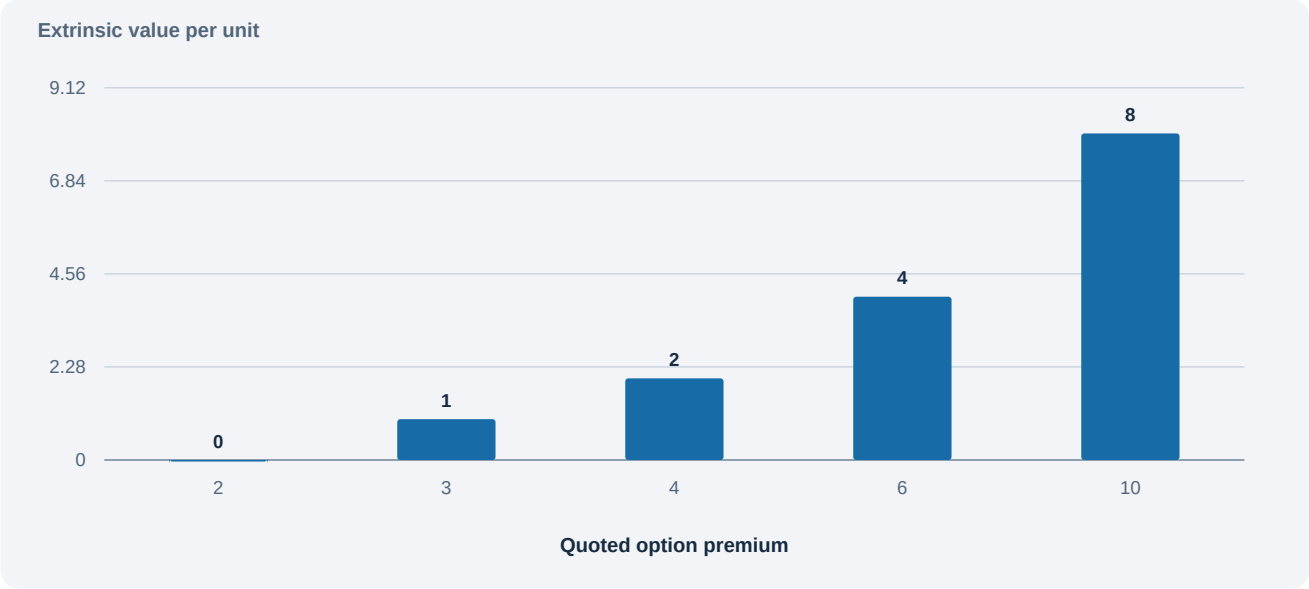
Call premium beyond intrinsic value

Option arithmetic | Original synthetic example | Edition 2026-11-26

For a quoted call, extrinsic or time value is the premium remaining after intrinsic value is subtracted. The quote may also reflect exercise style, market frictions and data quality.

FORMULA Extrinsic value = call premium - max(spot - strike, 0)

SCENARIO 01: Spot 102; strike 100; intrinsic 2



WORKED EXAMPLE

Premium 4 minus intrinsic 2 leaves 2 extrinsic value. Quotes must be synchronized.

COMMON MISTAKE

Interpreting a stale or crossed quote as meaningful negative time value ignores data consistency.

BEFORE YOU USE THE CALCULATION

1. Use synchronized spot and option quotes.
2. Keep premium and intrinsic in the same units.
3. Investigate inconsistent quotes.

COMPARE TWO MORE INPUT SETS

Scenario 05: Spot 146; strike 140; intrinsic 6. Premium 8 minus intrinsic 6 leaves 2 extrinsic value. Quotes must be synchronized.

Scenario 10: Spot 201; strike 190; intrinsic 11. Premium 13 minus intrinsic 11 leaves 2 extrinsic value. Quotes must be synchronized.

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