US CPA Exam Formulas & Financial Ratios Master Cram Sheet

High-Yield Formulas for FAR, BAR, Financial Management & Corporate Reporting | US GAAP Aligned

1. LIQUIDITY & SOLVENCY (COVERAGE) RATIOS

Ratio Name	Formula	Benchmark / Target	Exam Interpretation
Current Ratio	Current Assets ÷ Current Liabilities	1.5 – 2.0x	Ability to cover short-term obligations over 12 months.
Quick (Acid-Test) Ratio	(Cash + Mkt Sec + Net A/R) ÷ Current Liab	≥ 1.0x	Strict liquidity; excludes Inventory and Prepaid Expenses.
Debt-to-Equity Ratio	Total Liabilities ÷ Total Stockholders' Equity	≤ 1.5x	Financial leverage; higher = greater bankruptcy risk.
Times Interest Earned (TIE)	EBIT ÷ Interest Expense	≥ 3.0x	Operating cushion to service annual interest obligations.

2. OPERATING EFFICIENCY & CASH CONVERSION CYCLE (CCC)

Metric	Turnover Formula	Days Formula (365 basis)	Strategic Goal
Accounts Receivable	Net Credit Sales ÷ Average A/R	**DSO:** 365 ÷ A/R Turnover	Faster cash collections from customers.
Inventory Management	Cost of Goods Sold (COGS) ÷ Avg Inventory	**DSI:** 365 ÷ Inventory Turnover	Minimize shelf time and holding costs.
Accounts Payable	Inventory Purchases ÷ Average A/P	**DPO:** 365 ÷ A/P Turnover	Maximize non-interest working capital credit.
Cash Conversion Cycle (CCC)	**CCC = DSO + DSI – DPO**	Net days from cash outlay to receipt	Shorter/negative CCC = elite cash efficiency.

3. PROFITABILITY & 3-STAGE DUPONT ROE DECOMPOSITION

Formula Name	Mathematical Equation	Component Drivers
Return on Equity (ROE)	(Net Income – Preferred Div) ÷ Avg Common Equity	Measures total accounting return delivered to equity owners.
DuPont 3-Stage Model	**ROE = (Net Margin) × (Asset Turnover) × (Leverage)** = (Net Income ÷ Sales) × (Sales ÷ Assets) × (Assets ÷ Equity)	**Operating Efficiency** × **Asset Utilization** × **Financial Leverage**. Pinpoints root cause of ROE shifts.
Return on Assets (ROA)	Net Income ÷ Average Total Assets	Total asset productivity regardless of capital financing.

4. HIGH-YIELD STOCKHOLDER & TIME VALUE EXAM FORMULAS

Basic EPS: (Net Income – Cumulative Preferred Div) ÷ Wtd Average Common Shares Outstanding.
Diluted EPS: Adjust Basic EPS for in-the-money options (Treasury Stock Method) and convertible securities (If-Converted Method).
Break-Even Point (Units): Total Fixed Costs ÷ Contribution Margin per Unit (Sales Price – Variable Cost per Unit).
Bond Carrying Value Amortization: Effective Interest Expense = Carrying Value × Market (Yield) Rate; Cash Interest Paid = Face Value × Stated (Coupon) Rate; Difference = Discount / Premium Amortization.

© Everything About Accounting • https://everythingaboutaccounting.info • Free Printable Study Guide