The Greeks

PRO PRACTICE WORKSHEET

Work through these by hand or with a spreadsheet. There's no wrong answer, the goal is just practice.

Section 1 - Estimate a Delta Impact

An option has a delta of 0.40. If the stock rises $5, roughly how much would you expect the option's value to change?

Section 2 - Estimate a Theta Impact

An option has a theta of -0.12. If 4 days pass with no stock move, roughly how much value would it lose to time decay alone?

Section 3 - Estimate a Vega Impact

An option has a vega of 0.20. If implied volatility drops 3 points after earnings, roughly how much value would it lose from vega alone?

Section 4 - Combine the Greeks

Using the Sections 1-3 numbers together (delta, theta, and vega impacts), estimate the option's total value change.

Section 5 - Reflection

In your own words, explain why a trader holding a long option into a company's earnings announcement should think carefully about vega, not just delta.