Glossary of Trading Terms, Definitions, and Formulas

QuoteData

mark_price

Formula: (bid + ask) / 2

Definition: Midpoint between the bid and ask prices.

net_change

Formula: last_price - close_price

Definition: Difference between the last traded price and previous close.

percent_change

Formula: (net_change / close_price) * 100

Definition: Percentage change from the previous close.

OptionData

mark_price_option

Formula: (bid + ask) / 2

Definition: Midpoint between the bid and ask prices for an option.

intrinsic_value_call

Formula: max(last_price - strike_price, 0)

Definition: Value if the call option were exercised now.

intrinsic_value_put

Formula: max(strike_price - last_price, 0)

Definition: Value if the put option were exercised now.

extrinsic_value

Formula: option_price - intrinsic_value

Definition: Portion of the option price exceeding intrinsic value.

covered_return

Formula: (extrinsic / mark_price) * (365 / days_to_expiration)

Definition: Annualized return from selling a covered call.

return_on_capital

Formula: (mark_price * dv / -bp_effect) * (365 / days_to_expiration)

Definition: Annualized return based on capital deployed.

return_on_risk

Formula: (mark_price / max_risk) * (365 / days_to_expiration)

Definition: Annualized return relative to maximum risk.

VolatilityData

volatility_difference

Formula: front_vol - back_vol

Definition: Difference between front and back implied volatilities.

weighted_back_volatility

Formula: sqrt(((back_vol² * t2) - (front_vol² * t1)) / (t2 - t1))

Definition: Back volatility weighted over time.

norm_cdf

Formula: Normal CDF of x

Definition: Cumulative distribution function for normal distribution.

expected_move

Formula: last_price * exp(vol² / 2) * (2 * norm_cdf(volatility) - 1)

Definition: Expected price move based on volatility.

front_expected_move

Formula: expected_move(sqrt(t1) * front_vol)

Definition: Expected move using front month volatility.

back_expected_move

Formula: expected_move(sqrt(t2) * back_vol)

Definition: Expected move using back month volatility.

expected_move_difference

Formula: expected_move(sqrt(t2 - t1) * wbv²)

Definition: Difference in expected move over time.

market_maker_move

Formula: expected_move(sqrt(t1 * (front_vol² - wbv²)))

Definition: Implied expected move by market makers.

FundamentalData

pe_ratio

Formula: last_price / earnings_per_share

Definition: Price to earnings ratio.

dividend_yield

Formula: (dividend * freq_multiplier) / last_price

Definition: Annual dividend yield.

market_cap

Formula: last_price * shares_outstanding

Definition: Total market value of a company's outstanding shares.

VolumeData

put_call_ratio

Formula: put_volume / call_volume

Definition: Ratio of traded put options to call options.

HistoricalData

historical_volatility

Formula: std(log_returns) * sqrt(252)

Definition: Annualized historical volatility of returns.

SwingTradeAnalytics

sma

Formula: Simple Moving Average of close over period

Definition: Average of closing prices over a set period.

ema

Formula: Exponential Moving Average of close over period

Definition: Weighted average giving more importance to recent prices.

atr

Formula: Avg. True Range over period

Definition: Average of true range, a measure of volatility.

rsi

Formula: 100 - (100 / (1 + RS)); RS = avg_gain / avg_loss

Definition: Relative Strength Index.

price_change_percent

Formula: % change in close over period

Definition: Percentage price change over the selected period.

support_level

Formula: rolling min of low over lookback

Definition: Lowest price level over a lookback window.

resistance_level

Formula: rolling max of high over lookback

Definition: Highest price level over a lookback window.