

COMM 293
2018W1 Midterm Review Package
With Solutions
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1. Accounting Basics

$$\underline{\text{Asset} = \text{Liabilities} + \text{Shareholders' Equity}}$$

Asset:

- Resources that a business owns
- Has capacity to provide future services or benefits
- Resulted from past business events

Liabilities:

- Creditors' claims against assets
- Resulted from past business events
- Must be paid before ownership claims

Shareholders' equity:

- "Residual claim": leftover equity after creditors are paid
- Calculated as asset minus liabilities

Revenue: gross **increases** in stockholders' equity resulting from business activities entered into for the purpose of earning income

Expense: the cost of assets consumed or services used in the process of earning revenue. They are **decreases** in stockholders' equity that result from operating the business.

Financial Statements:

- Balance Sheet (at a **point** in time)
- Income Statement (for a **period** of time)
- Statement of Changes in Equity (over a **period** of time)



- Statement of Cash Flows (over a **period** of time)

Generally Accepted Accounting Principles (GAAP) in Canada

Public companies must use **IFRS**, private companies can use **IFRS** or **ASPE**.

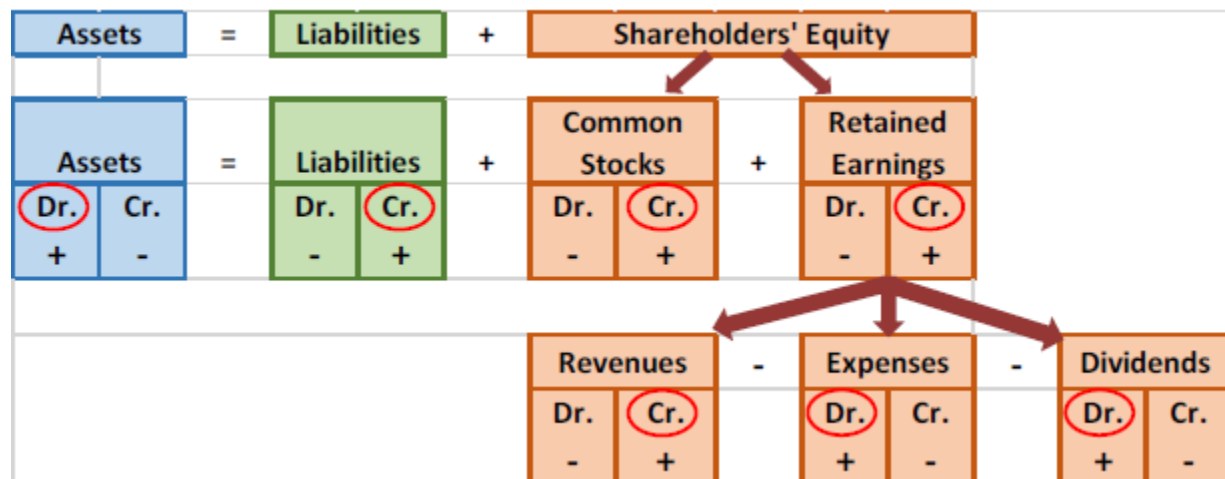


PRACTICE: Please find the correct classification for the following accounts, and indicate on which financial statement they will appear.

Accounts receivable	Asset	Inventory	Asset
Retained earnings	S/E	Common shares	S/E
Notes payable	Liability	Sales revenue	Revenue
Cost of goods sold	Expense	Unearned revenue	Liability
Prepaid expense	Asset	Accumulated depreciation	Contra-Asset

Debit & Credit

In double entry accounting system, a journal entry's total debit amount must equal total credit amount.



Credit: Xin Zheng, PhD



2. Adjustments

When and what to recognize?

Accrual basis vs Cash basis

Revenue recognition principle & Expense recognition principle

(matching principle):

when revenue (expenses) is incurred, no matter when cash is received (paid).



PRACTICE: How to prepare journal entries when cash is received before / at the same time when / after revenue is earned?

Before

At the same time

After

Dr Cash

Cr Unearned revenue

Dr Cash

Cr Revenue

Dr Cash

Cr Accounts receivable

What if cash is paid before expense is incurred? (e.g. insurance, rent)

Dr Prepaid insurance

Cr Cash

Period end adjusting entries:

Dr Insurance expense

Cr Prepaid insurance

Deferrals: cash before events (e.g. cash received before service rendered)

Accruals: cash after events (e.g. service rendered before customer pays)

Depreciation

Way of **allocating** the **cost** of a tangible asset over its useful life. It is not the same as decrease in the asset's **market value**. Salvage value and useful life are estimates, which require professional judgment.

Depreciation expense per period = (cost – salvage value) / useful life

Accumulated depreciation: a contra-asset account on balance sheet

Book value = cost – accumulated depreciation

(Again, book value does not mean market value)





PRACTICE:

Joe started a late-night food delivery business serving hungry UBC students. In the beginning of 2018, Joe bought a car for \$4000 and estimated that it would last 5 years, after which he would sell it for \$500. At the end of 2018, Joe asks you to prepare journal entries related to depreciation for the year.

Depreciable amount = \$4000 - \$500 = \$3500

Annual depreciation = \$3500 / 5 = \$700

Dr Depreciation expense	700
Cr Accumulated depreciation	700

Closing Process: close out all temporary accounts into **income summary**, and eventually into **retained earnings**.

Permanent accounts: carry balances forward.

e.g. Cash, accounts receivable, loans payable, contributed capital

Temporary accounts are closed every period.

e.g. sales revenue, utilities expense, loss on disposal, dividends declared



PRACTICE: Joe's business became an instant hit after launch. He earned \$2000 in revenue and incurred \$500 expense in the first month. Please help him prepare journal entries to close revenue and expense accounts into income summary.

Dr Revenue	2000
Cr Expense	500
Cr Income summary	1500



3. Inventory

Goods that a company holds for sale to customers



PRACTICE:

Circle the correct inventory system that has the following features:

Keeps track of inventory on hand	Perpetual	Periodic
Better internal control	Perpetual	Periodic
Cheaper to maintain	Perpetual	Periodic
Good for big firms with complex inventory system	Perpetual	Periodic
Account adjusted only at period end	Perpetual	Periodic

Journal entries for perpetual inventory system

Purchase Inventory:

Dr Inventory

Cr Accounts payable (credit sale) or Cash (cash sale)

Transportation and stocking cost incurred by buyer is added to inventory value.

Sale of goods (two parts):

Dr Accounts receivable

Cr Sales revenue

Record cost of goods sold:

Dr Cost of goods sold (or cost of sales)

Cr Inventory

Journal entries for periodic inventory system

Purchase Inventory:

Dr Purchases (Asset)

Cr Accounts payable

Sale of goods:

Dr Accounts receivables

Cr Sales revenue

Cost of goods sold:

No entry as sales are recorded.

Record COGS at year end.

Dr Cost of goods sold

Cr Purchase

Determine COGS at end of year:

Beginning inventory

+ Net Purchases in the year*

= Cost of goods available for sale

(COGAS)

Less Ending inventory (from physical count)

= Cost of Goods Sold



Purchase Discounts, Allowances and Returns (entries for periodic systems in *italic*)

Purchase discount: e.g. 2/10, n/30

Dr Accounts payable

Cr Inventory / *Purchase Discounts*

Cr Cash

Purchase Allowance:

Dr Accounts payable

Cr Inventory / *Purchase Allowances*

Purchase Return:

Dr Accounts payable

Cr Inventory / *Purchase Returns*

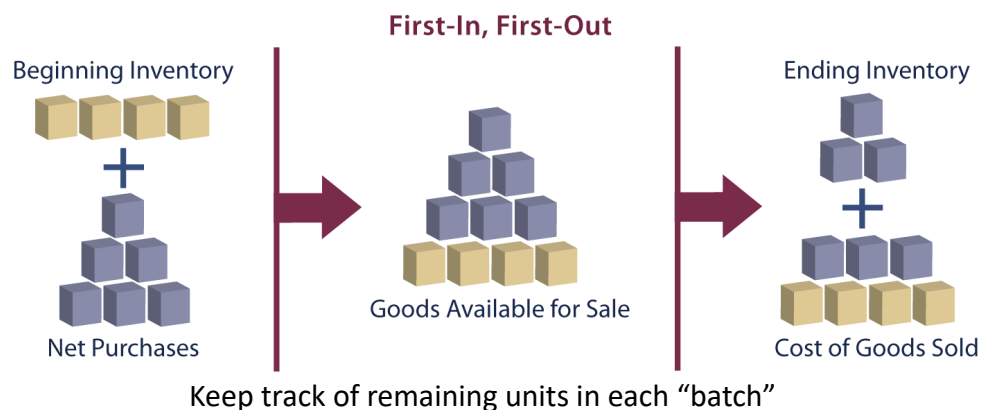
Ownership of Goods

FOB shipping point vs FOB destination

Consigned goods

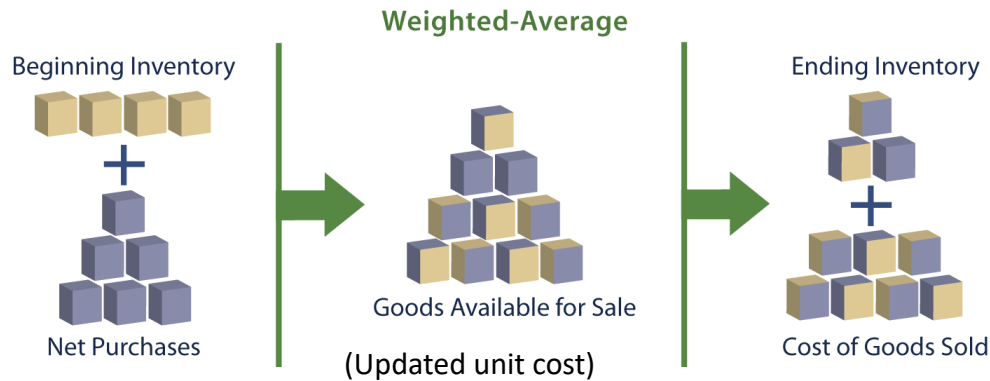
Inventory Costing Methods

- **Specific Identification**
 - Identify each product in inventory and record purchasing cost.
 - Customized, exotic products. Time- & cost-consuming but precise
- **First-In, First Out**
 - May not be the same flow of physical inventory (i.e. grocery store)
 - COGS charged to first purchased inventory
 - If running out of current batch, charge to next batch



- **Weighted Average**

- Inventory batches are mixed (i.e. gas station)
- Update unit cost after each purchase
- $\text{COGS} = \text{Avg. unit cost} * \# \text{ units sold}$



PRACTICE

Jason is a professional dealer who buys iClickers (inventory) from graduating students and sells them to incoming freshmen to make a profit. Here is a summary of his business activities this year.

Date	Purchase / Sale	Price (\$ each)	Quantity
April 28	Purchase	9	2
April 30	Purchase	10	3
May 2	Sale	25	1
May 3	Sale	30	2
May 25	Purchase	11	2
July 2	Sale	28	3

What is Jason's total cost of goods sold under FIFO and weighted average methods, respectively?

FIFO:

Until the first SALE happened, Jason had five (2+3) iClickers on hand.

Under FIFO we assume the first SALE (May 2) took inventory from the first PURCHASE (Apr. 28). $\text{COGS}_1 = \$9$

Now Jason had one iClicker from the first batch and three from the second batch. When SALE occurred on May 3, the remaining one unit in the first batch (\$9) was accounted for first, leaving one unit short. The other unit had to come from the second batch (\$10). $\text{COGS}_2 = \$19$

The third SALE happened on July 2, when Jason had four units in stock. At this moment, there were two units from second batch and the other two from the third batch. Under FIFO, two of the three units sold came from the second batch and the remaining one came from the third batch. $\text{COGS}_3 = \$31$



Total COGS under FIFO = $9+19+31 = \$59$

Weighted Average:

Under weighted average method, we do not track number of remaining units in each batch. Instead, we mix units and calculate unit cost based on the pool of inventory. Unit cost of inventory is updated whenever there is a PURCHASE. Unit cost = Total inventory cost / number of units

When a PURCHASE was made on Apr.30, we update our record to reflect the changing unit cost. The following SALES that occurred on May 2 and May 3 were accounted for at a unit cost of \$9.6 each.

Before the PURCHASE on May 25, we had 2 units left in stock. The PURCHASE changed the unit cost because $11 \neq 9.6$. The increased cost will be applied to all units including those newly purchased and the ones previously purchased. Using the same method, we obtain the updated unit cost \$10.3.

Date	Purchase / Sale	Price (\$ each)	Quantity
April 28	Purchase	9	2
April 30	Purchase	10	3
Updated unit cost = $(9 \times 2 + 10 \times 3) / (2 + 3) = \9.6			
May 2	Sale	25	1
May 3	Sale	30	2
Number of units in stock: $2 + 3 - 1 - 2 = 2$ Unit cost = \$9.6			
May 25	Purchase	11	2
Updated unit cost = $(9.6 \times 2 + 11 \times 2) / 4 = \10.3			
July 2	Sale	28	3

Total COGS under weighted average = $\$9.6 \times 3 + \$10.3 \times 3 = 28.8 + 30.9 = \59.7

Lower-of-Cost-or-Market (LCM):

Inventory is written down if **market value** drops below its original cost.

No write-ups allowed. Reversion of write-downs allowed under IFRS.

Rationale behind it: **Accounting Conservatism**



PRACTICE

BeaverBox sells protective cases for smartphones. After Samsung recalled Galaxy Note 7 phones, BeaverBox can no longer sell its custom fit Note 7 cases. There are 30000 cases in stock and each case costs \$5 to manufacture. The company currently sells this case for \$15 each. Sales manager estimates that all remaining Note 7 cases can only be sold as scrap plastic to a recycling company for \$0.5 each. Please prepare journal entries to write-down BeaverBox's inventory.



TRAP: \$15 is irrelevant here as inventory is valued at cost.

Write-down amount for each phone case: $\$5 - \$0.5 = \$4.5$

Total write-down amount: $30000 * \$4.5 = \135000

Dr Cost of goods sold	135000
Cr Inventory	135000

4. Accounts Receivable

Classification: current vs non-current

A/R is often recorded when

- revenue is recognized
- returns or allowances occur
- cash is collected from customers who previously purchased on account

Bad debts

Part of accounts receivable may become uncollectible. **Indirect** method is commonly used. Estimate requires professional judgment. Rationale behind indirect method: matching principle.

Allowance for doubtful accounts is a contra-account under accounts receivable.



PRACTICE

Bob sells office supplies to local businesses on credit. A recent storm destroyed plants of many of his clients. On Jan. 1, Bob estimated that 3% of total accounts receivable would become uncollectible. He had \$50000 outstanding receivables. Please prepare journal entries to record bad debt expense.

a. Estimate the amount of bad debt expense for this period (percentage of credit sales or aging of accounts receivable)

$BDE = \$100000 * 3\% = \3000

Dr Bad debt expense	3000
Cr Allowance for doubtful accounts	3000

b. When a certain amount of A/R becomes uncollectible (e.g. customer goes bankrupt)



On Mar.1, in light of extended business suspension of his biggest client FloppyDiskDepot, who owed \$1500, Bob determined that he would never be able to collect the money. Assume that the \$1500 had been recorded in allowance for doubtful accounts.

reverse allowance and reduce A/R

Dr Allowance for doubtful accounts	1500	
Cr Accounts receivable		1500

c. When a previously written-off account becomes collectable

On Mar. 15, FloppyDiskDepot resumed operation and confirmed with Bob that they would pay the full amount owed by the end of March.

Dr Accounts receivable	1500	
Cr Allowance for doubtful accounts		1500

d. When cash is received

On Mar.30, Bob received a \$1500 cheque from FloppyDiskDepot.

Dr Cash	1500	
Cr Accounts receivable		1500

Disposal of Accounts receivable

Company transfers accounts receivable to another party for a fee. Do not confuse it with bad debts.



PRACTICE

XYZ company has a large amount of accounts receivable. To improve liquidity, management decided to sell \$100000 A/R to a third-party collector for a 5% fee. Please prepare journal entries for this transaction.

Dr Cash	95000	
Dr Service charge expense	5000	
Cr Accounts receivable		100000

Promissory notes

Usually have specified interest rate, face value and terms.

Face value * annual interest rate * time in terms of one year = interest





PRACTICE

Anthony's Pasta Bar is an iconic restaurant in Vancouver serving mega-size pasta dishes. Due to the venue's increasing popularity, management decides to finance a renovation project to increase seating capacity. On Feb. 1, Anthony's signed a promissory note with a face value of \$100000 due in ten months. Interest is to be paid at maturity at 9% per annum. Please prepare journal entries for the **LENDER**.

The lender has a Sep. 30 year end. Interest accruals need to be adjusted at year end.

Interest earned = $\$100000 * 9\% * 8/12 = \750

Dr Interest receivable	6000	
Cr Interest revenue		6000

On Nov.1, Anthony's paid interest and the principal.

Interest earned after Sep. 30 year end = $100000 * 9\% * 1/12$

Dr Cash	106750	
Cr Interest revenue		750
Cr Interest receivable		6000
Cr Notes receivable		100000

5. Internal Control

Bank Reconciliation

Reconcile balance in accounting records and bank records to check for discrepancies, which typically result from timing difference and errors. Bank statements may also show items that are not yet recorded by the company.

Timing difference: uncashed cheques.

Errors: clerical errors, bank errors



PRACTICE

On July 3, ABC company conducted a bank reconciliation. The following transactions were reported by the bank. Please prepare journal entries.

June 6	a client sent in a \$500 wire transfer to pay for products purchased in May.
June 15	the bank charged \$25 monthly fee
June 30	\$20 interest was credited into the company's account



June 6	Dr Cash	500	
	Cr Accounts receivable		500
June 15	Dr Service charge expense	25	
	Cr Cash		25
June 30	Dr Cash	20	
	Cr Interest revenue		20

