FINANCIAL FORMULAS - QUICK REFERENCE GUIDE

INFLATION & RETURNS

FV = PV × (1 + Inflation Rate)^n

Real Return = Inv. Return – Inflation Rate

MUTUAL FUNDS & EQUITY

NAV = (Total Assets – Liab.) / Units

Market Cap = Market Price × Total Shares

Brokerage ≤ 2.5% of Trade Value

Bid Ask Spread = Best Bid – Best Ask

YIELD MEASURES

Curr. Yield = (Annual Coupon / Market Price) × 100
Annual Coupon = Coupon Rate × Face Value (FV=100 unless mentioned)

Div. Yield = (Dividend / Share Price) × 100

INTEREST & COMPOUNDING

Simple Interest (SI)

SI = P × n × r
A = P(1 + nr)

Compound Amount (CA)

A = P(1 + i)^n

BALANCE SHEET BASICS

Net Block = Gross – Depreciation

Net Working Capital = Curr. Assets – Curr. Liab.

TIME VALUE OF MONEY

Future Value (Single Flow)

Discrete:
FV = PV × (1 + r)^t

Continuous:
FV = PV × e^{rt}
(e ≈ 2.7183)

Future Value of Annuity

$$FVA = CF*(1+r)^{t-1} + CF*(1+r)^{t-2} + \ldots + CF*(1+r)^1 + CF$$

$$= CF\left(\frac{(1+r)^t - 1}{r}\right)$$

Present Value (Single Flow)

Discrete:
PV = FV / (1 + r)^t

Continuous:
PV = FV × e^{-rt}

Present Value of Annuity

Discrete:
PVA = FV [{(1+r)^t – 1} / {r(1+r)^t}]

Continuous:
PVA = FV × [(1 - e^{-rt}) / r]

LIQUIDITY RATIOS

Current Ratio = CA / CL

Acid Test = Quick Assets / CL
Quick Assets = CA – (Inv. + Prepaid)

LEVERAGE RATIOS

Debt / Equity Ratio = Total Debt / Total Equity

Debt / Asset Ratio = Total Debt / Total Assets

Interest Coverage Ratio = EBIT / Interest

Debt Service Coverage Ratio = Cash Flows / Debt Obligations
Num: (PAT + Dep + Non-cash + Int)
Den: (Interest + Loan Repayment)

TURNOVER RATIOS

Inv. Turnover = COGS / Avg Inv.
COGS = Sales – Profit
Avg Inv = (Open + Close) / 2

Debtors T/O = Net Credit Sales / Avg Debtors

Average Collection Period = Avg Debtors / Daily Credit Sales
or ACP = 365 / Debtors Turnover

Fixed Asset T/O = Net Sales / Net FA

Total Asset T/O = Net Sales / Avg Total Assets

PROFITABILITY RATIOS

Gross Profit Ratio = (GP / Sales) × 100

Net Profit Ratio = (NP / Sales) × 100

Return On Total Asset = NPAT / (Fixed Assets + CA)

Return On Capital Employed = NPAT / Capital Employed
Cap Emp = FA + CA – CL

Return On Equity = NPAT / Shareholders' Equity

Earnings Per Share = Profit Avail. to Equity / Shares

P/E = Market Price / EPS