- Assets – Liabilities = Equity
- Assets = (Contributed Capital + Beginning Earnings + Revenue) + Liabilities – Expenses – Dividends

Sales
- COGS

Gross Margin
- Operating expense

Operating Profit
- Interest Expense

Income before Taxes
- Provision for Taxes

Income from Continuing Operations
- Provision for Taxes

Income from Discontinued Operations (Net of Taxes)

Net Income

- Basic EPS = $\frac{NetIncome - Pfd.Dividends}{TotalShares}$
- Diluted EPS =

$$\frac{(NetIncome - Pfd.Dividends) + (Conv.PfdDividend) + Conv.DebtInterest)(1-t)}{TotalShares + Conv.prf.Shares + Conv.DebtShares + SharesfromOptions}$$

- Profit Margin = Net Income / Sales
- Current ratio = Current Assets / Current liablities
- Quick ration = (Current assets – Inventory) / Current Liabilities
- Cash ratio = (Cash + Cash Equivalents) / Current liabilities

Debt (Solvency) Ratios:

- Long Term debt to Equity = Long Term Debt / Total Equity
- Debt Ratio to Equity = Total Debt / Total Equity
- Total Debt Ratio = Total Debt / Total Assets
- Financial Leverage = Assets / Equity

Inventory:

- Begin Inventory + Purchases – COGS = End Inventory.
- FIFO Inventory – LIFO Inventory = LIFO reserve
- $COGS_{FIFO}$ = $COGS_{LIFO}$ - Change in LIFO Reserve
- $COGS_{FIFO}$ = $COGS_{LIFO}$ - (LIFO Res_{End} - LIFO Res_{Beg})
- $COGS_{LIFO}$ = $COGS_{FIFO}$ + (BEG INV_{FIFO} * Inflation)

Depreciation:

- Straight line depreciation = (Actual Cost – Salvage) / Depreciable Life
- Sum of the year Depreciation: Add all years (for Four years 1+2+3+4= 10), then the first year depreciation is 4/10, followed by 3/10, 2/10, 1/10.
- Double-Declining Depreciation = (2/Depreciable life) * Value at Begin of the Year

Activity Ratios:

- Receivable Turnover = (Annual Sales / Average Receivables)
- Days of sales Outstanding (Avg. Collection Period) = 365 / Receivable turnover
- Inventory Turnover = (Cost of Goods Sold / Avg. Inventory)
- Days of On hand Inventory = 365 / Inventory Turnover
- Payable Turnover = Purchases / Avg. Payables
- Days of Payable = 365 / Payable turnover
- Asset Turnover = Sales / Average Assets
- Fixed Asset Turnover = Sales / Average Fixed Assets
- Cash Conversion Cycle = Days of sales Outstanding + Days of Inventory - Days of Payable

Profitability Ratios:

- Profit Margin = Net Income / Sales
- Gross margin = Gross Profit / Sales
- Operating Margin = Operating Profit / Sales (EBIT / Sales)
- Pretax Margin = (EBT / Sales)
- Return on Assets ROA = Net Income / Total Assets

- Return on Capital (ROTC) = Net Income / Total Capital
- Total capital = add short term debt, Long term debt, Preferred Equity and Common Equity
- Return on Equity (ROE) = Net Income / Total Equity
- Return on Common Equity = (Net Income – Preferred Dividend) / Common Equity

DuPont Equation for ROE

- ROE = (Net Income/Sales) * (Sales/ Equity)
  = *Profit Margin * Equity Turn Over*

- ROE = (Net Income/Sales) * (Sales/ Assets) * (Assets/Equity)
  = *Profit Margin * Asset Turn Over * Leverage*
  = Return on Assets * Leverage
  (ROA = NI/Assets or Profit Margin* Asset Turnover)

DuPont Equation - 5 Part Equation:

ROE = (NI/EBT) *(EBT/EBIT) * (EBIT/Sales) * (Sales/Assets) * (Assets/Equity)

Tax Burden Equals to (1-T) *
Interest Burden *
Operating Margin *
Asset Turn Over *
Leverage

Growth Rate (g) = ROE * Plough back ratio (or Retention Ratio)

Retention ratio = 1-dividend ratio