this time…

Answer 1-12
Black to play: Is 1…Bxd4 safe?



No, 1…Bxd4 is not safe. After 2.Bxc6 Bxc3 (2…bxc6 3.Qxd4 wins a piece as in 1-10), Black attempts to regain the piece as in 1-11. However, this time White has the final piece capture with 3.Bxd7 and only now is equilibrium reached with White ahead a piece.

After 3.Bxd7 Black can either save his bishop with 3…Bf6, allowing White to do similarly, e.g. 4.Bh3, or give up his bishop with 3… Bxb2 4.Bxb2 Qxd7 or 3…Qxd7 4.bxc3. Getting an extra pawn for Black is nice, but it's clearly insufficient either way.

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

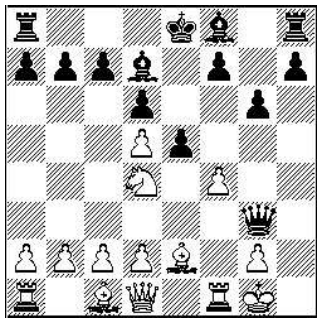
I have given this trio to hundreds of students and it is clear that there are talent issues not only in visualizing what is happening, but in being able to track when a piece is being lost and whether or not something can be done about it. It seems that the ability to resolve these seemingly straightforward Counting issues lies quite at the heart of a player's tactical ability. If you are able to quickly and accurately calculate problems like 1-12, you have a big advantage over those who struggle to figure out if the sequence is safe.

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

Important note: the skills involved in analysis are not black and white (no pun intended). It's not as if you either have them or you don't – it's much more grey than that. Some players are excellent at these types of calculations and some just never get the hang of it, but most fall

in that grey area in-between. Moreover, *it is the type of skill that can be improved;* the more you do similar problems and the more you work at it, the better you get. Can someone with little innate skill ever be as good, through hard work, as someone with high innate skill but lesser work? Sure, but it's better to have more skill *and* more work! ☺

Answer 1-13
Black to play: Is 1…Bh3 safe?



White has just captured a piece on d4, and Black could have recaptured 1…exd4. However, 1…Bh3 threatens checkmate, so it is a *Zwischenzug*, an in-between move. Many lower-rated players are captivated with *Zwischenzugs* and play them whenever possible. Some do it because it is fun, and others do it because they want to show they can't be pushed around by being forced into simple recaptures.

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

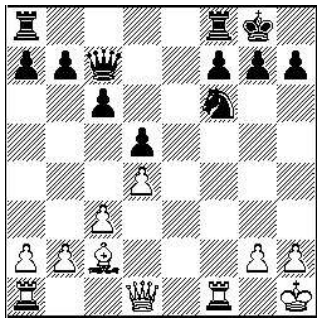
What about this case?

The intended solution is that 1…Bh3 is harmful, and it is. When a student showed me this game, I pointed out that 1…Bh3?? loses to 2.Bf3 exd4 3.Qe1+! (in the game my student played 3.Re1+?) and Black is forced to trade queens, but after 3…Qxe1 4.Rxe1+ White wins the bishop on h3 whether it retreats to e6 or not. It's a type of the common tactic removal-of-the-guard. So 1…Bh3 is a bad *Zwischenzug*, and unsafe.

However, one student, when presented with this problem, gave a correct answer because he found there is a *second* reason 1…Bh3 is unsafe! White can also play the tricky 2.Bb5+ and Black has no good way to get out of check, e.g. 2…Kd8 3.Qf3 and Black will not have time to recapture the piece without losing his bishop. 2…c6 3.Qf3! is similarly good for White. Good stuff!

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

Answer 1-14
White to play: Which of the following are safe?
a) 1.a3 b) 1.Qd3 c) 1.Rxf6



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

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

a) 1.a3 is innocuous and does not lose anything; it just leaves White a pawn behind. Thus it is "safe" but not preservative of the victory, and thus has the equivalency of unsafe moves. *It is relatively the same error to miss a win and go to an equal position as it is to start in an equal position and lose material into a loss. In both cases, the error is the equivalent of giving away a half-point with a bad move.*

b) 1.Qd3 is an aggressive attempt to win, with the removal-of-the-guard threat 2.Rxf6. Unfortunately for White, Black has the defense 1…Ne4. So while it doesn't lose material, it doesn't win any, either. White is still behind a pawn.

c) 1.Rxf6! is the "Play and win" solution. If White rejects this as losing the exchange after 1…gxf6, that's a quiescence error. If Black accepts the material with 1…gxf6, however, White mates with 2.Qg4+ (2.Qd3 f5! 3.Qxf5 f6 and Black's queen defends h7) 2…Kh8 3.Qf5 will mate.

Don't play a *Zwischenzug* (or any move for that matter) just

because it is tricky. Play it because it is good no matter how the opponent replies. Only if you are losing and desperate and you need to complicate, then complications are welcome, even if the complications might not favor you with best play.

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