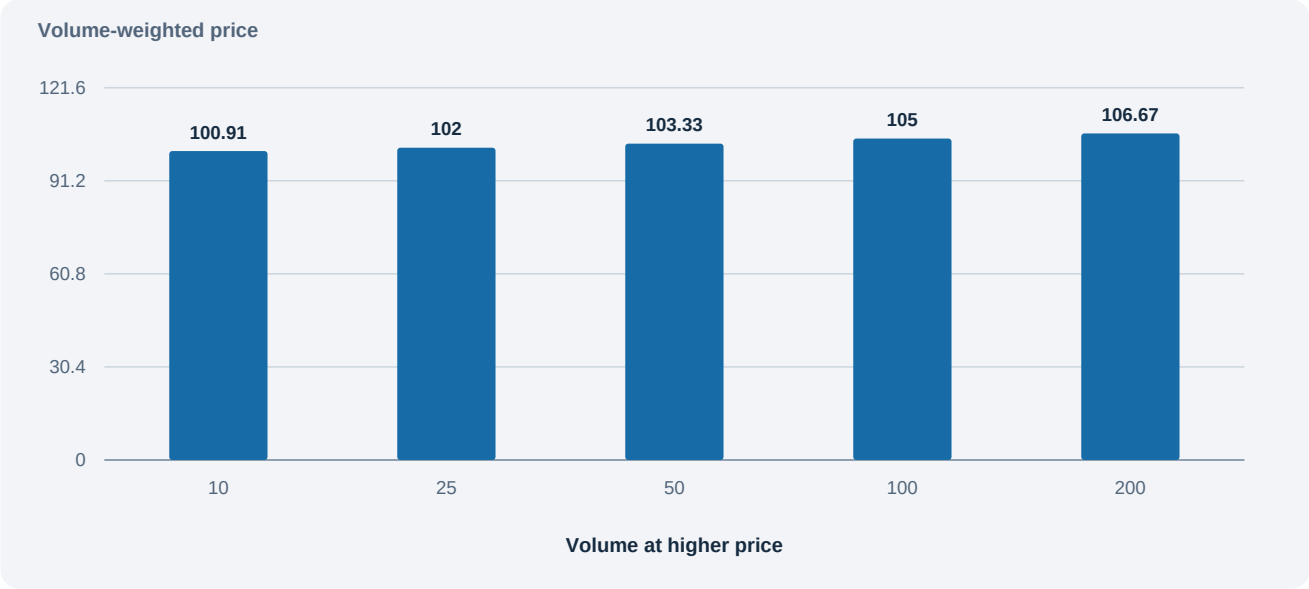
Volume-weighted moving average

Volume and auction | Original synthetic example | Edition 2026-11-26

A volume-weighted moving average weights prices within a rolling fixed window by volume. Unlike an anchored VWAP, its oldest observation leaves as the window advances.

FORMULA VWMA = sum(window price x volume) / sum(window volume)

SCENARIO 01: 100 units trade at 100; compare volume at 110



WORKED EXAMPLE

With 50 units at 110, weighted price is 103.33. Both observations belong to the stated two-observation rolling window.

COMMON MISTAKE

Using a cumulative denominator with a rolling numerator produces a calculation that is neither VWMA nor VWAP.

BEFORE YOU USE THE CALCULATION

1. Define the rolling window.
2. Remove matching old prices and volumes.
3. State the price proxy if using bars.

COMPARE TWO MORE INPUT SETS

Scenario 05: 100 units trade at 140; compare volume at 150. With 50 units at 150, weighted price is 143.33. Both observations belong to the stated two-observation rolling window.

Scenario 10: 100 units trade at 190; compare volume at 200. With 50 units at 200, weighted price is 193.33. Both observations belong to the stated two-observation rolling window.

Synthetic values are not historical market data. Educational material; trading can result in substantial losses.