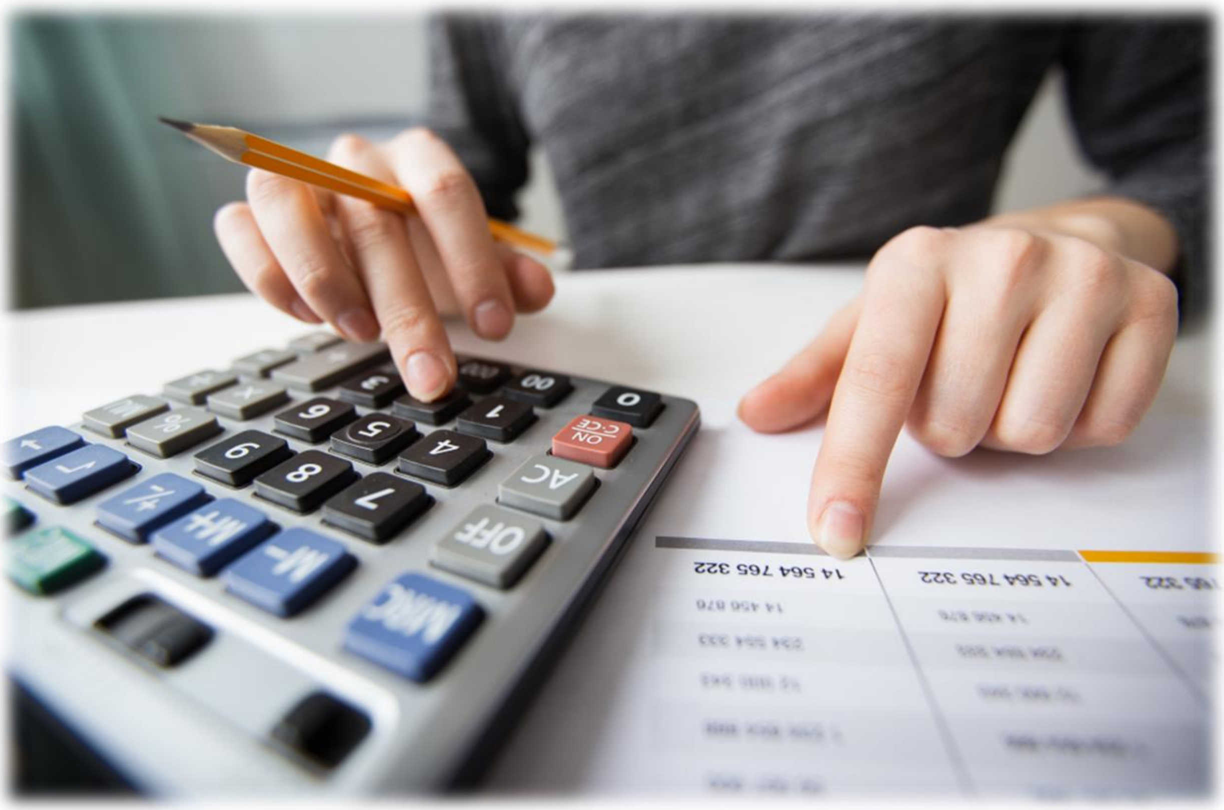
Fundamental of Accountancy, Business, and Management 2

Module 4

Name: ________________________________

Section: ________________________________

Chapter 7 Pt. 2



End-of-the-Period Adjustments Part 2. (4th step of the accounting process)

WRITE YOUR NAME ON THE FRONT BEFORE YOU START READING AND ANSWERING!!!

PROPERTY AND EQUIPMENT AND THE RELATEED DEPRECIATION

Property and Equipment as defined by **Philippine Accounting Standards (PAS No. 16)** are tangible assets which are held by an enterprise for use in the production of supply of goods and services, for rental to others, or for administrative purposes, and are expected to be used during more than a one-year period.

These include land, buildings, machineries, motor vehicles, furniture and fixtures, equipment and improvement to leased facilities which are called **depreciable assets** except land because it is expected to be useful to the business enterprise for an indefinite period of time.

Before we discuss depreciation accounting, let us first study how property and equipment is valued and classified.

Land – The account includes purchase price, agent's commissions, attorney's fees and other expenses incurred in obtaining the clean title, payment to squatters and tenants occupying the land including relocation and reconstruction of property belonging to others in order to acquire possession, cost of demolition of old structures (salvage from disposal of the old building is considered as a reduction of the land account), clearing and grading and all expenses that should have been paid by the seller but assumed by the buyer.

Building – The account includes acquisition cost, renovation or remodeling cost incurred if the building is already existing; If the building is going to be constructed, the actual cost of the construction which include salaries of construction workers, building permits and architect's fees. Included also are excavation costs and cost of temporary structures used as office and stockroom.

Machinery and Equipment – The account includes the cost of purchase, transportation, installation, trial-run, insurance while in transit and cost incurred in order for it to be ready to operate.

Land Improvements – The account includes driveways, sidewalks, parking lots, water drainage system, canals and culverts, fencing and landscaping.

Property and Equipment are generally recorded at cost, less allowance for depreciation. Cost is measured at the cash price equivalent. This is presented in the Balance Sheet as Non-current Assets.

The portion of the property and equipment that should be allocated over the number of years and chargeable against expenses during the period. This is called **depreciation expense**.

The reason why property and equipment are subject to depreciation is because it helps in generating revenue in the conduct of its operation. The *revenue* that it generates should be matched against *depreciation expense* incurred during the period.

There are two (2) kinds of depreciation; **Physical Depreciation** and **Functional** or **Economic Depreciation**.

1. **Physical Depreciation** – results to the ultimate retirement of the property or termination of the service of the asset because of wear and tear due to frequent use, passage of time due to non-use, action of the elements such as wind, sunshine, rain, or dust, and others.

2. **Functional or Economic Depreciation** – assets from obsolescence or inadequacy of the assets to perform efficiently. The asset is said to be obsolete when there are already new models or inventions and that the business desires to replace the old asset that can no longer produce the desired production result due to growth in business. For example, the *production capacity* of the machine is only 50,000 units whereas *sales volume requirements* are 100,000 units.

Methods of Computing Depreciation

There are various methods of computing depreciation. This module, however, discusses only the most common and simplest method of computing depreciation, the **"straight-line method"**.

There are three (3) factors that must be considered in determining depreciation. These are:

1. **Acquisition Cost** – it is the amount paid or liability incurred when the asset is acquired. It includes the purchase price and other incidental cost of its acquisition.
2. **Scrap Value** – the estimated value of the asset at the end of its economic or useful life. This is sometimes called **salvage value** or **residual value**.
3. **Estimated Economic or Useful Life** – the estimated length of time usually stated in years that the asset can be of use.

The straight-line method computes depreciation using this formula:

$$\textbf{Annual Depreciation} = \frac{\textbf{Cost of the Asset – Salvage Value}}{\textbf{Estimated life of the asset in years}}$$

Based on the above formula, the computed depreciation represents the yearly expiration of the fixed asset and is called *Annual Depreciation Expense*.

To illustrate:

On Oct. 1, 20A, Metro Davao Commercial acquired an air conditioning unit for office use costing P80,000. Freight paid was P5,000 and cost of installation was P15,000. The estimated useful life is 5 years and a residual value of P10,000.

By using the above formula, annual depreciation is computed as follows:

$$\frac{\textbf{Cost of the Asset – Salvage Value}}{\textbf{Estimated Life in years}} = \frac{\text{P100,000 – P10,000}}{\text{5 Years}}$$

$$= \textbf{P18,000 Annual Depreciation}$$

Since the air conditioning unit was acquired on Oct. 1, 20A and the annual accounting period ends on Dec. 31, 20A, the depreciation to be recorded shall be equivalent to the fraction of 3/12 (counting from Oct. 1 to Dec. 31) times P18,000 which is equal to P4,500. This is what we call a Fractional Depreciation because we get a fraction of the annual depreciation.

The adjusting entry on Dec. 31. 20A will record depreciation of the air conditioning unit for the three (3) month period only:

ADJUSTING ENTRY

20A		**Particulars**		**Debit**	**Credit**
Dec.	31	Depreciation Expense		P4,500	
		Accumulated Depreciation			P4,500
		To record depreciation expense from the period Oct. 1 to December 31, 20A.			

Note: The Depreciation Expense to be recorded on the next accounting period which covers Jan.1, 20B to Dec. 31, 20B will be P18,000.

Presented below is a table (Lapsing Schedule) showing the expiration of the cost of fixed asset, Office Equipment from the date of its acquisition up to the end of its useful life.

Depraciation	Acquisition Cost	Scrap Value	Depreciation Expense	Accumulated Depreciation	Net Book Value
Oct. 1 to Dec. 31, 20A	P100,000	P10,000	P4,500	P4,500	P85,500
Jan. 1 to Dec. 31, 20B			18,000	22,5000	67,500
Jan. 1 to Dec. 31, 20C			18,000	40,500	49,500
Jan. 1 to Dec. 31, 20D			18,000	58,500	31,500
Jan. 1 to Dec. 31, 20E			18,000	76,500	13,500
Jan. 1 to Dec. 31, 20F			18,000	90,000	0
The end of its life			P90,000	P90,000	

Take note of the following:

1. The amount of the Accumulated Depreciation kept on increasing at the end of each period equivalent to the recorded depreciation expense.
2. The cost of the Property and Equipment is shown with its decreasing value through the *"net book value"* column.
3. At the end of its life on Sept. 30, 20F, the fixed asset is said to have been *"fully depreciated."* On this date, the total amount of the Accumulated Depreciation is P90,000 which will equal to the acquisition cost of P100,000 less scrap value of P10,000 = P90,000.

4. This means that the asset can still be sold for P10,000 at the end of its economic life. When the fixed asset is acquired without *scrap value*, the formula in computing depreciation is made much simpler:

Formula

$$\frac{\textbf{Cost of fixed asset}}{\textbf{Economic Life}} = \textbf{Annual Depreciation}$$

In this instance, at the end of its economic life, the computed depreciation expense will be P100,000 which will equal to its accumulated depreciation of P100,000 also.

Using the same illustration:

$$\frac{\text{P100,000}}{\text{5 years}} = \textbf{P20,000 Annual Depreciation}$$

Since the air conditioning unit was acquired on Oct. 1, 20A, the computed depreciation for three (3) months ending Dec. 31, 20A would be P5,000 (20,000 x 3/12)

EFFECTS OF ERROR/OMISSION ON FINANCIAL STATEMENTS

Income Statement – if depreciation expense is not recorded or understated, Profit is **overstated**. Conversely, if depreciation expense is overstated, Profit is **understated**. If overstatement or understatement of depreciation expense will occur in one period, it will continue to overstate or understate profit in the subsequent periods until such time that the error is discovered and corrected.

Balance Sheet – the overstatement or understatement of depreciation expense has the effect of overstating its valuation account, the **Accumulated Depreciation** which has also the effect of understating or overstating the **Net Book Value** of the property and equipment. This *"domino effect"* of transactions and events will overstate or understate the non-current asset section of the Balance Sheet. Owner's Equity will also be affected depending on what this error/omission will have in the Balance Sheet.

FINANCIAL STATEMETNS PRESENTATION

Depreciation Expense is the nominal account which will be shown in the Expense section of the **Income Statement** while the Accumulated Depreciation is a valuation, contra-asset or asset-offset account which will be shown in the **Balance Sheet** as a reduction from the cost of fixed assets as shown below:

The difference between the cost of the **Fixed Asset,** Office Equipment of P100,000 and the related Accumulated Depreciation, P5,000 is called **Net Book Value** or **Book Value** of P95,000.

When a company acquires two or more fixed assets, each fixed asset will carry its own valuation account in the books while depreciation expense will show a lump sum account of depreciation during the period the fixed assets are depreciated. Let us assume that the company also acquires a delivery car on the same date for P120,000 and the computed depreciation is let's say P12,000. This is presented in both Balance Sheet and Income Statement as follows:

RECORDING ACQUISITION OF PROPERTY AND EQUIPMENT AT DISCOUNT

When property and equipment, say for example a machine is acquired at a discount, the amount of the discount is considered as a reduction from its acquisition cost.

To illustrate:
A machine is acquired on account costing P100,000. If paid within 20 days from the date of purchase, a 10% discount can be availed.

Journal Entry on date of purchase

20A		Particulars		Debit	Credit
		Machine		P100,000	
		Accounts Payable			P100,000
		To record cost of machine acquired			

Journal Entry upon payment with a discount

20A		Particulars		Debit	Credit
		Accounts Payable		P100,000	
		Machine			P10,000
		Cash			90,000
		To record payment within the discount period			

The amount of the discount of P10,000 was *credited* reducing the cost of the machine. The ledger account of Machine is presented below:

(insert pic here)

The basis of depreciating the machine is the cost of P90,000. This is called depreciable cost or depreciable value of the fixed asset.

Most often, after the acquisition of the machine, the business will incur additional costs before it can be used in its operations, such as installation cost, freight and handling, trial-run or testing cost, insurance while in travel, etc, These are called incidental costs which are being added to the purchase cost of the machine.

Assuming that the business incurs incidental costs of P20,000, the journal entry would be as follows:

20A		Particulars		Debit	Credit
		Machine		P20,000	
		Cash			P20,000
		To record installation and trial-run costs incurred.			

At this point, the machine will have a depreciable cost of P110,000 (P90,000 + P20,000).

RECORDING ACQUISITION OF PROPERTY AND EQUIPMENT BY LUMP SUM

When a company acquires a group of assets for lump sum price, the total cost should be allocated to the individual assets based on the relative fair market values.

Example:

Arnold Navales Company acquired printing machine and delivery vehicle for P900,000 with the following fair market values:

Printing Machine	P450,000
Delivery Vehicle	150,000
Total	P600,000

The P900,000 lump sum price should be allocated as follows:

	Market Value	Fraction	Allocated Purchase Price
Printing Machine	P450,000	450/600	P675,000
Delivery Vehicle	150,000	150/600	225,000
	P600,000		P900,000

The allocated purchase price of printing machine in the amount of P675,000 is derived by multiplying the fraction 450/600 or 75% by P900,000 while delivery vehicle is the fraction 150/600 or 25% is multiplied by P900,000 = P225,000.

The entry to record the acquisition of assets is:

Printing Machine	P675,000
Delivery Equipment	225,000

The same holds true in allocating the cost of land, building and land improvements.

DISPOSAL OF PROPERTY AND EQUIPMENT

The acquisition of a property and equipment is not intended for sale by the business. However, it might be deemed wise for the business to sell its fixed asset order to acquire a new one which can be more productive in its operations. When this event happened, the cost of the fixed asset together with its valuation account is being removed from the records by way of a journal entry. The sale may result to having either a gain or a loss transaction.

Assume:

The business has a computer which it acquired a year ago. Per record, the acquisition cost was P35,000 and its accumulated depreciation was P7,000 as of the date of sale. The net book value therefore is P28,000.

Case 1: The computer was sold for P30,000.

Journal Entry to record the disposal at a gain:

20A		**Particulars**		**Debit**	**Credit**
		Cash		P30,000	
		Accumulated Depreciation – Office Equipment		7,000	
		Office Equipment			P35,000
		Gain on Disposal of Office Equipment			2,000
		To record the disposal of computer.			

(The sale resulted to having a gain because the cash proceeds is bigger that its net book value. While the cash proceeds is P30,000, the net book value is P28,000)

Case 2: The computer was sold for P25,000.

Journal Entry to record the disposal at a loss:

20A		**Particulars**		**Debit**	**Credit**
		Cash		P30,000	
		Accumulated Depreciation – Office Equipment		7,000	
		Loss on disposal of Office Equipment		3,000	
		Office Equipment			P35,000
		To record the sale of computer.			

(The sale resulted to having a loss because the cash proceeds is smaller than its net book value. While the cash proceeds are P25,000, the net book value is P28,000.)

Shown on the next page are the ledger accounts of the Office Equipment and its Valuation account before and after the sale transaction.

Review Questions: Answer the following questions and write your answer on a separate sheet of paper and attach in to this module.

1. What is the formula in computing the straight-line method of depreciation?
2. Differentiate physical from function depreciation.
3. Why is it important to depreciate assets?
4. When do you depreciate assets?

True or False: Write **T** if the statement is correct and **F** if incorrect.

_______ 1. In PAS No. 16, property and equipment are considered as depreciable assets which are all subject to depreciation including land.

_______ 2. Depreciation expense is an example of systematic and rational allocation.

_______ 3. The value of the property and equipment decreases due to wear and tear, passage of time and introduction of new model and inventions.

_______ 4. When a company acquires two or more fixed assets, each fixed asset carries its valuation account.

_______ 5. When a specific fixed asset is sold, the related accumulated depreciation will also be written-off in the books.

_______ 6. When cash proceeds from the sale of fixed asset is smaller than its net book value, it will result to a gain on sale of fixed assets.

_______ 7. Incidental cost incurred in buying machine (fixed asset) such as freight and handling, trial-run or testing cost are added to the purchase price of said machine.

_______ 8. Property and Equipment is shown in the Balance Sheet less Accumulated Depreciation.

_______ 9. Depreciation expense will always equal to accumulated depreciation at the end of the accounting period.

_______ 10. Accumulated Depreciation, although not an asset but it is presented in asset section of the Balance Sheet.

_______ 11. Net Book Value is the term for an Accounts Receivable less Estimated Uncollectible Accounts once reflected in the books of accounts.

_______ 12. When depreciation expense is understated, the net book value of the asset is overstated.

Multiple Choice: Encircle the letter of the correct answer in each of the given questions.

1. Exception of depreciable assets which are subject to depreciation is -

   a. Building
   b. Furniture and fixtures
   c. Land
   d. Equipment

2. The portion of property and equipment that have been allocated to the number of years is called -

   a. Appreciation
   b. Depreciation
   c. Deterioration
   d. Consumption

3. Which of the following is not needed in computing depreciation under straight-line method?

    a. Cost of the asset
    b. Estimated life of the asset
    c. Scrap value of the asset
    d. Book value of the asset

4. The difference between cost of the asset and its related valuation account is called -

    a. Replacement value
    b. Current value
    c. Net book value
    d. Market value

5. The wear and tear due to frequent use of the asset and passage of time due to non-usage is an example of -

    a. Physical depreciation
    b. Functional depreciation
    c. Accumulated depreciation
    d. Depreciation expense

6. Accumulated depreciation is a valuation account of the property and equipment or fixed asset. Valuation account is sometimes referred to as -

    a. Depreciation expense
    b. Contra-asset
    c. Net book value
    d. Net realizable value

7. What is the possible effect in the Balance Sheet if recording of depreciation expense is omitted?

    a. Net income is overstated
    b. Depreciation expense is understated
    c. Non-current asset section is overstated
    d. Non-current asset section is understated

8. The assets that are needed to be replaced because they can no longer meet the required production due to growth in business, the assets are said to be -

    a. For sale
    b. Obsolete
    c. Fully depreciated
    d. Terminated

9. A Machine costing P350,000 was purchased on account with a given term. If upon payment, a 20% discount was availed, the credit entry will include -

    a. Cash of P280,000 and machine of P70,000
    b. Cash of P280,000 and purchase discount of P70,000
    c. Accounts payable of P280,000 and machine of P70,000
    d. Machine of P280,000 and purchase discount of P70,000

Problem Solving: Journalize and solve for the following transactions. (Show your solutions)

1. On July 1, 2021, Metro Pacific Commercial acquired a brand-new delivery van to be used for its customer delivery service. The delivery van was purchased on account for P1,500,000. The agent charged an additional P5,000 for commission fee and added P8,000 for shipping costs. On July 15, 2021, the delivery van was registered in the Land Transportation Office, the company paid P5,000. It was estimated that the delivery van had a useful life of 8 years. On December 31, 2021, the end of the current account period, adjustment entries were prepared.

    Required:

    What is the total acquisition cost of the delivery van?

    What is the annual depreciation expense?

    What is the depreciation of the current year ending December 31, 2021?

    What is the Journal Entry to record the depreciation?

What if the salvage value for the delivery van was P80,000, what is the annual depreciation?

2. On September 1, 2021, Trakov Mills arranged the purchase of a new milling machine which was priced at P500,000. It was estimated that the machine would be useful for about 5 years. It was also estimated that the machine would carry a salvage value of P20,000. The installation of the milling machine including all training costs amounted to P15,000. The end of the accounting period was December 31, 2021.

   Required:

   What is the acquisition cost of the milling machine?

   What is the annual depreciation of the milling machine?

   What is the Journal Entry to record the depreciation?

3. On August 1, 2021, Asus computers acquired a new forklift for P300,000 that had an estimated useful life of 4 years with a salvage value of P20,000. At the time, the purchase was made on account. A 15% discount was offered to the company if they were to pay within 15 days after the date of purchase. One month after purchase, the company had to spend an additional P15,000 training and safety improvements for the forklift. The end of the accounting period is on December 31, 2021.

   Required:

   If payment was made on August 14, what is the value of the forklift?

   If payment was made on August 17, what is the value of the forklift?

What is the annual depreciation expense, granting the discount was availed?

What is the Journal Entry to record the depreciation if the discount was availed?

4. On Oct 1, 2021. Greentown Lending Corporation purchased a brand-new computer set, printer, desk, and chair for a lump sum price of P80,000. The accounting period ends on December 31, 2021.

   The fair market values of the the purchased equipment are as follows:

Computer set	P70,000;
Printer	P10,000;
Desk	P15,000;
Chair	P5,000;

   Required:

   What is the allocated purchase cost of the computer set?

   What is the allocated purchase cost of the Printer?

   What is the allocated purchase cost of the Desk?

   What is the allocated purchase cost of the Chair?

5. Apple Google Store bought laptop 2 years ago for P45,000. It was determined that the accumulated depreciation of the laptop was P22,000. The net book value of the laptop at the time was P23,000.

   The laptop is considered an office equipment in the books of the company.

   Required:

   If the computer set was sold for P25,000, would there be a gain or a loss on disposal? What is the Journal Entry to reflect your answer?

   If the computer was sold for P20,000, would there be a gain or a loss on disposal? What is the Journal Entry to reflect your answer?