

Position sizing: from risk to lots

POSITION SIZING

Position size is calculated, never chosen: account balance times risk percentage gives the cash at risk, and dividing that by the stop distance times the pip value gives the size in lots. Run in that order the chain caps every trade's loss at the chosen fraction; run backwards from a desired size it silently chooses your risk for you.

You have a balance, a chosen fraction from lesson 1, and a trade whose stop belongs 40 pips away. One division turns those into the only size that respects all three. This lesson is that division, run carefully once, so you can run it for the rest of your trading life.

What are the chain's three links?

First: balance times risk percentage equals cash at risk - the money this trade may lose, fixed before anything else. Second: stop distance times pip value per lot equals the loss one lot would take at the stop. Third: divide the first by the second, and the result is the largest size whose stop-out stays inside the budget.

Module 3's lesson 2 built the pip value this chain multiplies by, and its conversion into your account currency is where beginners most often slip: the arithmetic must happen in one currency, yours, end to end.

Why does the stop come before the size?

Because the stop belongs to the trade and the size belongs to the arithmetic. The stop's distance is set by where the idea is wrong - lesson 3's subject - and it varies trade by trade. The size absorbs that variation: a wider stop buys fewer lots at the same risk, a tighter stop buys more, and the cash at risk holds still through both.

Run backwards - pick a size, then place the stop where the size can afford it - and the stop lands where the arithmetic pushed it rather than where the idea fails. The trade then carries either too much risk or a stop that a normal wobble clips. Both are self-inflicted, and both are invisible until the account shows them.

What does the same trade look like at a different balance?

Identical in fractions, different in everything the eye sees. The worked example's accounts range widely, and each lands on a different lot size from the same percentage and the same stop. Comparing your size with another trader's is meaningless without their balance and fraction attached; comparing fractions is the honest comparison.

Worked example - figures in USD

\$12,000 of account, 1.5% risk chosen, and a EUR/USD setup with a 40-pip stop.

1. Fix the budget: 1.5% of \$12,000 is \$180.00.
2. Price one lot's stop-out: 40 pips at \$10.00 per pip.
3. Divide: the budget over the per-lot loss gives 0.45 lots - 45,000 units. A stop-out costs \$180.00; a favourable exit is whatever the market gives at that same size. The cap was set either way.

What this means for you

Run this chain for your next planned trade before you touch the ticket, in your currency, with your numbers. If the computed size is below your broker's minimum, the answer is not rounding up - it is that this trade, at this stop, does not fit this account at your chosen risk. The arithmetic saying no is the arithmetic working.

Try it yourself with the position-size calculator: <https://ticksprout.com/tools/position-size>

Check your understanding

1. Widening a stop from 25 to 50 pips at the same risk percentage does what to position size?

- a. Halves it - the same cash budget spread over twice the distance
- b. Doubles it
- c. Nothing, if the pair is the same

Answer: a. Cash at risk is fixed by balance and fraction; the stop distance divides into it. Twice the pips per lot at the stop means half the lots for the same budget - which is precisely how the chain keeps risk constant across different trades.

2. What goes wrong when the size is chosen first and the stop placed to fit it?

- a. The stop lands where the arithmetic afforded it rather than where the idea is wrong - risking too much or clipping on noise
- b. Nothing - the arithmetic is the same in both directions
- c. The broker rejects the order

Answer: a. The equation balances either way, which is what makes running it backwards dangerous rather than impossible: it silently converts a size preference into a risk decision or a bad stop. Brokers accept the order happily - the account pays for it later.

3. The computed size comes out below your broker's minimum lot. What is the honest response?

- a. Round up to the minimum - it is close enough
- b. Skip the trade or find a structurally valid tighter stop: at your risk fraction, this trade does not fit this account
- c. Increase the risk percentage for this one trade

Answer: b. Rounding up and raising the fraction are the same decision wearing different clothes: more risk than the plan allows. The arithmetic exists to surface exactly this conflict before money is on the line.