Key Business Terms & Formulas to Know for Case Interviews

Revenue Terms
• **Gross Revenue**: Total amount of sales (in $) for reporting period
• **Price**: Average price of all sold items
• **Volume**: Total number of items sold
• **Top-line Growth**: Gross sales or revenue growth
• **Mix Change**: Different volumes sold at different prices and profitability

Cost Terms
• **Fixed Cost**: Costs that change in step function (overhead, machinery, etc.)
• **Variable Cost**: Costs that vary by output, matched to units sold
• **COGS**: Cost of Goods Sold (Variable Cost/item)
• **Contribution Margin**: Revenue - Variable Cost per each unit (usually $ amount)
• **Total Cost Allocation**: A non-accounting proxy for total actual resources (fixed and variable) it takes to produce a product or serve a customer

Profit Terms
• **Gross Profit**: Gross Revenue - COGS
• **EBITDA**: Earnings Before Interest, Taxes, Depreciation, and Amortization
• **Operating Profit/EBIT**: Profit after subtracting all normal expenses except interest/taxes from regular course of business
• **Net Profit**: The final profit for tax purposes after subtracting all expenses (interest, taxes, one-time, etc.)
• **Profit Margin**: Proportion left over after subtracting (different kinds of) costs from revenue (as %)
• **Bottom-line Growth**: Profit growth (usually net profit)

Key Formulas

**ROI** = \( \frac{((\text{Ending price of investment} - \text{Cost of investment}) / \text{(Cost of investment)}) \times 100}{\text{Cost of investment}} \)

**CAGR (Compound Annual Growth Rate)** also known as **Annual Rate of Return** = 
\( \left( \frac{\text{Ending value of investment} / \text{beginning value of investment}}{\text{raised to} 1/\text{the number of years}} \right) - 1 \)

**Growth** = (Ending value – starting value)/starting value

**Breakeven point** is the point at which total cost and total revenue are equal

\[ 0 = (\text{Price} – \text{VC}) \times \text{Volume} – \text{FC} – \text{IC} \]

\[ \text{Volume} = \frac{\text{FC} + \text{IC}}{(\text{Price} – \text{VC})} \]

**Payback period** is the time it takes to reach breakeven point

\[ \text{Investment Cost / annual inflow } (\text{R} – \text{VC} – \text{FC}) \]

**Elasticity** is the measure to which, if you decrease price, your volume will increase

\[ \text{Change in volume}/-(\text{Change in price}) = \text{Elasticity} \]

Elasticity < 1 is inelastic
Elasticity > 1 is elastic

**Net Present Value (NPV)** = \( (\text{Cash flows})/(1+r)^t – \text{initial investment} \)

Cash flows = Cash flows in the time period
\[ r = \text{Discount rate} \]
\[ t = \text{time period} \]