Debit spread maximum payoff

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

A same-expiry call debit spread buys a lower strike and sells a higher strike. At expiry its intrinsic spread value is bounded by the strike width; subtracting the debit gives P/L.

FORMULA Maximum profit = strike width - net debit

SCENARIO 01: Synthetic expiry scenario; reference strike 100



WORKED EXAMPLE

Call spread 100/110 costs 3; idealized expiry maximum profit is 7. No fees or settlement frictions.

COMMON MISTAKE

Confusing the gross strike width with net profit ignores the debit paid.

BEFORE YOU USE THE CALCULATION

1. Order the strikes correctly.
2. Use a common expiry.
3. Treat exercise and settlement frictions separately.

COMPARE TWO MORE INPUT SETS

Scenario 05: Synthetic expiry scenario; reference strike 140. Call spread 140/154 costs 5; idealized expiry maximum profit is 9. No fees or settlement frictions.

Scenario 10: Synthetic expiry scenario; reference strike 190. Call spread 190/209 costs 7.5; idealized expiry maximum profit is 11.5. No fees or settlement frictions.

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