Sizing: from risk to whole contracts

> **POSITION SIZING**
>
> Converting a risk budget into a holdable size: cash at risk divided by what the stop distance costs per contract, rounded down to whole contracts. The rounding is not housekeeping - up would exceed the chosen risk, and a result of zero is a finding about the trade, not a failure of the method.

The budget exists. The stop distance exists. This lesson divides one by the other, and takes the floor.

The chain, in commodity units

Each contract's risk is the stop distance - in the quoted price's own units, dollars per barrel - times the units in a contract. A $1.50 stop on 1,000 barrels is $1,500 a contract before conversion; your account currency arrives via the rate, exactly as module 1's notional lesson taught. Divide the cash at risk by that figure and the budget names its size.

Round down. Always. Even from 1.9.

A fractional answer is not a holdable position. Rounding 1.69 up to 2 contracts carries 18% more risk than the account chose - a silent renegotiation of the only fixed number in the plan. Down is the rule, and the risk actually carried at the whole size sits below budget as a result. That gap is information: it is slack the plan can spend elsewhere, or keep.

Zero is an answer

Sometimes one contract's risk already exceeds the budget, and the floor is zero. Commodities produce this outcome constantly - the contracts are simply big - and the honest responses are a wrapper that slices smaller, a deliberately revised budget, or no trade. What is never a response is nudging the stop closer until the arithmetic behaves; that is lesson 1's sequence run backwards, and the market does not honour it.

Work the example in your currency, then size a trade you have no intention of taking. The habit being built is mechanical: budget, stop, divide, floor - in that order, every time, until it stops feeling like a procedure.

Worked example - figures in USD

A $100,000 US dollar account risking 2% on WTI (1,000 barrels a contract) with a $1.50 stop.

1. The account risks 2% of $100,000: $2,000. That number exists before any chart is opened.
2. The stop sits $1.50 away on a contract of 1,000 barrels, so each contract carries $1,500 of risk. The budget buys 1.33 contracts.
3. You cannot hold 1.33 contracts. You hold 1, carrying $1,500 - under budget, never over. Rounding down is the sizing rule that keeps the risk you chose being the risk you have.

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

Check your understanding

1. The sizing arithmetic returns 1.69 contracts. What is the position?

a. 2 contracts - round to nearest
b. 1 contract - always down, because up exceeds the chosen risk
c. 1.69 contracts via a CFD

Answer: b. Rounding up carries more risk than the account fixed in advance, which defeats the entire sequence. The whole size carries less than budget, and the gap is shown, not hidden.

2. The arithmetic returns 0 whole contracts. What does that mean?

a. The calculation has failed and should be redone
b. One contract's risk exceeds the budget: the honest sizes are none, or a smaller-sliced wrapper
c. The stop should be tightened until the answer is 1

Answer: b. Zero is the method working. Commodity contracts are large, and 'this trade does not fit this account at an honest stop' is exactly the kind of finding sizing exists to produce.