Options cheatsheet

Options Greeks Cheat Sheet

Implied Volatility (IV)

What it is: The market's expectation of how much the stock price will move over the next year, expressed as a percentage.

Value	What it means
0–20%	Low volatility — stock expected to be calm
20–50%	Normal range for most stocks
50–80%	High volatility — big moves expected
80%+	Extreme volatility — options are expensive

> **Your WD put:** IV = 93% → Market expects massive swings. Options are pricey.

Delta (Δ)

What it is: How much the option's price moves when the stock moves **$1**.

Value	What it means
0.00 to +1.00	Calls — rises when stock rises
0.00 to −1.00	Puts — falls when stock rises
±0.50	Roughly 50/50 chance of expiring in the money
±0.80–1.00	Deep in the money — moves almost like the stock
±0.01–0.10	Far out of the money — very unlikely to profit

>

> **Your WD put:** Delta = −0.0805 → For every $1 WD rises, your put loses ~$0.08. For every $1 WD falls, your put gains ~$0.08.

Gamma (Γ)

What it is: How much **delta itself changes** when the stock moves $1. Think of it as delta's sensitivity.

Value	What it means
High (0.05+)	Delta changes rapidly — option is very sensitive to price moves
Low (0.001–0.005)	Delta barely changes with price moves
Near expiration	Gamma spikes dramatically

> **Your WD put:** Gamma = 0.0002 → If WD drops $1, delta moves from −0.0805 to about −0.0807. Very small — you're far out of the money.

Theta (Θ)

What it is: How much value the option **loses each day** just from time passing, assuming the stock price stays flat. Always negative for buyers.

Value	What it means
−0.01 to −0.05	Slow decay — often far from expiration
−0.05 to −0.20	Moderate decay
−0.20+	Fast decay — usually near expiration or high IV

> **Your WD put:** Theta = −0.1049 → You lose ~$10.49 per day (×100 shares per contract) just from time passing. Over 30 days = ~$314 lost to time decay alone.

Vega (ν)

What it is: How much the option's price changes when **IV moves 1%**.

Value	What it means
High (0.50+)	Very sensitive to volatility changes
Low (0.01–0.10)	Less affected by volatility shifts
Long options	You benefit when IV rises
Short options	You benefit when IV falls

> **Example:** If your option has a Vega of 0.30 and IV jumps from 93% to 94%, the option gains $0.30 in value (×100 = $30 per contract).

Rho (ρ)

What it is: How much the option's price changes when **interest rates move 1%**. Usually the least important Greek for short-term traders.

Value	What it means
Positive (calls)	Rising rates slightly increase call value
Negative (puts)	Rising rates slightly decrease put value
Near zero	Short-dated options barely affected

Quick Reference: Your WD Put ($300 Strike, Jan 2028)

Greek	Your Value	Plain English
IV	93%	Market expects huge moves — option is expensive

Greek	Your Value	Plain English
Delta	−0.0805	Gains ~$8 per contract for every $1 WD falls
Gamma	0.0002	Delta barely changes — you're far out of the money
Theta	−0.1049	Loses ~$10.49/day per contract from time alone
Contract cost	$6,200	$62 quote × 100 shares

Key Concepts to Remember

- **One contract = 100 shares.** Always multiply the quoted price by 100 to get your actual cost.
- **Out of the money (OTM):** The stock price hasn't reached your strike yet. For puts, this means the stock is *above* your strike price.
- **In the money (ITM):** Your option has intrinsic value. For puts, this means the stock is *below* your strike.
- **Time decay accelerates** as expiration approaches — the last 30 days are the fastest decay period.
- **IV crush:** After major news events (earnings, etc.), IV often drops sharply, taking option prices with it even if the stock moves in your favour.

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