Crypto · How crypto markets work · lesson 8 · 6 min read

Position arithmetic on a fractional asset

> **FRACTIONAL POSITION VALUE**
>
> Coins held times price - the notional - with coins divisible to many decimal places, so there is no whole-unit floor at all: the computed size is the held size, exactly, always. The simplest sizing arithmetic on the platform, feeding the highest volatility on it - which makes skipping the pre-trade calculation both easiest here and most expensive.

Equities reached the one-unit case; crypto removes the unit entirely. Coins divide to eight decimal places or more, so the sizing division has no remainder - and the arithmetic could not be simpler, which is exactly the trap.

The arithmetic, floorless

Coins times price is the position: £20,000 into a £40,000 coin buys 0.5 coins, and a £400 move on that position is £200 - plain multiplication, plain division, no rounding step because none is needed. The risk-based size from the platform's standard division comes out to whatever decimal it comes out to, and the account holds exactly that. The whole-contract chunkiness of futures and the whole-unit floor of shares are both simply gone.

Why the simplicity is dangerous here

No friction forces the calculation: no spec to read, no contract to size, no floor to notice - nothing about the trade makes a trader compute the notional, so the habit lapses exactly where volatility punishes the lapse hardest.The volatility is the highest on the platform: a coin moving 20% in a session - module 4's opening fact - turns an unsized position into a portfolio event; the notional the trader never computed is the loss they never bounded.The denominations confuse the base: a position sized in stablecoins, valued in fiat, against a coin - three units in one trade; the arithmetic is trivial only once the base currency is fixed, per lesson 6.

The self-imposed habit

The tool below sizes crypto positions from account risk and the stop; use it until coins-times-price and risk-over-stop-distance are reflexes. The platform's sizing discipline has been self-imposed since the equity track - nothing forces it - but crypto raises the stakes: the easiest arithmetic on the platform guards the most violent asset on it, and module 4 builds every risk lesson on the number this one computes. The volatility that makes crypto attractive is exactly what makes the unsized position ruinous.

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

Check your understanding

1. How does crypto sizing differ from equity sizing?

a. It uses a different formula

b. It removes the last floor: coins divide to many decimals, so the computed size is held exactly - no rounding at all, where shares still had whole units

c. It requires whole coins

Answer: b. Equities reached one unit; crypto removes the unit. The division has no remainder - the simplest arithmetic on the platform, feeding the most violent asset.

2. Why is crypto's sizing simplicity specifically dangerous?

a. The formula is easy to misremember

b. Nothing forces the calculation - no spec, no floor - so the habit lapses exactly where 20%-session volatility punishes an unsized position hardest

c. Fractional coins carry higher fees

Answer: b. Easiest to skip, most expensive to skip. The notional never computed is the loss never bounded - and module 4's every lesson builds on the number this one insists you compute.