

## Advanced Quiz Series

Challenging questions for advanced trading practitioners.

1. What is the optimal hedge ratio in cross-hedging strategies?
2. Calculate the Sharpe ratio adjustment for non-normal returns.
3. Explain the difference between implied and realized volatility.
4. What is the Kelly criterion formula for optimal bet sizing?
5. Define the concept of cointegration and its application.
6. How does the Black-Litterman model improve upon mean-variance optimization?
7. What are the key factors affecting bid-ask spreads?
8. Explain the mechanics of statistical arbitrage.
9. What is the significance of the Hurst exponent in financial time series?
10. How do transaction costs affect optimal trading frequency?
11. What is the optimal stopping problem in option exercise?
12. Explain the concept of regime switching models.
13. How do you measure and manage tail risk?
14. What are the limitations of the Efficient Market Hypothesis?
15. Explain the mechanics of high-frequency trading strategies.

Answer Key: Answers vary by question complexity and market conditions.