1 Notes to myself

1. Read whole question first. A lot of info is useless.
2. For multiple part questions, highlight the key point they are asking for.
3. Before calculating, write down all equations being used.

2 Accounting in Business & FS Overview

2.1 International Accounting Standards Board (IASB)

2.1.1

- Qualitative Characteristics: Relevance, Faithful Representation, Comparability, Veriiability, Timeliness, Understandability
- IASB -> IFRS -> FRS (Singapore)
- Overall ethical conduct - Independent accountants represent the public interest

2.1.2 Auditors & External Audit

- Independent certified public accountant (CPA) perform external audits.
- Provides public with assurance that FSs are not misleading.

2.2 The Accounting Equation

- Assets = Liabilities + Equity
- = Liabilities + Share Capital + Retained Earnings
- = Liabilities + Share Capital + Revenue - Expenses - Dividends

2.2.1 Asset

- A **present resource**
- Due to a **past event**
- That will **result in future benefits**

2.2.2 Liabilitity

- An **obligation**
- Due to a **past event**
- That will **result in future outflow** of resources upon **settlement**
- Accounts: Unearned Revenue, Accounts Payable

2.2.3 Equity

- Owner's claim on the residual interest after deducting all Liabilities
- net assets (total assets - total liabilities)

2.2.4 Claims

- Share Capital / Capital Stock: contributed by owners
- Retained earnings: equity earned by company

2.3 IASB Definitions

- Income: inflow/enhancement of assets (OR decrease in liabilities -> equity up). During accounting period, not by contributions from owners.
- Expense: outflow/depletions of assets (OR incurrance of liability -> equity down). During accouting period.
- Capital Maintenance Adjustments: Revaulation of assets/liabilities. **not included in income statement**. Treated as Other Comprehensive Income (OCI)

2.4 The Financial Statements

2.4.1 Statement of Financial Position AKA Balance Sheet (SFP/BS)

- A = L + E
- A snapshot of company's economic resources and obligations
- Limitation: Assets recorded at cost, not market value. Usually book v < market v

2.4.2 Statement of Comprehensive Income (SCI)

- **Net Income (NI)** = Rev - Exp
- NI + OCI = Comprehensive Income
- Revenues: Operation earnings, Net Income: NI = Rev - Exp, Other Comprehensive Income: investments etc.
- Shows economic performance over time.
- Either Income statement & SCI together or not. OCI can be seperate (IAS1)

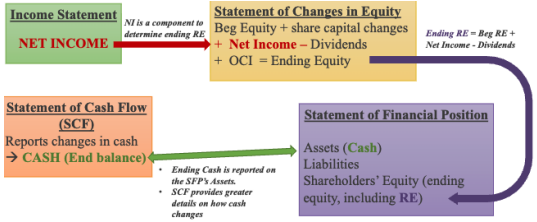
2.4.3 Statement of Changes in Equity (SCE)

- How the ownership interest in a company has changed over a specific period
- Beginning Equity + △Equity = End Equity, where △Equity = △Capital + Net Income - Dividends + OCI

2.4.4 Statement of Cash Flows (SCF)

- How cash is generated and used by the company
- CFO + CFI + CFF (operating, Investing, financing)
- CFO: revenue, etc. CFI: buying equipment, land, etc. CFF: investors investing, paying dividends etc.

2.5 Relationships among the 4 FSs



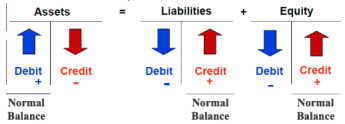
2.6 Fundamental Concepts & Assumptions of Accounting

- Separate entity concept: Activity of a bz is separate from its owners
- Time-period assumption: bz's activities can be divided into time periods (monthly,quarterly,etc)
- Assumption of arm's-length transactions
- Cost Principle
- Fair value Principle
- Monetary measurement concept
- Going concern assumption

3 Mechanics of Accounting

3.1 Credit/Debit

- Depends on Type of account.
- Normal Debit/Normal Credit



depends on where the account lies on the AE.

4 The Accounting Equation

4.1 Main equation

- Assets = Liabilities + Equity
- = Liabilities + Share Capital + Retained Earnings
- = Liabilities + Share Capital + Revenue - Expenses - Dividends

4.2 Assets

- Current and Non-current
- Current: Cash & Cash eq, Accounts Receivable, Inventory, Prepaid expenses
- Non-current: PPE, Intangible assets: trademarks, copyrights, goodwill, Long-term investments: Bonds

5 AJE (Adjusting Entries) & effect on Accounting Equation

5.1 Cash vs Accrual

- Cash: add up cash inflows and outflows. Revenue recorded as soon as cash comes in, expense recorded as soon as cash goes out. None of: AR, AP, UR, Prepaid Expenses, Accumulated Depreciation
- Accrual: Recognizes event when main economic impact occurs. Revenues recorded when earned, expenses recorded when incurred.

5.2 Calculating Effects on AE

- Supplies worth $500 was purchased but was not included in assets because it got debited to Supplies Expense even though they were not consumed during the year.

Original | Corrected | effect on accounts | effect on AE

In recording a credit Sales of $15,700, NachoCheez incorrectl

5.3 Fast way to calculate effect on AE

- If need **fast**: (1) **Focus on variable (A/L/E or others)** (2) Correcting Change to Accounts (3) effect on variable (A/L/E or NI, Cur Asset, or others.)

5.4 Careful of Contra Accounts

- **be careful of contra accounts**: category[Contra account(account)]
- xAssets[Accumulated Depreciation (PPE), Loss Allowance(AR), Discount on NR(NR)]
- xRevenues[Sales returns, Sales Discounts(Sales Revenue)]
- xEquity[Treasury Stock(Shareholders Equity), Owner's Draws(Owner's Capital)]
- xLiability[Discount on bonds payable(bonds payable)]

6 Notes Receivables

A promissory note to pay a specified amount of money, usually with interest, either on demand or at a definite future date. e.g. 800k, 4%, 9 month note on July 1st 2023.

(1) at **EOY 2023**: Accrued $\frac{6(\text{july-dec2023})}{12} \times 4\% \times 800k$ worth of Interest Revenue. -> Dr Interest Receivable, Cr Interest Revenue.
(2) at March 31st (**due date**): Dr Cash 800k + full interest (24k), Cr Interest Receivable 16k, Cr Interest Revenue $\frac{3(\text{jan-mar2024})}{12} \times 4\% \times 800k$, Cr 800k Accounts Receivable.

7 Estimated Credit Loss (ECL) & Loss Allowance (LA)

- $ECL = LA_{target} - LAcurrent$ where LA_{target} depends on analysis
- **Individual Assessment**: n% chance that $x owed by Company A will be uncollectible: $n\% \times \$x = ECL$ (for that company)
- **Group Assesment**: Usually aging analysis: $SUM(\$Amt \times Est.\%Uncollectible)$,
- where each class(current, 1-30 days past due, etc) has some $\$Amt$ collectible and some $Est.\%Uncollectible$.

8 Inventory & COGS

8.1 Inventory

- NRV > Cost : inventory recorded at cost
- NRV < Cost : inventory recorded at NRV

8.2 COGS

- **COGS - Cost of Goods Sold**: There's no such thing as inventory expense. [-asset(cash or credit) and +asset(inventory).] You only record it as an expense when you sell the inventory (COGS).
- COGS = Beg Inv + Purch'd Inv – End Inv

8.3 Formulas

- Weighted Average Cost = total cost/total n
- Specific Identification Cost = n*cost per purchasing transaction

9 Current Liabilities

9.1 Warrenty

- During expected warrenty expense calculation: Dr Warrenty Exp, Cr Est. Warrenty Liability
- When warrenty claimed: Dr Est. Warrenty Liability, Cr Cash/Inventory for repairs

10 PPE & Intangibles

- ...

10.1 Depreciation Methods

10.1.1 Why Depreciation?

Pressure to lower taxable income v.s. Pressure to inflate reported profitability **Remember to calculate partial year if needed.**

10.1.2 Straight-line

- Equal depreciation each year
- $DE = \frac{\text{Cost} - RV}{\text{Useful years}}$

10.1.3 Calculating Depreciation

- Acquisition cost = Invoice + Other add-ons + Sales Tax
- Annual depreciation expense under straight line = (Acquisition cost – salvage value) / estimated life

10.1.4 Units-of-production

- Varying amounts of depreciation depending on production that year
- $DE = \frac{\text{Cost} - RV}{\text{Life in units of production}} \times \text{Actual units produced that year}$

10.1.5 Declining-balance/Accelerated Depreciation

- More depreciation in earlier stage (2x, 1.5x)
- (1) Useful life is 4 years -> straight line rate = $\frac{100\%}{4} = 25\$$
- (2) Assume double declining -> DDB rate = $2 \times 25\% = 50\%$
- (3) Assume net book value of asset is $10,000 -> depreciation expense = $10k x 50% = $5,000 (for that period)
- **Residual value** is **ignored**.
- Once asset is depreciated below RV: Depreciation Expense = $NBV_{previous} - RV$

1) Straight-line method
   - Equal depreciation expense each year

$$\text{Depreciation Expense} = \frac{\text{Cost - Residual Value}}{\text{Useful Life in Years}}$$

2) Units-of-Production method
   - Varying amounts of depreciation expense each year based on production

$$\text{Depreciation Expense} = \frac{\text{Cost - Residual Value}}{\text{Life in Units of Production}} \times \text{Actual Units Produced}$$

3) Double-declining-balance (DDB) method
   - Declining amount of depreciation expense over time (accelerated depreciation)

$$\text{Depreciation Expense} = \text{Net Book Value} \times \frac{2}{\text{Useful Life in Years}}$$

10.2 Capitalize v.s. Expense

- R&D: Expensed. Dev cost after tech feasiility established can be capitalized. (IFRS) (GAAP: all r&d are expensed in the period incurred).
- Repairs:
- Expense: Maintainence, Does not increase productivity, does not extend life beyond original estimate, Recurring in nature.
- Capitalize: Overhauls or partial replacements, not frequent, increases efficiency, Extends useful life beyong estimate, Involves a lot of money
- NBV before capitalization = Original Acquisition cost – Accumulated Depr
- NBV after capitalization = Revised asset value – salvage value
- = (Beg Carrying amount + capitalized exp) – salvage

10.3 Disposal of PPE

- Go through slides again (Slide 47 + post lecture stuff)
- PPE Truck + (Gain) = Disposal Value + Accumulated Depreciation + (Loss)

10.4 Intagible Assets

- Definite vs indefinite life
- Amortisation expense
- Accumulated Amortization (new xAsset)
- Market Cap - Net Book value = Goodwill (2638B - 51B for apple lol)

10.5 new formulas

- Fixed Assets Turnover = $\frac{NetSales}{AvgFixedAssets}$
- how efficient a company is in using its fixed assets to generate sales
- Total Assets Turnover = $\frac{NetSales}{AvgTotalAssets}$
- ability in using its total assets as a whole to generate sales

10.6 slide 62 for summary

11 Statement of Cash Flows

11.1 Cash Flow from Operating Activities (CFO)

- NI = Net Income, δ CA = δ Current Assets, δ CL = δ Current Liabilities
- CFO = NI + Non-cash expenses + Losses - Gains - δ CA + δ CL

11.2 Cash Flow from Investing Activities (CFI)

- Purchase/Sales of PPE, Purchase/Sale of Investments
- CFI = Cash Inflows from Investing - Cash Outflows from Investing

11.3 Cash Flow from Financing Activities (CFF)

- Issuance/Repayment of debt, Issuance/Repurchase of Shares, Dividends Paid
- CFF = Cash Inflows from Financing - Cash Outflows from Financing

11.4 Net Change in Cash

- Net Change in Cash = CFO + CFI + CFF

11.5 Ending Cash

- Net Change in Cash = CFO + CFI + CFF

11.6 Statement Structure

12 Uncategorized

12.1 Other

- **Retained Earnings**
  RE = Rev - Exp - Div + **Previous RE**
- **Normal Debit or credit?**
  Equity = Rev - Exp - Div. Revenue is normal credit, Expenses are normal debit, Dividends are normal debit.
- **Expenses**
  Operating expenses: Rent, Utilities, Salaries, Advertising exp, Fees, **Expected Credit Loss (ECL)**| Non-operating expenses: Interest expense on loans, Taxes expense.| **COGS** (direct cost of producing/obtaining goods sold)
- **Revenue**
  Operating revenue: Service/Sales revenue, Rental income (real estate company), Recurring revenue (SaaS company)
  Non-operating revenue: Dividend revenue, Gain on sale of assets, ROyalty income, Forex gains, etc.
- △**NI**(Net Income) = Revenues (all) - Expenses (all). Remember to sum startNI and △**NI** for endingNI.
- △**AR**(Accounts Receivable) = Cash Collected - Credit Sales
- **Current Assets**
  (1) Current Assets - Loss Allowance (Contra-asset account) (2) For all entries, calculate change to Asset. Note that Liabilities are not assets, so if you take on liabilities for assets your assets still go up.
- **Cash Collected from customers**
  (finalAR-totalAR) + (final Unearned Revenue - startingUR)

- **Journal Entries for Recovering write-offs**: If we recovered $828 from previously written off accounts, its: [Dr AR Cr LA], THEN [Cr AR Dr Cash]. 2 steps, same with:
- **Journal Entries for Selling Goods** [Dr Cash Cr Revenue] then [Dr COGS Cr Inventory]
- △**Equity** = △**Share Capital** + Net Income - Dividends (Inferred from SCE) = △**Assets** - △**Liability** Depending on the question, this must be shifted around.
- **Collect on account**: no longer AR. means collected in cash or equivalents.
- n-day note issued on day x of some month: n – days left in month – days in next month – ... = day of payment

13 Other Accounting Equations

13.1 Return on Assets (ROA)

Returns on assets is in ratio form as income divided by assets invested. (income/assets invested)

$$\text{ROA} = \frac{\text{Net Profit}}{\text{Average total assets}}$$

Where Average total assets = (Start Assets + End Assets)/ 2
Note: Net profit = net income

13.2 Debt Ratio

Evaluate **debt risk**. Ability to pay its liabilities using debt ratio. (liabilities/assets), lower = less risk.

$$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

13.3 Profit Margin

r/s between sales and net profit. Higher = more profit per $ sale

$$\text{Profit Margin} = \frac{\text{Net Profit}}{\text{Net Sales}}$$

Note: Net Sales = Sales Revenue
A high profit margin is an indicator of future growth.

13.4 Current Ratio

The current ratio of a company gives us a good indication of the company's ability to pay its debts when they fall due. The current ratio is calculated by dividing current assets by current liabilities.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

13.5 Days' Sales Uncollected

how much time is likely to pass before we receive cash receipts from credit sales.

$$\text{Days' Sales Uncollected} = \frac{\text{Accounts Receivable}}{\text{Net Sales}} \times 365$$

13.6 Accounts Receivable Turnover Ratio

Measures how often are receivables collected - how many times a year the company converts its average accounts receivables into cash.

$$\text{Receivable Turnover Ratio} = \frac{\text{Net Sales Revenue}}{\text{Average Net Receivables}}$$

high ratio = faster collection of receivables -> shorter operating cycle -> more cash available for running business. Low RTR could indicate that company is allowing too much time for customers to pay. When calculating a ratio and have income statement item in the numerator and a balance sheet item in denominator, must calculate the avg balance sheet amount. The quickest way is to take (beginning + ending balance)/2.
If a company offers terms of net 30 on its sales, we should expect turnover of 12. This is because over the entire year, the average accounts receivable should be equivalent to roughly 30 days of sales. Hence, Total sales/Avg AR should be 12. >12 -> collect >12x its Avg AR per year -> they collect fast -> more cash for running business.

13.7 Avg Collection Period/Days to Collect

Measures how many days on average it takes the company to collect its accounts receivables.

$$\text{Avg Collection Period} = \frac{365}{\text{Accounts Receivable Turnover}}$$

Should be as close to or lower than its offer terms. i.e. net 30 then try to be <=30

13.8 Inventory Turnover

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

How many times a company sells its entire inventory during a period. If inventory varies a lot, average amounts can be computed from interim periods.
Applied to analyze short-term liquidity and management of inventory. High ratio = more short-term liquidity. Low ratio suggest inefficient use of assets, such as company holding more inventory than it needs. High ratio may suggest that inventory is too low. No simple rule other than high ratio is prefered PROVIDED inventory is adequate to meet demand.

13.9 Days' Sales in Inventory

$$\text{Days' Sales in Inventory} = \frac{\text{Ending Inventory}}{\text{Cost of Goods Sold}} \times 365$$

To better interpret inventory turnover, many users measure the adequacy of inventory to meet sales demand. Days' sales in inventory, also called days' stock on hand, is a ratio that reveals how much inventory is available in terms of the number of days' sales. It can be interpreted as the number of days one can sell from inventory if no new items are purchased. This ratio is useful in evaluating liquidity of inventory.
To interpret turnover, we can use this metric to measure how adequate the inventory is to meet sales demand. It reveals how much inventory is available in terms of the number of days' sales. Used to evaluate liquidity of inventory. Higher = more liquid inventory.

13.10 Cash Flow on Total Assets

The Cash Flow on Total Assets ratio is used with profit-based ratios to help assess a company's performance. It is calculated as Net cash flow from operating activities divided by Average total assets.

$$\text{Cash Flow on Total Assets} = \frac{\text{Net Cash from Operating Activities}}{\text{Average Total Assets}}$$

This ratio reflects actual cash flows and is not affected by accounting profit recognition and measurement. It can help business decision makers estimate the amount and timing of cash flows when planning and analyzing operating activities.

14 Statements

- In order of steps:
- Income Statement

Saja & Co.
Income Statement
For the Year Ended December 31, 2025

Sales Revenue	$ 80,000
Cost of Sales	$ (18,400)
Gross Profit	$ 61,600
Less Expenses:	
Salaries Expense	$ (20,000)
General Admin Expense	$ (7,000)
Rent Expense	$ (7,000)
Depreciation Expense	$ (10,000)
Bad Debt Expense	$ (2,100)
Operating Income	$ 15,500
Income Tax Expense	$ (1,300)
Net Income	**$ 14,200**

- Statement of Changes in Equity

Saja & Co.
Statement of Changes in Equity
For the Year Ended December 31, 2025

	Share Capital	Retained Earnings	Total Equity
Beginning Balance	$ 120,000	$ 31,000	$ 151,000
Net Income		$ 14,200	$ 14,200
Dividends		$ (4,500)	$ (4,500)
Ending Balance	$ 120,000	$ 40,700	$ 160,700

- Statement of Financial Position

Saja & Co.
Statement of Financial Position
At December 31, 2025

Assets		
Current Assets		
Cash	$ 130,000	
Accounts Receivables (net)	$ 42,900	
Inventory	$ 16,600	
Prepaids	$ 7,000	
Total Current Assets		$ 196,500
Non-current Assets		
Property, Plant & Equipment (net)	$ 70,000	
Total Non-current Assets		$ 70,000
Total Assets		**$ 266,500**
Liabilities		
Current Liabilities		
Accounts payable	$ 44,000	
Income Tax Payable	$ 2,800	
Unearned Revenue	$ 4,500	
Dividends Payable	$ 4,500	
Total Current Liabilities		$ 55,800
Non-current Liabilities		
Long-term Debt	$ 50,000	
Total Non-current Liabilities		$ 50,000
Total Liabilities		**$ 105,800**
Stockholders' Equity		
Share Capital	$ 120,000	
Retained Earnings	$ 40,700	
Total Equity		**160,700**
Total Liabilities & Shareholders' Equity		**$ 266,500**

- Statement of Cash Flows

Rizz Tea Company
Statement of Cash Flows
For the Year Ended Dec 31, 2025

Cash Flows from Operating Activities:		
Profit before taxes	46,797	
Adjustments to reconcile profit to net cash from operating activities:		
Depreciation Expense	8,891	
Changes in non cash current assets & liabilities:		
Accounts Receivable	(4,549)	
Inventories	(858)	
Prepaid expenses	6,457	
Accounts payable	(1,798)	
Accrued expenses	(396)	
Loss on disposal of asset	2,500	
Interest income	(860)	
Cash generated from operations	56,184	
Income tax paid	(11,055) (1)	
Interest income received	410 (2)	
Net cash from operating activities		45,539
Cash Flows from Investing Activities:		
Cash received from disposal of asset	1,009 (3)	
Cash paid for purchases of asset	(10,000) (3)	
Net cash from investing activities		(8,991)
Cash Flows from Financing Activities:		
Cash received from share issuance	645 (4)	
Cash paid for dividends	(7,550) (5)	
Net cash from financing activities		(6,905)
Net increase in cash		29,643
Beginning cash balance		54,497
Ending cash balance		84,140