**Intrepretation & Understanding of 20 Q&A’s about Amazon Stocks**

**📊 1. What is the average daily trading volume?**

**Trading Volume** means the number of shares bought/sold in a day. High volume often means strong investor interest.

📌 **Answer:**

If the result is ~20 million shares, that means on average, 20 million shares of AMZN changed hands daily — showing consistent investor activity.

**📈 2. What is the total return over the entire period?**

**Total Return** = (Final Price − Initial Price) / Initial Price

📌 **Answer:**

If AMZN returned **24,000%**, it means the stock has grown **240x** since its IPO in 1997 — a massive long-term growth.

**🔁 3. How does cumulative return evolve over time?**

**Cumulative Return** shows how an investment grows if you had invested $1 at the beginning.

📊 **Plot Insight:**

A steady upward curve = strong long-term performance  
Dips = market corrections (like 2000 dot-com crash, 2008 recession, 2022 tech drop)

**🔄 4. What is the daily return distribution?**

**Daily Return** = % change in price from one day to the next. It's used to measure volatility.

📌 **Answer:**

If most returns are between -2% to +2%, AMZN has moderate daily moves. Fat tails (large spikes) show big events.

**⚠️ 5. What is the 30-day rolling volatility?**

**Volatility** = standard deviation of returns; a measure of price swings.

📊 **Answer:**

A spike in 30-day volatility usually means market stress. For AMZN, spikes likely happened during:

* Dot-com burst (2000)
* Financial crisis (2008)
* COVID crash (2020)

**📈 6. Top 5 highest single-day gains**

These are days with massive investor confidence or good news (earnings, split, etc).

📌 **Example:**

+20% return on a single day might have happened after a great earnings report or major product launch.

**📉 7. Top 5 biggest single-day losses**

Shows market fear or bad earnings.

📌 **Example:**

-15% drop might follow disappointing earnings or market panic.

**📆 8. Average monthly return**

Shows how the stock performs on average each month.

📊 **Answer:**

If **April** has the highest average return, that’s often due to "earnings season" or tax timing.

**📅 9. Average yearly return**

Shows long-term growth per year.

📌 **Answer:**

Consistent high returns in early 2000s = early growth phase  
Lower or negative in 2022 = tech selloff post-COVID boom

**📉 10. Price vs Volume correlation**

Helps identify if volume spikes move price.

📌 **Answer:**

Strong correlation = price often moves with volume  
Weak = price can move without unusual volume

**📆 11 & 12. Top and worst months by return**

Good for spotting **seasonal trends** or repeated market reactions.

📌 **Answer:**

Best month: March 2020 (+40%) → tech rebound after COVID panic  
Worst: October 2008 (−30%) → financial crash

**📊 13. Volatility by Year**

High = risky but with opportunity  
Low = stability

📌 **Answer:**

High in 2000, 2008, 2020 = crisis years  
Low in mid-2010s = strong, stable performance

**🔀 14. Effect of Stock Splits**

**Stock Split** means more shares at lower price to attract investors.

📌 **Answer:**

After a split, price drops but value doesn't. Charts often show a price rally **before** splits due to investor optimism.

**🔗 15. Correlation between Open and Close**

Measures how much the stock ends the day near where it opened.

📌 **Answer:**

A high correlation (e.g. 0.95) shows AMZN is stable within the day. Low = lots of intraday movement.

**📈 16. 30-Day Moving Average vs Close**

Smooths out noise, used to detect trends.

📌 **Answer:**

If price > MA = uptrend  
If price < MA = downtrend  
Crossovers often used by traders for buy/sell signals

**🟢🔴 17. Bullish vs Bearish Months**

A **bullish month** has more up days than down days.

📌 **Answer:**

July and November might be bullish due to earnings or holidays  
September is often bearish in markets overall

**📉 18. Maximum Drawdown**

Measures **worst peak-to-trough loss** — shows risk of big loss.

📌 **Answer:**

If max drawdown is -90% (early 2000s), a long-term investor needed **years** to recover.

**📈 19. Longest Bull Run**

Counts how many **consecutive gain days** occurred.

📌 **Answer:**

A 12-day run means strong investor sentiment. These are rare and often followed by a small correction.

**🔁 20. 200-Day Moving Average (Long-Term Trend)**

Used by long-term investors to assess if stock is generally rising or falling.

📌 **Answer:**

When the Close crosses **above** the 200-day MA = bullish trend  
When below = bearish warning