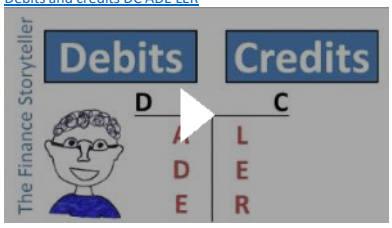
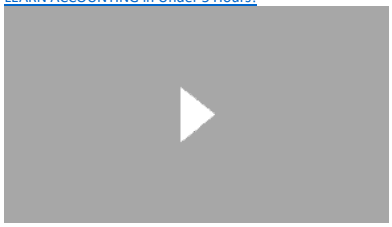
Accounting

Sunday, January 14, 2024 7:00 PM

Debits and credits DC ADE LER



LEARN ACCOUNTING in Under 5 Hours!



Basic Accounting:

Assets = Liabilities + Equity

Ex:	Cash	AP=0	Profit	Equity	Rent	
	Fixed Asset	Maid -	Salary	capital	Main	
	AR=0					
	A	**L**	**I**	**C**	**E**	
	Asset	**Liability**	**Income**	**Capital & equity**	**Expense**	
Normal Bal	Dr	Cr	Cr	Cr	Dr	***Increase***
	Cr	Dr	Dr	Dr	Cr	***Decrease***

Charge and Receipt:

Charge and Receipt					
No Cash (Charge)	**Accrual - Book**	Before receiving the cash we record the transaction		**DR**	**CR**
				AR	**Income**
			Rent	5000	5000
Cash received	**Accrual - Book**	Before receiving the cash we record the transaction		**Cash**	**AR**
			EMI	5000	5000
	Cash - Book	Actual transaction			
				Cash	**Income**
			Rent	5000	5000

Charge and Receipt					
No Cash (Charge)	**Accrual - Book**	Before receiving the cash we record the transaction		**DR**	**CR**
				AR	**Income**
			Rent	5000	5000
Cash received	**Accrual - Book**	Before receiving the cash we record the transaction		**Cash**	**AR**
			Rent	5000	5000
	Cash - Book	Actual transaction		**Cash**	**Income**
			Rent	5000	5000

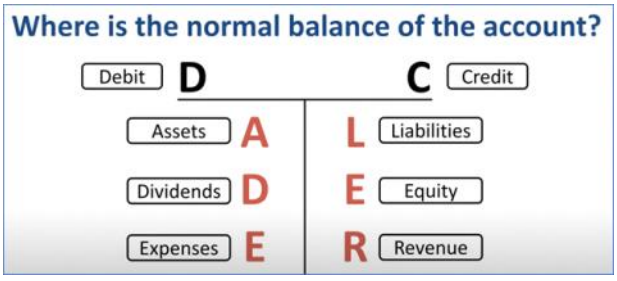
Payable and Check:

Payable and Check					
No cash (Payable)	Accrual - Book	Before receiving the cash we record the transaction		**DR**	**CR**
				Exp	**AP(Liability)**

		Rent	5000	5000
Cash Given	Accrual	Before receiving the cash we record the transaction		**AP(Liability)**	**Cash**
		Rent	5000	5000
	Cash - Book	Actual transaction		**Exp**	**Cash**
		Rent	5000	5000

Payable and Check					
No cash (Payable)	Accrual - Book	Before receiving the cash we record the transaction		**DR**	**CR**
				Exp	**AP(Liability)**
			Rent	5000	5000
Cash Given	Accrual	Before receiving the cash we record the transaction		**AP(Liability)**	**Cash**
			Rent	5000	5000
	Cash - Book	Actual transaction		**Exp**	**Cash**
			Rent	5000	5000

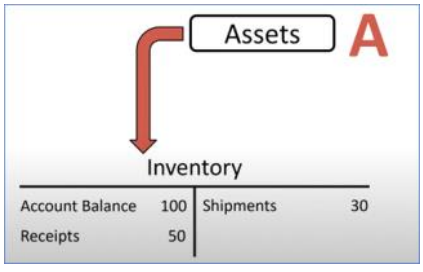
Lecture 1: Debits and Credits



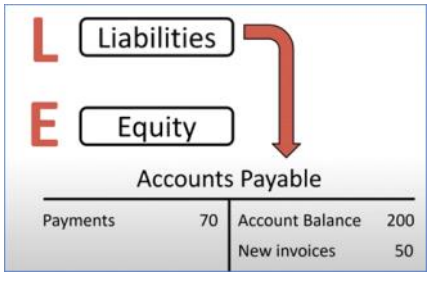
- **Balance Sheet Equation:**

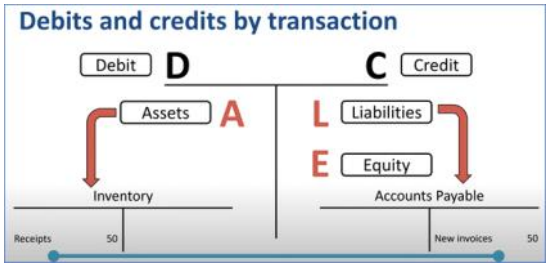
  Assets = Liabilities + Equity

- **Asset**: an asset is a resource that a business or economic entity owns or controls. Assets can be tangible or intangible and can be used to produce economic value



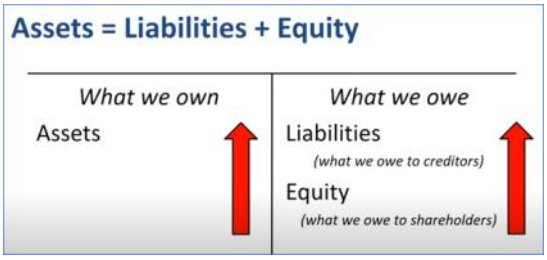
- **Liabilities**: Something a person or company owes, usually a sum of money.





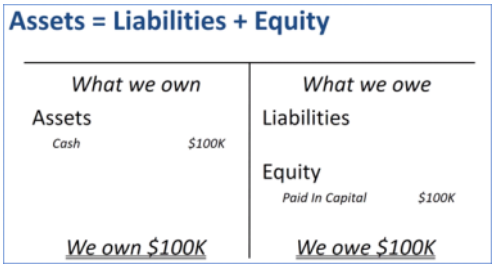
Dividend: A dividend is a distribution of profits by a corporation to its shareholders.
When a corporation earns a profit or surplus, it is able to pay a portion of the profit as a dividend to shareholders.
Any amount not distributed is taken to be re-invested in the business (called retained earnings).

Lecture 2: Accounting Equation:

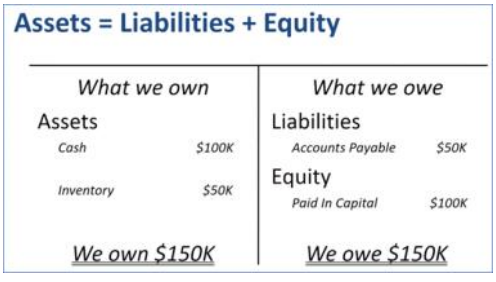


Example:

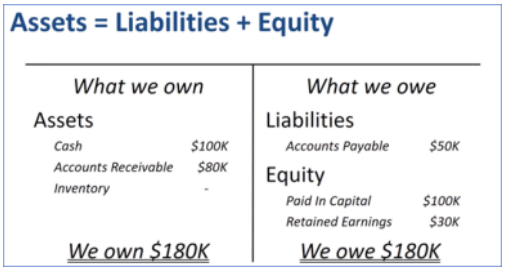
◇ During the starting of company with $100K



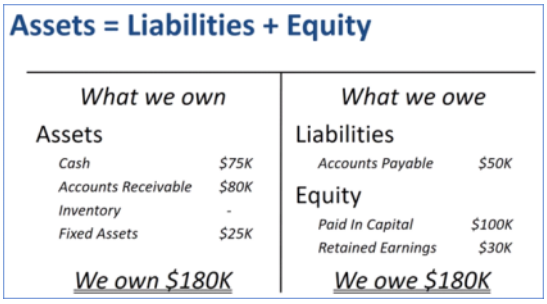
◇ "Inventory" purchase on Loan for $50k



◇ Company sold all the inventory for $80k, hence made of profit of $30k (they didn't gave dividend so it come under retained ea rnings)

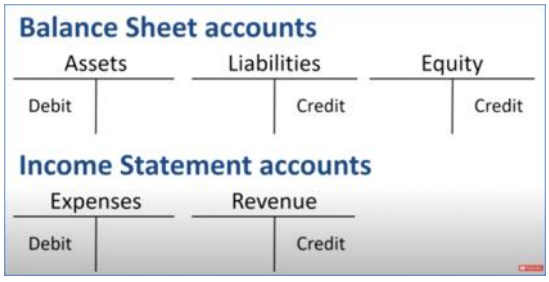


Now, if we buy 'Assets' for $25K then you cash will reduce from $100k to $75k



Lecture 3: Debits and Credits:

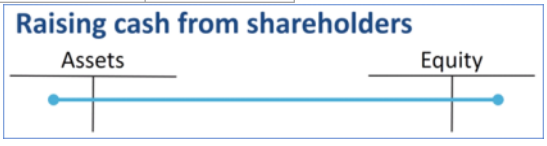
- Normal Balance for accounts: (ALICE)



Example:

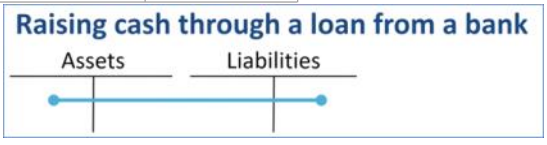
1. Company raise cash from shareholder:

Asset: DR	Equity: CR



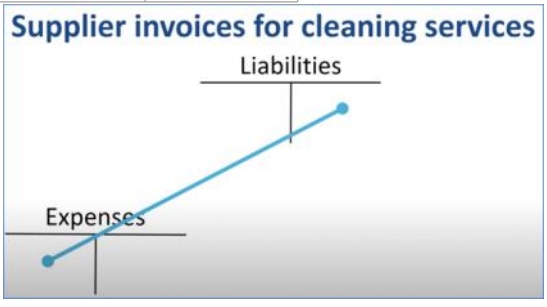
2. Company raise cash through a loan from bank:

Asset: DR	Liabilities: CR



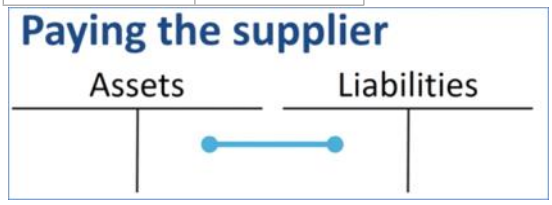
3. Supplier invoice for cleaning services:

Expense: DR	Liabilities: CR



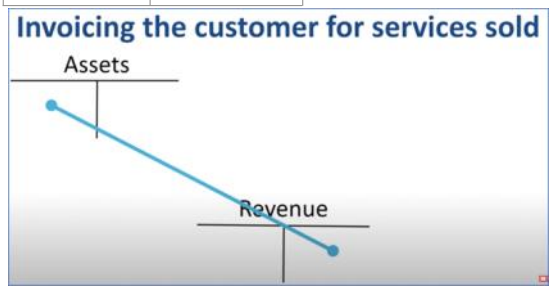
Now, paying the supplier for the cleaning work:

Assets(Cash): DR	Liabilities: CR



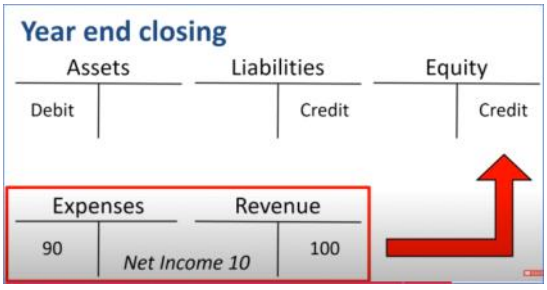
4. Billing to customer for services sold:

Assets: DR	Revenue: CR

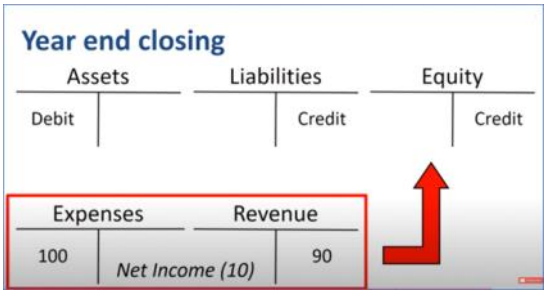


5. Year-end closure.

   Profit of $10 will be added to 'Retained Earning' in 'Equity'

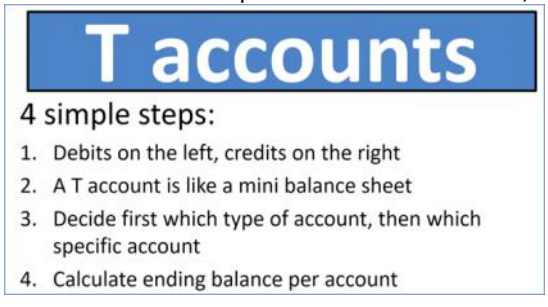


   Loss of ($10) will be reduced to 'Retained Earning' in 'Equity'



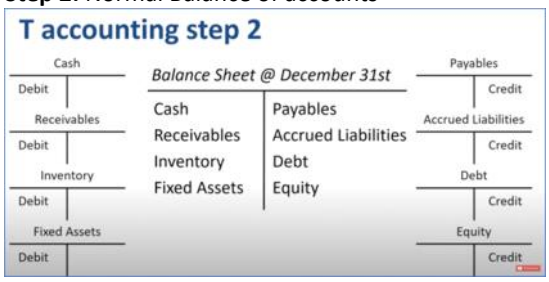
Lecture 4: T accounts:

T accounts: A visual representation of an account, to think through the journal entries for recording transactions.

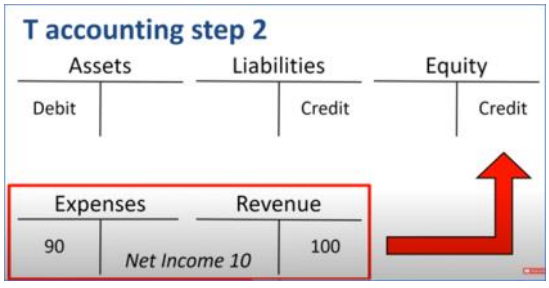


Step 1: DR- Left; CR- Right

Step 2: Normal Balance of accounts

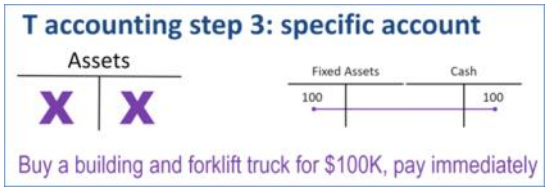


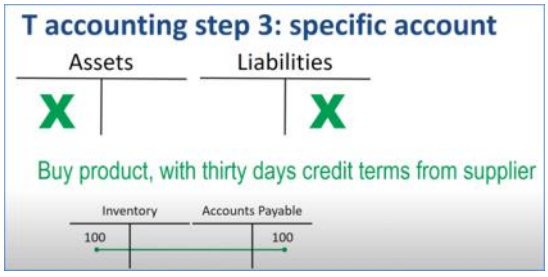
If we notice, 'Expense' and 'Revenue' are sub-set of 'Equity'. At the end of accounting period, it will merge to 'Retained Earning' in 'Equity'



Step 3: Decide type of accounts:

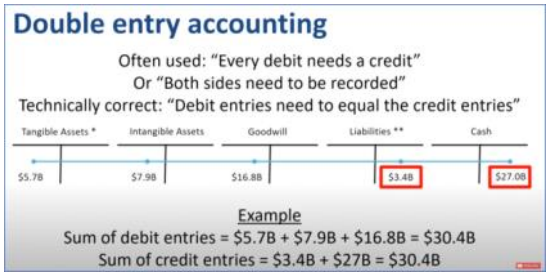
Example:

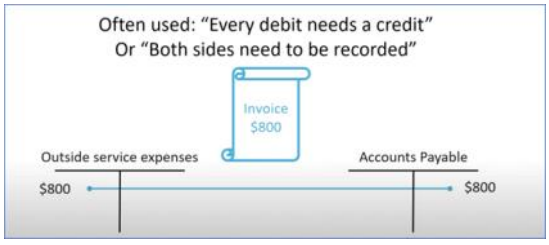




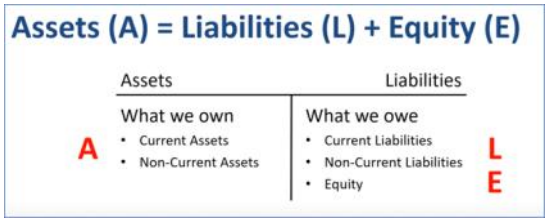
Step 4: Calculate Ending Balance per account:

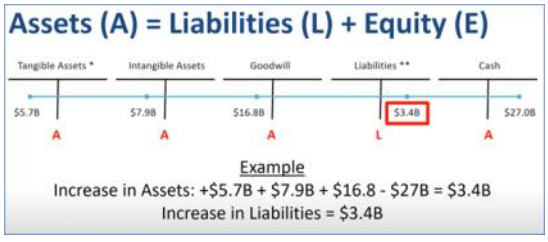
Lecture 5: Double Entry Accounting:





Example of Double Entry Accounting via Accounting Equation:





Lecture 5: Current Assets and Current Liabilities:

Current Assets and Current Liabilities

Balance Sheet

What we own	What we owe
• Current Assets	• Current Liabilities
• Non-Current Assets	• Non-Current Liabilities
	• Equity

Current Assets

Cash and other assets that are expected to be converted to cash within a year

Examples: Cash, Accounts Receivable, Inventory, Prepaid Expenses

Current Liabilities

Amounts due to be paid to creditors within twelve months

Examples: Accounts Payable, Accrued Liabilities, Short Term Debt

Example:

Apple's Current Assets / Liabilities

Balance Sheet @ Sep 28, 2019

Current assets:		
Cash and cash equivalents	$	48,844
Marketable securities		51,713
Accounts receivable, net		22,926
Inventories		4,106
Vendor non-trade receivables		22,878
Other current assets		12,352
Total current assets		162,819
Non-current assets:		
Marketable securities		105,341
Property, plant and equipment, net		37,378
Other non-current assets		32,978
Total non-current assets		175,697
Total assets	$	338,516

Current liabilities:		
Accounts payable	$	46,236
Other current liabilities		37,720
Deferred revenue		5,522
Commercial paper		5,980
Term debt		10,260
Total current liabilities		105,718
Non-current liabilities:		
Term debt		91,807
Other non-current liabilities		50,503
Total non-current liabilities		142,310
Total liabilities		248,028
Total shareholders' equity		90,488
Total liabilities and shareholders' equity	$	338,516

Amazon's Current Assets / Liabilities

Balance Sheet @ Sep 30, 2019

Current assets:	
Cash and cash equivalents	23,255
Marketable securities	20,146
Inventories	18,766
Accounts receivable, net and other	16,887
Total current assets	79,054
Property and equipment, net	67,662
Operating leases	23,114
Goodwill	14,734
Other assets	14,535
Total assets	199,099

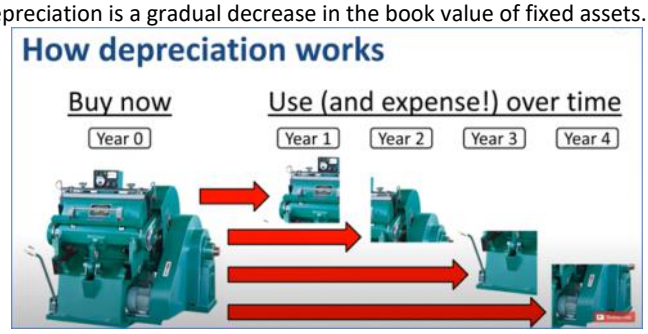
Current liabilities:	
Accounts payable	35,794
Accrued expenses and other	28,961
Unearned revenue	7,381
Total current liabilities	72,136
Long-term lease liabilities	37,058
Long-term debt	22,472
Other long-term liabilities	10,925
Total stockholders' equity	56,508
Total liabilities and stockholders' equity	199,099

1. Depreciation

Friday, January 26, 2024 10:08 AM

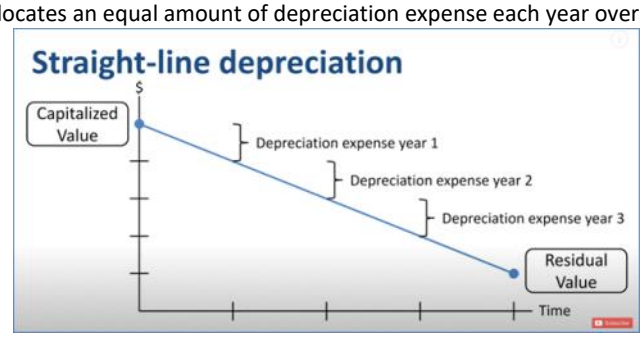
Lecture 1: Depreciation :

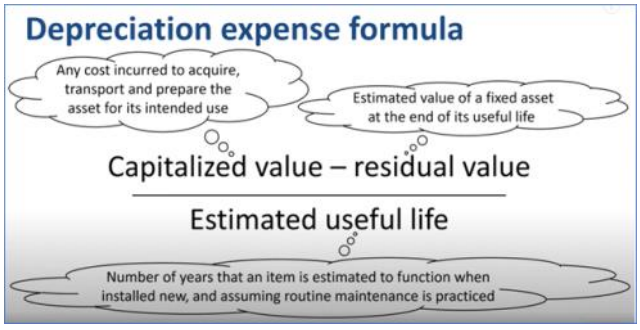
Depreciation is a gradual decrease in the book value of fixed assets.

- 

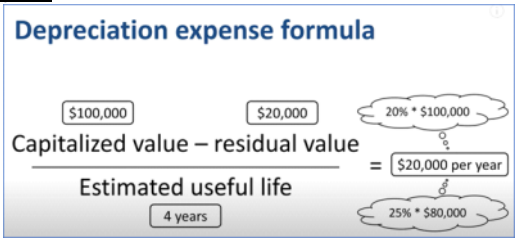
Straight - Line Depreciation:

Allocates an equal amount of depreciation expense each year over the asset's useful life.

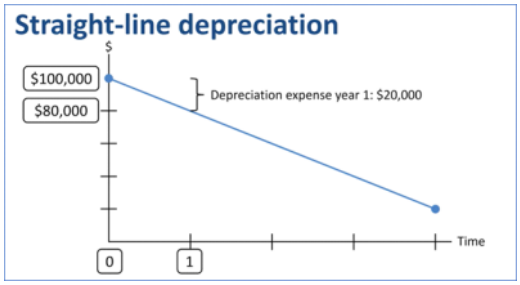




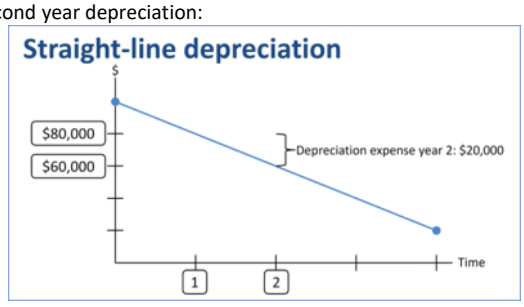
Example:



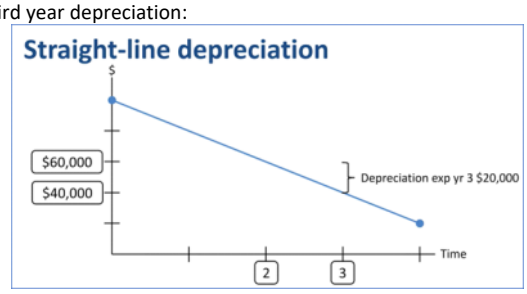
First year depreciation:



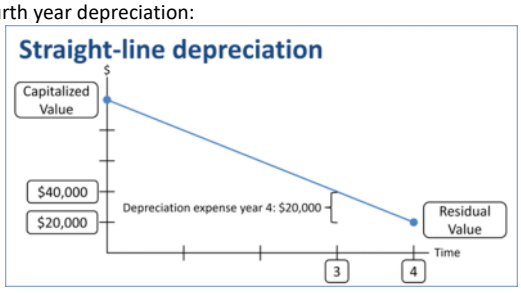
Second year depreciation:



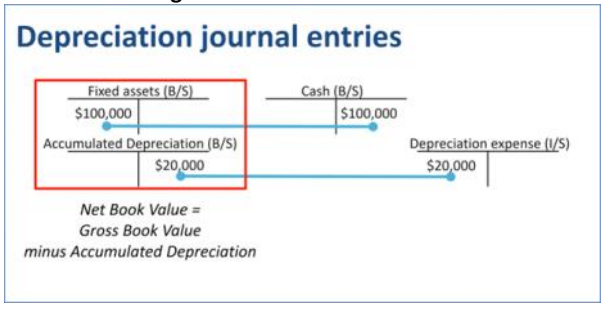
Third year depreciation:



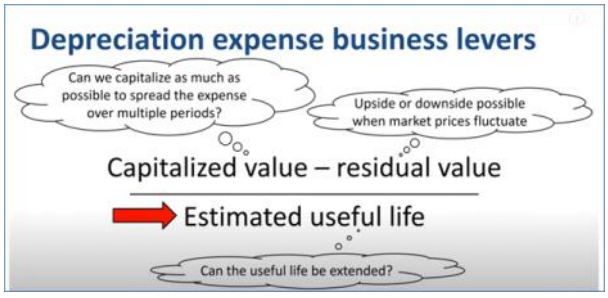
Fourth year depreciation:

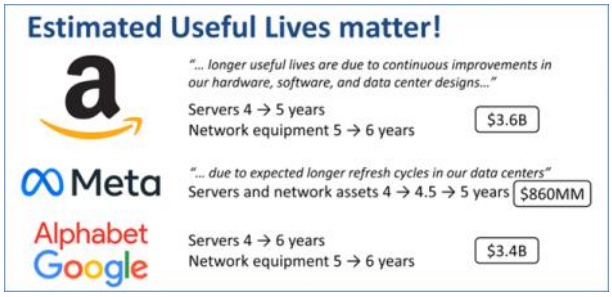


Depreciation Accounting Entries:



Depreciation Expense Business Levers:



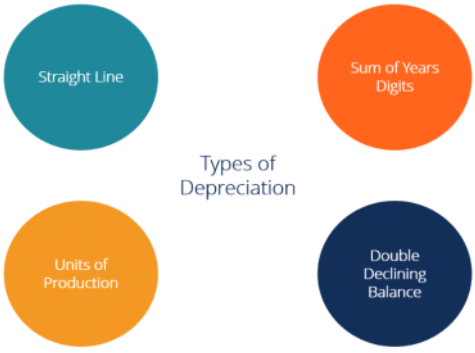


Lecture 3: Depreciation - III :

Article: https://corporatefinanceinstitute.com/resources/accounting/types-depreciation-methods/

There are several types of depreciation expense and different formulas for determining the book value of an asset. The most common depreciation methods include:

1. Straight-line
2. Double declining balance
3. Units of production
4. Sum of years digits



1. Straight-Line Depreciation Method:

In straight-line depreciation, the expense amount is the same every year over the useful life of the asset.

Depreciation Formula for the Straight Line Method:

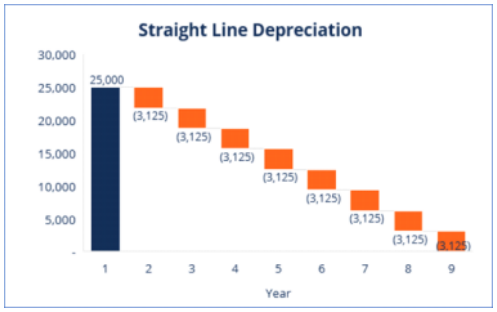
Depreciation Expense = (Cost – Salvage value) / Useful life

Example:

Consider a piece of equipment that costs $25,000 with an estimated useful life of 8 years and a $0 salvage value. The depreciation expense per year for this equipment would be as follows:

Year #		1	2	3	4	5	6	7	8
Straight Line									
Opening Book Value		25,000	21,875	18,750	15,625	12,500	9,375	6,250	3,125
Depreciation	8	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125
Ending Book Value	25,000	21,875	18,750	15,625	12,500	9,375	6,250	3,125	-

Depreciation Expense = ($25,000 – $0) / 8 = $3,125 per year



2. Double Declining Balance Depreciation Method

- Compared to other depreciation methods, double-declining-balance depreciation results in a larger amount expensed in the earlier years as opposed to the later years of an asset's useful life.
- The method reflects the fact that assets are typically more productive in their early years than in their later years – also, the practical fact that any asset (think of buying a car) loses more of its value in the first few years of its use.
- With the double-declining-balance method, the depreciation factor is 2x that of the straight-line expense method.

Depreciation formula for the double-declining balance method:

Periodic Depreciation Expense = Beginning book value x Rate of depreciation

Example:

Consider a piece of property, plant, and equipment (PP&E) that costs $25,000, with an estimated useful life of 8 years and a $2,500 salvage value. To calculate the double-declining balance depreciation, set up a schedule:

Year #		1	2	3	4	5	6	7	8
DDB									
Opening Book Value		25,000	18,750	14,063	10,547	7,910	5,933	4,449	3,337
Depreciation	25%	6,250	4,688	3,516	2,637	1,978	1,483	1,112	834
Ending Book Value	25,000	18,750	14,063	10,547	7,910	5,933	4,449	3,337	2,503

The information on the schedule is explained below:

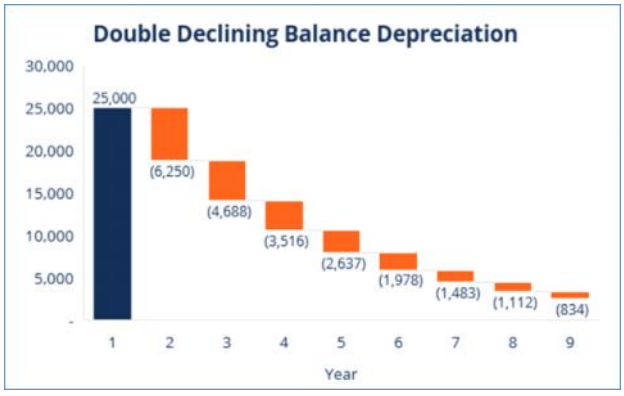
1. The beginning book value of the asset is filled in at the beginning of year 1 and the salvage value is filled in at the end of year 8.

2. The rate of depreciation (Rate) is calculated as follows:
   Expense = (100% / Useful life of asset) x 2
   Expense = (100% / 8) x 2 = 25%
   Note: Since this is a double-declining method, we multiply the rate of depreciation by 2.

3. Multiply the rate of depreciation by the beginning book value to determine the expense for that year.
   For example, $25,000 x 25% = $6,250 depreciation expense.

4. Subtract the expense from the beginning book value to arrive at the ending book value.
   For example, $25,000 – $6,250 = $18,750 ending book value at the end of the first year.

5. The ending book value for that year is the beginning book value for the following year.
   For example, the year 1 ending book value of $18,750 would be the year 2 beginning book value. Repeat this until the last year of useful life.



3. Units of Production Depreciation Method

The units-of-production depreciation method depreciates assets based on the total number of hours used or the total number of units to be produced by using the asset, over its useful life.

The formula for the units-of-production method:

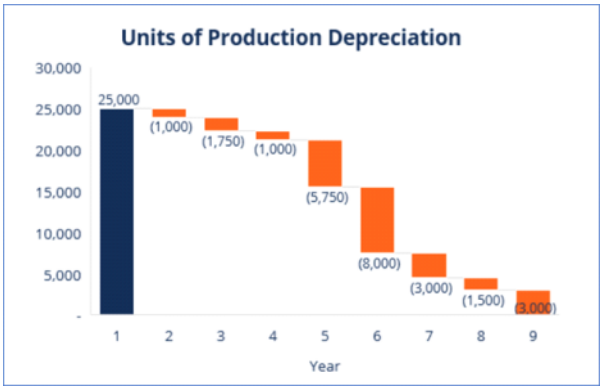
Depreciation Expense = (Number of units produced / Life in number of units) x (Cost – Salvage value)

Example:

Consider a machine that costs $25,000, with an estimated total unit production of 100 million and a $0 salvage value. During the first quarter of activity, the machine produced 4 million units.

Year #		1	2	3	4	5	6	7	8
Units									
Production (Units)		4	7	4	23	32	12	6	12
Opening Book Value		25,000	24,000	22,250	21,250	15,500	7,500	4,500	3,000
Depreciation		1,000	1,750	1,000	5,750	8,000	3,000	1,500	3,000
Ending Book Value	25,000	24,000	22,250	21,250	15,500	7,500	4,500	3,000	-

First Year: Depreciation Expense = (4 million / 100 million) x ($25,000 – $0) = $1,000
Second Year: Depreciation Expense = (7 million / 100 million) x ($25,000 – $0) = $1,750
Third Year: Depreciation Expense = (4 million / 100 million) x ($25,000 – $0) = $1,000
Fourth Year: Depreciation Expense = (23 million / 100 million) x ($25,000 – $0) = $5,750
Fifth Year: Depreciation Expense = (32 million / 100 million) x ($25,000 – $0) = $8,000



4. Sum-of-the-Years-Digits Depreciation Method

- The sum-of-the-years-digits method is one of the accelerated depreciation methods. A higher expense is incurred in the early years and a lower expense in the latter years of the asset's useful life.

- In the sum-of-the-years digits depreciation method, the remaining life of an asset is divided by the sum of the years and then multiplied by the depreciating base to determine the depreciation expense.

The depreciation formula for the sum-of-the-years-digits method:

Depreciation Expense = (Remaining life / Sum of the years digits) x (Cost – Salvage value)

Consider the following example to more easily understand the concept of the sum-of-the-years-digits depreciation method.

Example:

Consider a piece of equipment that costs $25,000 and has an estimated useful life of 8 years and a $0 salvage value. To calculate the sum-of-the-years-digits depreciation, set up a schedule:

Year #		1	2	3	4	5	6	7	8
SYD									
Remaining Life		8	7	6	5	4	3	2	1
Opening Book Value		25000	19,444	14,583	10,417	6,944	4,167	2,083	694
Depreciation		5,556	4,861	4,167	3,472	2,778	2,083	1,389	694
Ending Book Value	25,000	19,444	14,583	10,417	6,944	4,167	2,083	694	0

The depreciation base is constant throughout the years and is calculated as follows:
Depreciation Base = Cost – Salvage value
Depreciation Base = $25,000 – $0 = $25,000

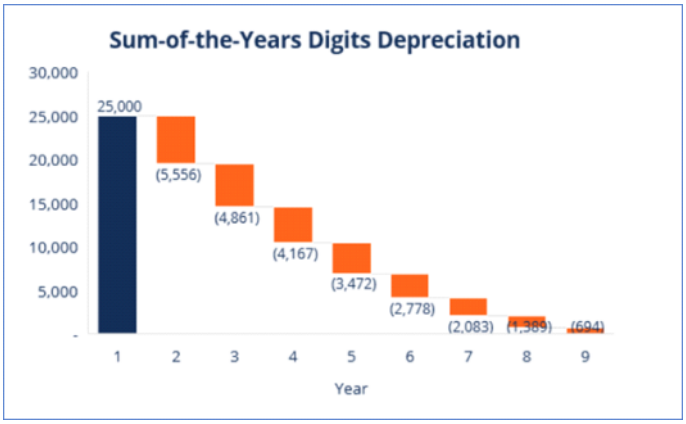
2. The remaining life is simply the remaining life of the asset.
For example, at the beginning of the year, the asset has a remaining life of 8 years. The following year, the asset has a remaining life of 7 years, etc.

3. RL / SYD is "remaining life divided by sum of the years." In this example, the asset has a useful life of 8 years.
Therefore, the sum of the years would be 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 = 36 years.
The remaining life in the beginning of year 1 is 8. Therefore, the RM / SYD = 8 / 36 = 0.2222.

4. The RL / SYD number is multiplied by the depreciating base to determine the expense for that year.

5. The same is done for the following years. In the beginning of year 2, RL / SYD would be 7 / 36 = 0.1944.x $25,000 = $4,861 expense for year 2.

First Year: Depreciation Expense = (8 remaining year / year 36 total) x ($25,000 – $0) = $5,556
Second Year: Depreciation Expense = (7 remaining year / year 36 total) x ($25,000 – $0) = $4,861
Third Year: Depreciation Expense = (6 remaining year / year 36 total) x ($25,000 – $0) = $4,167
Fourth Year: Depreciation Expense = (5 remaining year / year 36 total) x ($25,000 – $0) = $3,472
Fifth Year: Depreciation Expense = (4 remaining year / year 36 total) x ($25,000 – $0) = $2,778



Lecture 4: edrw3 Depreciation VS Amortization:

Basis	Depreciation	Amortization
Concept	Depreciation is described as a permanent, continuing and gradual shrinkage in the book value of fixed assets.	Amortization is a general term used to write off intangible assets such as patents, copyrights, etc. It is a periodic depletion in the value of such assets.
use	Depreciation is used to logically spread the cost of a fixed asset over its useful life.	Amortization is used to match the cost of using an intangible asset and the revenue the asset is generating, in the normal course of business.
Standard	IAS 16 covers the norms of depreciation in property, plant and equipment's.	IAS 38 covers the norms of amortization.
Methods	Straight line method and written down value methods are commonly used for depreciation.	Straight line method is the most acceptable method of calculating amortization.
Formula	(Cost of asset - scrap value) / Economic life	Cost of Asset / Economic life
Scrap Value	There is a concept of scrap value(salvage value) as it deals with tangible assets.	There is no concept of a scrap value in intangible assets.
Example	Plant, land, building are some common depreciable assets.	Patents, copyrights, franchises are generally amortized.

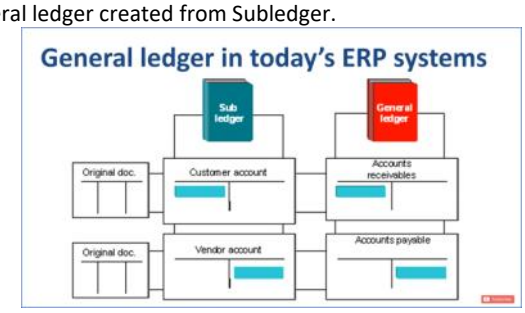
2. Accounting Books

Sunday, January 28, 2024 9:27 AM

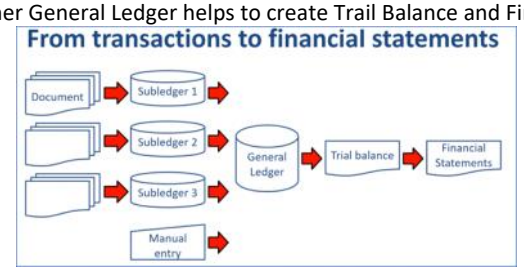
Lecture 1: General Ledger:

The general ledger is a central accounting record that provides a complete record of all financial transactions of a business.
It serves as the primary accounting record for a company, summarizing all transactions in various accounts

General ledger created from Subledger.



Further General Ledger helps to create Trail Balance and Financial Statement.



Lecture 2: Balance Sheet and Income Statement:

Balance Sheet:

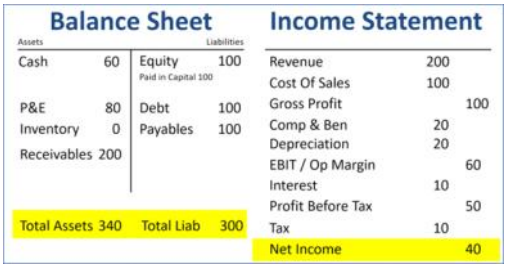
- A financial statement that reports a company's assets, liabilities, and shareholder equity at a specific point in time.
- Balance sheets provide the basis for computing rates of return for investors and evaluating a company's capital structure
- Ex: It is like camera - specific point in time

Income Statement

- An income statement, also known as a profit and loss (P&L) statement
- It is a financial report that details a company's income and expenses over a reporting period. It's typically prepared quarterly or annually
- Ex: It is like a movie - it does have start and end point

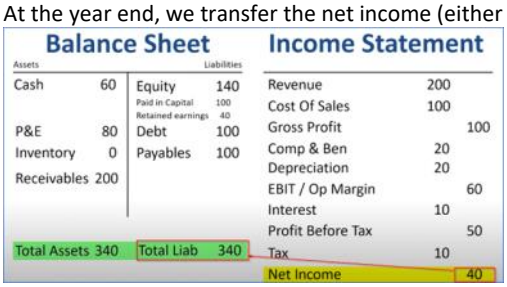
Example:

Transaction in the entire year:



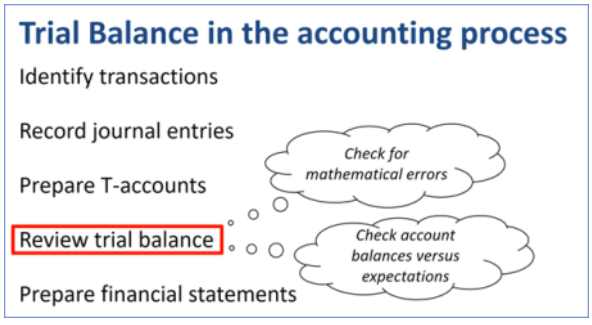
But the Balance Sheet is not balance above.

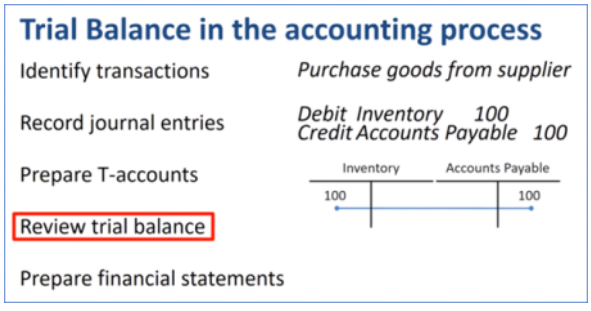
At the year end, we transfer the net income (either profit or loss) to 'Retained Earning' in 'Equity' in Balance Sheet.



Lecture 3: Trail Balance:

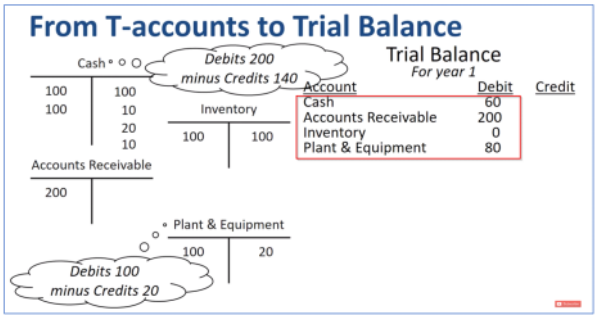
- A listing of all ledger accounts along with their respective debit or credit balances for the period
- A trial balance is a fundamental accounting report that lists the balances of all general ledger accounts of a company at a specific point in time. It serves as a preliminary check to ensure that the total debits equal the total credits, thereby verifying the accuracy of the recorded transactions



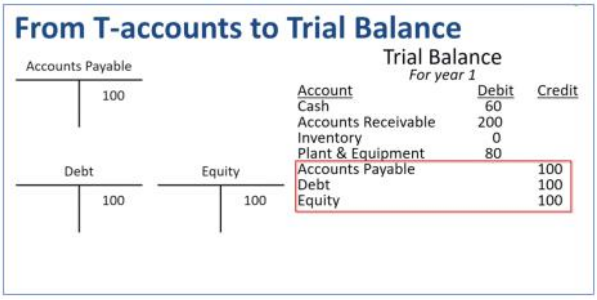


Example for Trail Balance:

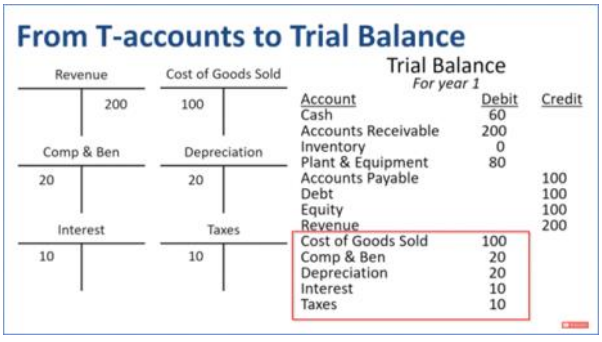
Step1: Balance on Assets account:



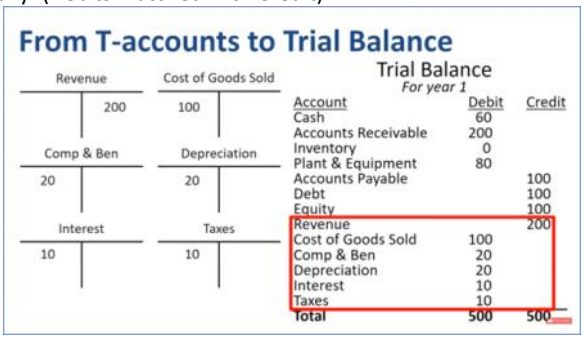
Step2: Balance on Liabilities account:



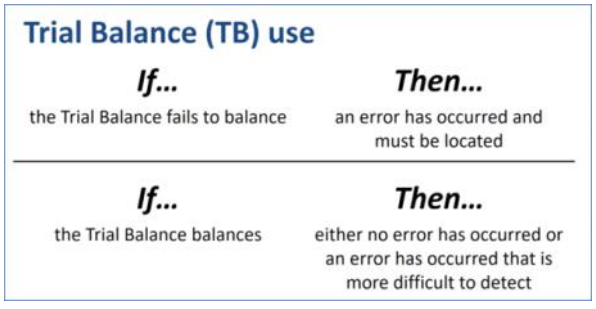
Step3: Balance on Income statement (P&L) account:

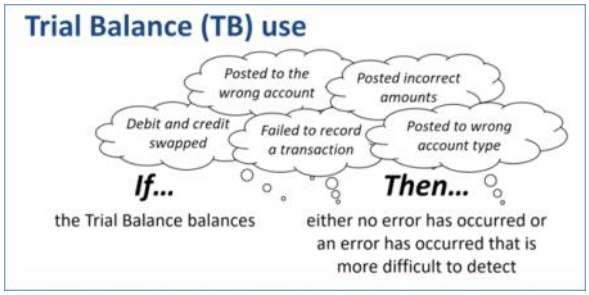


Finally: (Debits matched with Credit)



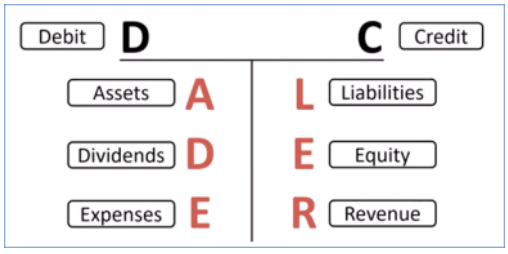
Use of Trail Balance:



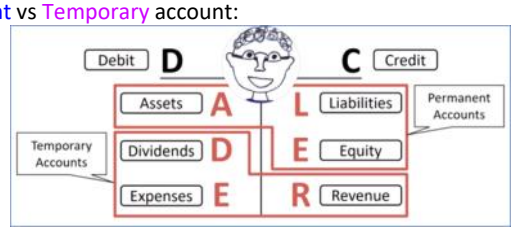


Lecture 4: Closing Entries in Accounting:

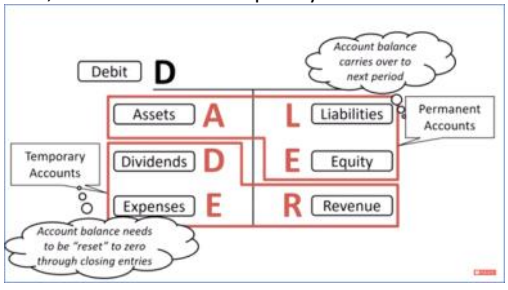
- Account and their normal balance:



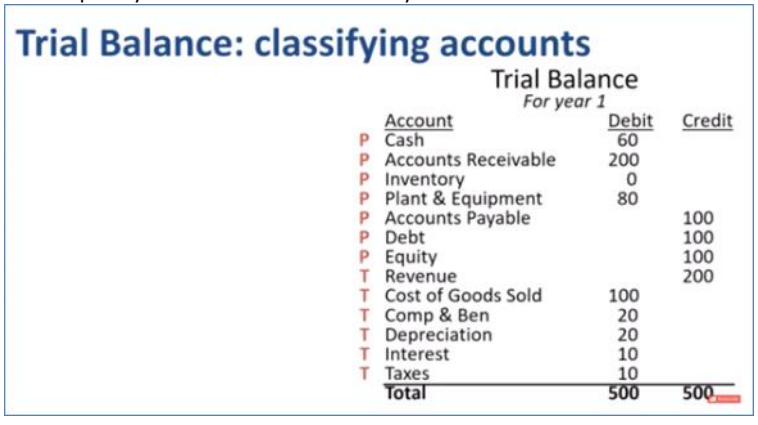
Permanent vs Temporary account:

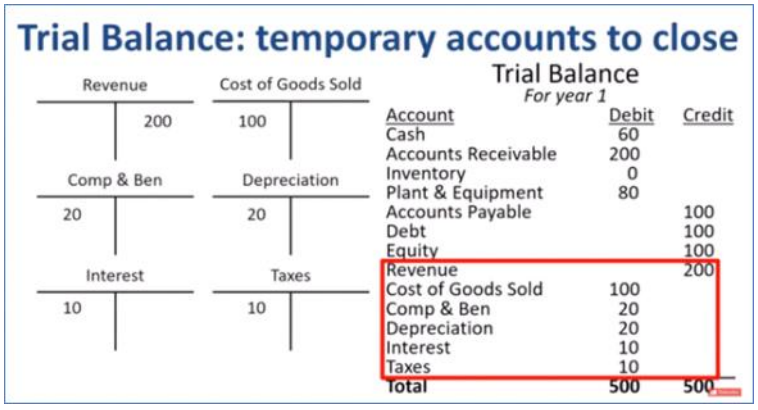


At the year end, Balances in the Temporary account needed to be rest to '0' and balance need to transfer to Permanent Account:

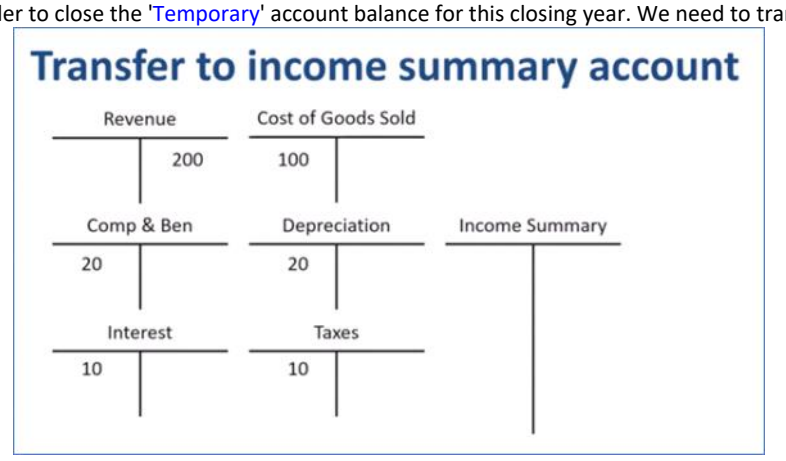


- Balance in the temporary account needs to close at year end:

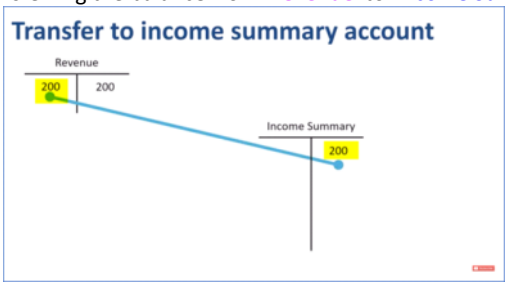




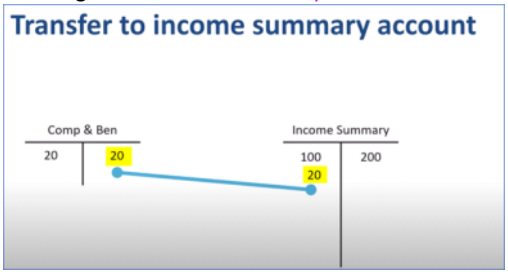
- In Order to close the 'Temporary' account balance for this closing year. We need to transfer the balance 'Income summary' account:



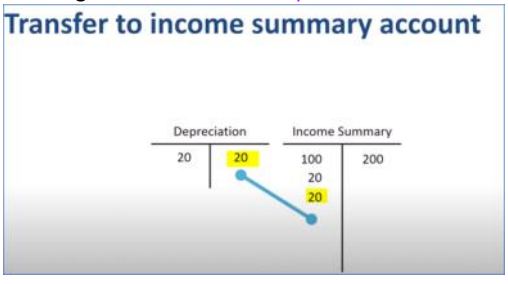
  - Transferring the balance from 'Revenue' to 'Income Summary'



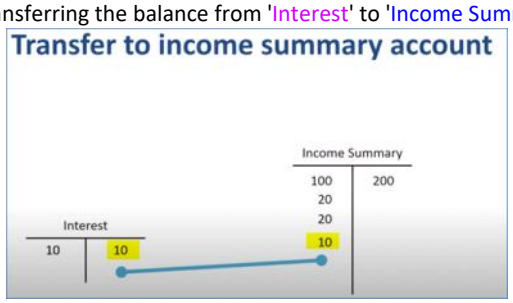
  - Transferring the balance from 'Comp & Ben' to 'Income Summary'



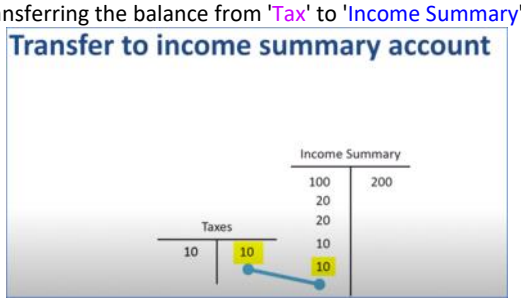
  - Transferring the balance from 'Depreciation' to 'Income Summary'



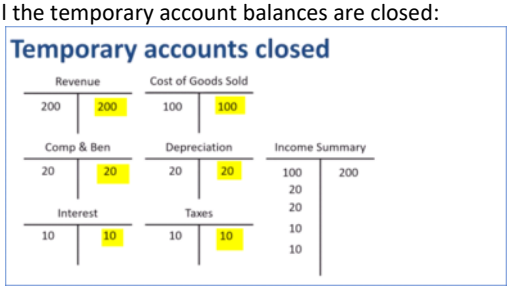
- Transferring the balance from 'Interest' to 'Income Summary'



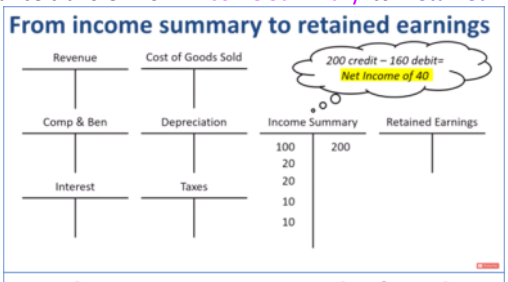
- Transferring the balance from 'Tax' to 'Income Summary'

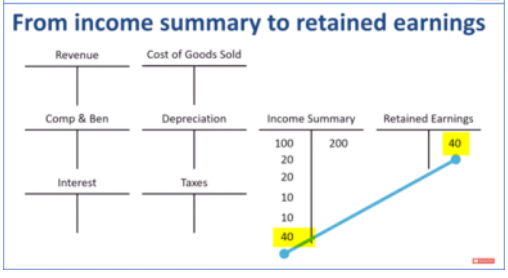


✓ Now all the temporary account balances are closed:

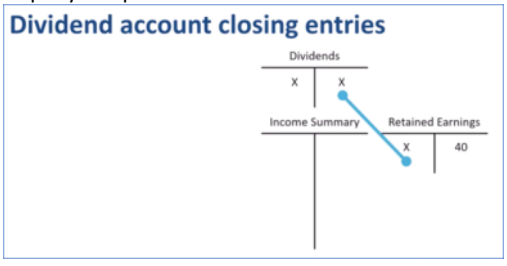


➢ Balance transfer from 'Income Summary' to 'Retained Earning'





➢ If the company has paid the 'Dividends' then entries will be:



- Pre-closure and Post-closure of Accounting during the year end:

Trial Balance update

Trial Balance (pre-close) — *For year 1*

Account	Debit	Credit
Cash	60	
Accounts Receivable	200	
Inventory	0	
Plant & Equipment	80	
Accounts Payable		100
Debt		100
Equity		100
Revenue		200
Cost of Goods Sold	100	
Comp & Ben	20	
Depreciation	20	
Interest	10	
Taxes	10	
Total	**500**	**500**

Trial Balance (post-close) — *For year 1*

Account	Debit	Credit
Cash	60	
Accounts Receivable	200	
Inventory	0	
Plant & Equipment	80	
Accounts Payable		100
Debt		100
Equity		140
Revenue		0
Cost of Goods Sold	0	
Comp & Ben	0	
Depreciation	0	
Interest	0	
Taxes	0	
Total	**340**	**340**

Temporary account balance is rolled-up to 'Equity' and balance of 'Equity' is increased by $40 due to year end closure:

Trial Balance update

Trial Balance (pre-close) — *For year 1*

Account	Debit	Credit
Cash	60	
Accounts Receivable	200	
Inventory	0	
Plant & Equipment	80	
Accounts Payable		100
Debt		100
Equity		100
Revenue		200
Cost of Goods Sold	100	
Comp & Ben	20	
Depreciation	20	
Interest	10	
Taxes	10	
Total	**500**	**500**

Trial Balance (post-close) — *For year 1*

Account	Debit	Credit
Cash	60	
Accounts Receivable	200	
Inventory	0	
Plant & Equipment	80	
Accounts Payable		100
Debt		100
Equity		140
Revenue		0
Cost of Goods Sold	0	
Comp & Ben	0	
Depreciation	0	
Interest	0	
Taxes	0	
Total	**340**	**340**

Lecture 5: Income Statement:

Income Statement: It is known as a profit and loss (P&L) statement, is a financial report that shows a company's income and expenses over a period of time.

Income Statement is also known as:

- Consolidated Statement of Earnings
- Profit & loss statement
- Earning Report
- Statement of Operations
- Statement of Financial Performance
- Income Statement

Read Income Statement:

Example: Microsoft Income Statement:

INCOME STATEMENTS

(In millions, except per share amounts)

Year Ended June 30,	2019	2018	2017
Revenue:			
Product	$ 66,069	$ 64,497	$ 63,811
Service and other	59,774	45,863	32,760
Total revenue	125,843	110,360	96,571
Cost of revenue:			
Product	16,273	15,420	15,175
Service and other	26,637	22,933	19,086
Total cost of revenue	42,910	38,353	34,261
Gross margin	82,933	72,007	62,310
Research and development	16,876	14,726	13,037
Sales and marketing	18,213	17,469	15,461
General and administrative	4,885	4,754	4,481
Restructuring	0	0	306
Operating income	42,959	35,058	29,025
Other income, net	729	1,416	876
Income before income taxes	43,688	36,474	29,901
Provision for income taxes	4,448	19,903	4,412
Net income	$ 39,240	$ 16,571	$ 25,489
Earnings per share:			
Basic	$ 5.11	$ 2.15	$ 3.29
Diluted	$ 5.06	$ 2.13	$ 3.25
Weighted average shares outstanding:			
Basic	7,673	7,700	7,746
Diluted	7,753	7,794	7,832

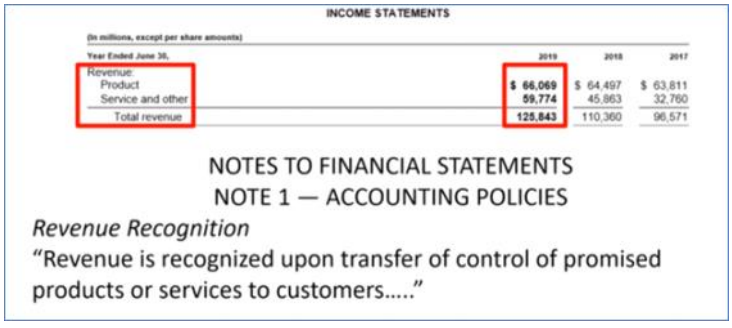
Top Line

Net Sales Billed Turnover

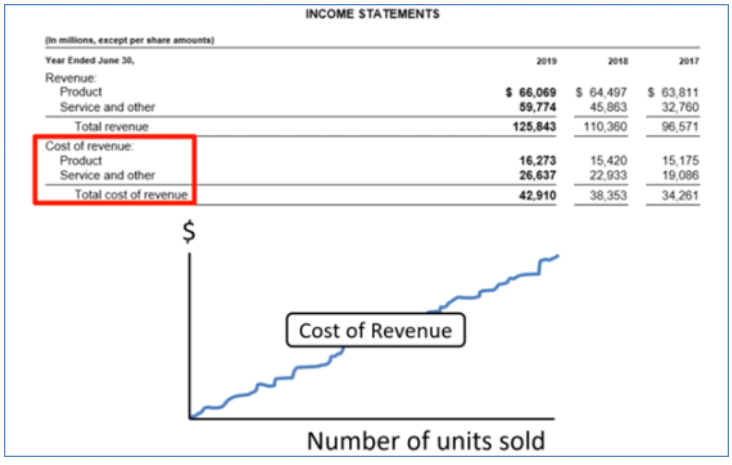
Bottom Line

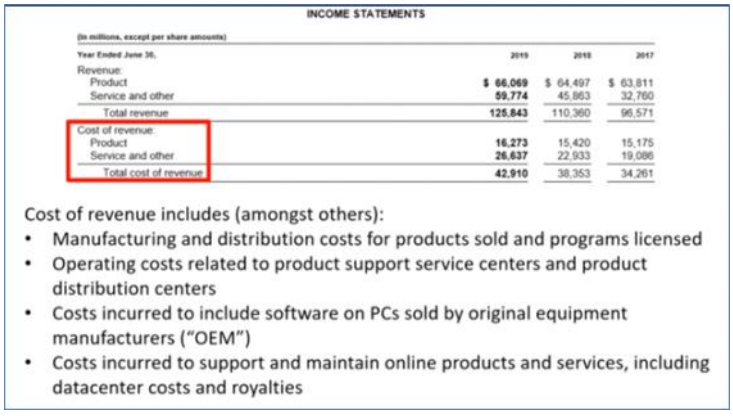
Net Earnings Net Profit

✓ **Revenue**: (generated by selling goods and giving services:)

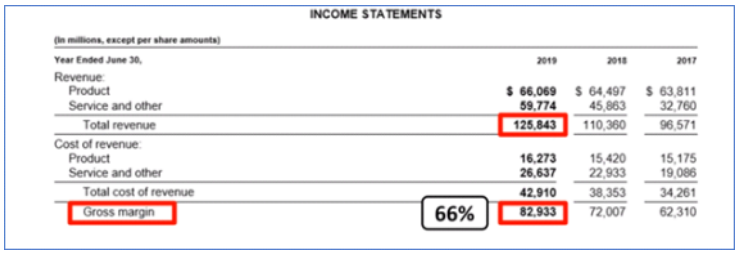


✓ **Cost of Revenue:** Cost Incurred to generate the revenue:





✓ **Gross Margin:** Total Revenue - Gross Margin
125,843 - 42,910 = 82,933



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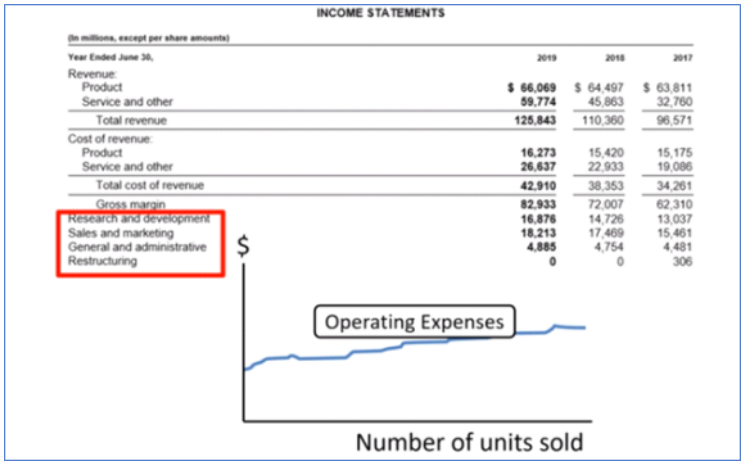
Total cost of revenue	42,910	38,353	34,261
Gross margin	82,933	72,007	62,310

66%

✓ **Operating Expense (OPEX):** ongoing costs that a business incurs to maintain its day-to-day operations.



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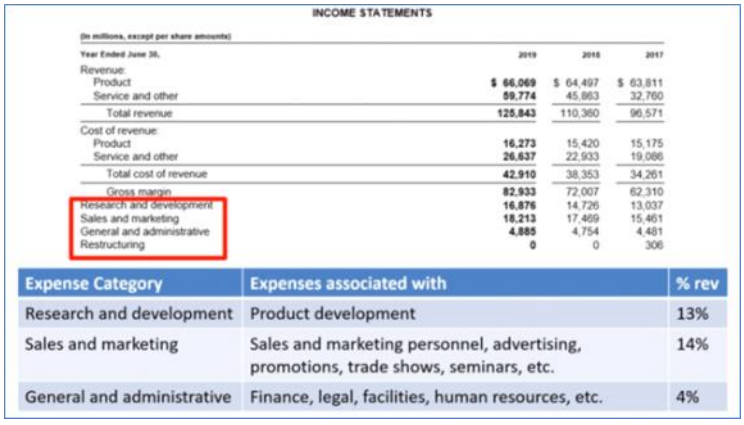
Research and development	16,876	14,726	13,037
Sales and marketing	18,213	17,469	15,461
General and administrative	4,885	4,754	4,481
Restructuring	0	0	306

$

Operating Expenses

Number of units sold



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Restructuring	0	0	306

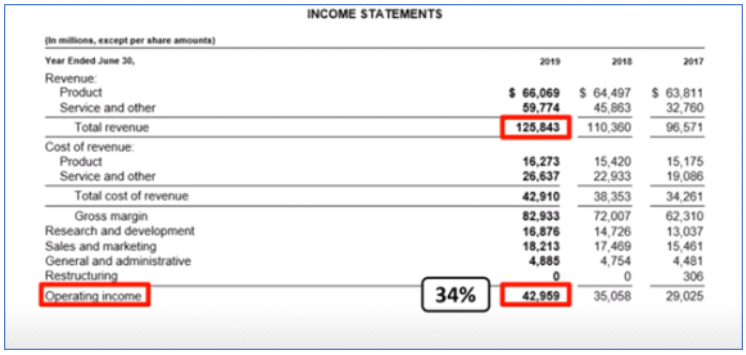
Expense Category	Expenses associated with	% rev
Research and development	Product development	13%
Sales and marketing	Sales and marketing personnel, advertising, promotions, trade shows, seminars, etc.	14%
General and administrative	Finance, legal, facilities, human resources, etc.	4%

✓ **Operating Income:** Operating income is a company's profit after deducting operating expenses. It's also known as income from operations, EBIT, or Earnings Before Interest and Taxes

Formula:

- Operating income = Total Revenue – Direct Costs – Indirect Costs. OR.
- Operating income = Gross Profit – Operating Expenses – Depreciation – Amortization. OR.
- Operating income = Net Earnings + Interest Expense + Taxes. Sample Calculation

Operating Income = Total Revenue - Gross Margin - Operating Income
82993 - 16876 - 18213 - 4885 = 43019



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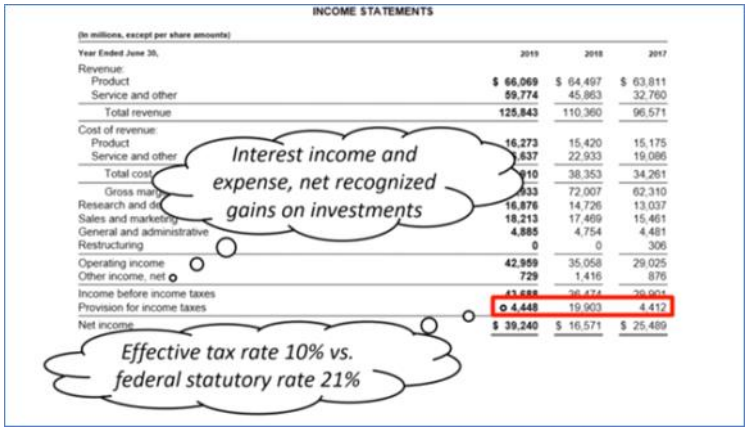
Restructuring	0	0	306
Operating income	42,959	35,058	29,025

34%

Few other Line items in Income statement:



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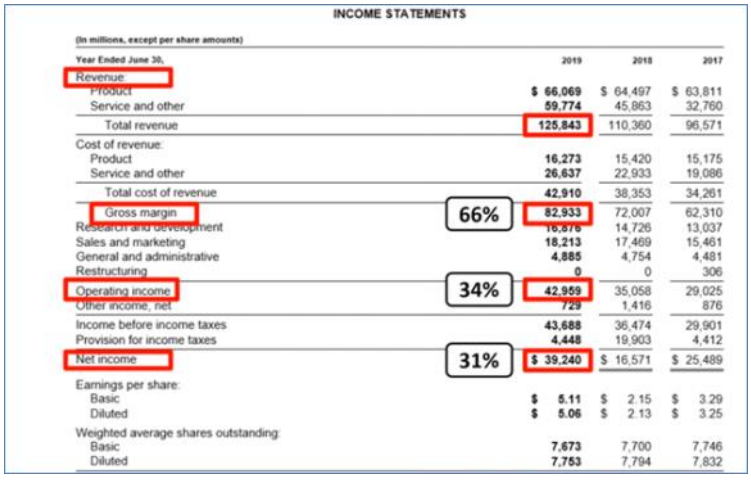
Income before income taxes	43,688	36,474	29,901
Provision for income taxes	4,448	19,903	4,412
Net income	$ 39,240	$ 16,571	$ 25,489

Interest income and expense, net recognized gains on investments

Effective tax rate 10% vs. federal statutory rate 21%

✓ **Net Income:**

Operating Income = Total Revenue - Gross Margin - Operating Income - + Other Income, Net - Provision of Income Taxes
82993 - 16876 - 18213 - 4885 + 729 - 4448 = 39300



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Earnings per share:			
Basic	$ 5.11	$ 2.15	$ 3.29
Diluted	$ 5.06	$ 2.13	$ 3.25
Weighted average shares outstanding:			
Basic	7,673	7,700	7,746
Diluted	7,753	7,794	7,832

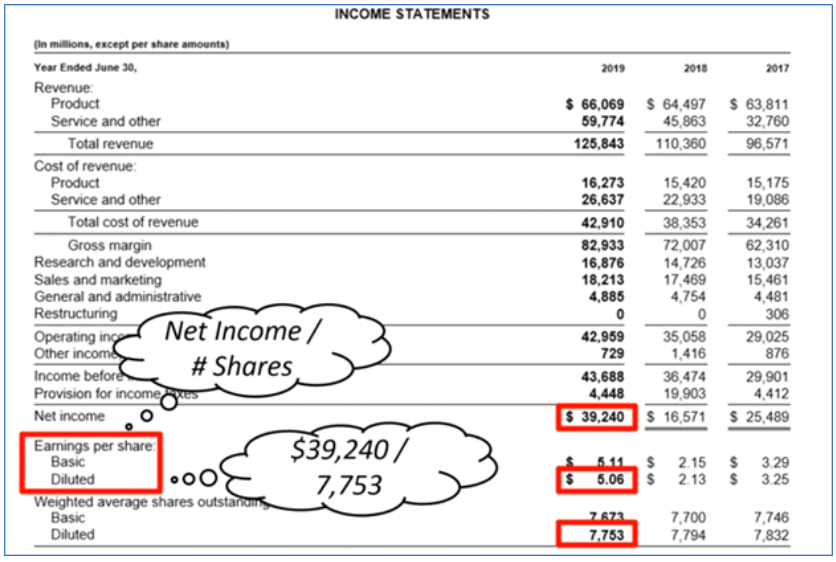
66%

34%

31%

✓ **Earnings Per Share (EPS):**

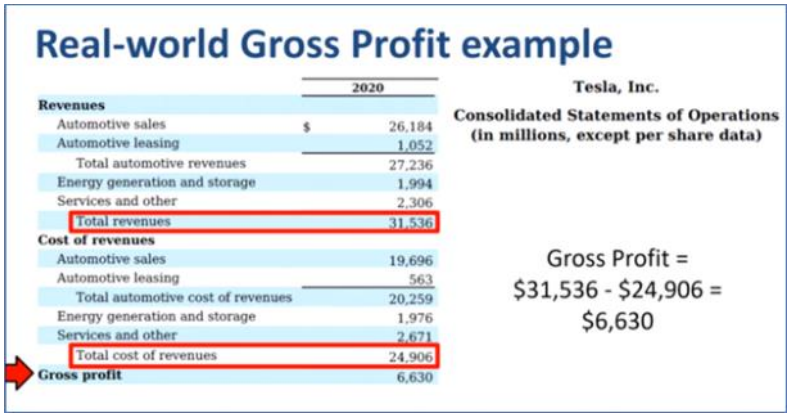
EPS = Net Income /Weighted Average share outstanding



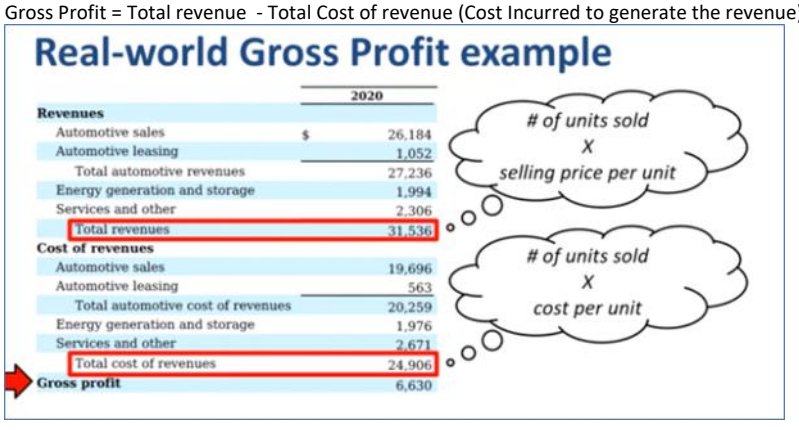
Lecture 6: Gross Profit:

Gross Profit: It is the profit a business makes after subtracting all the costs that are related to manufacturing and selling its products or services

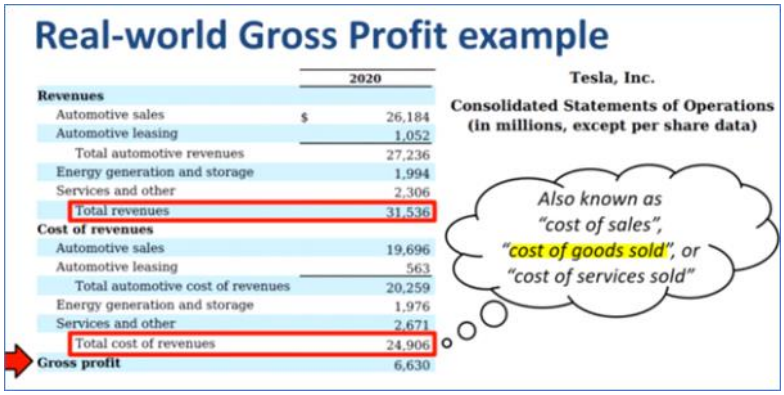
Example:



Gross Profit = Total revenue - Total Cost of revenue (Cost Incurred to generate the revenue)



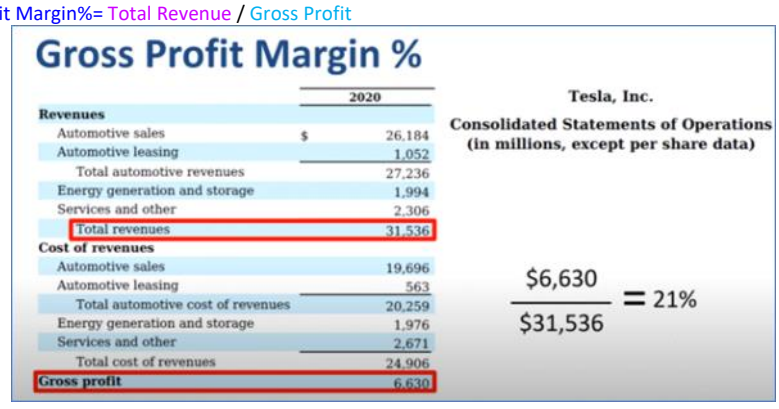
Total Cost of Revenue is also known as Cost of Goods Sold:

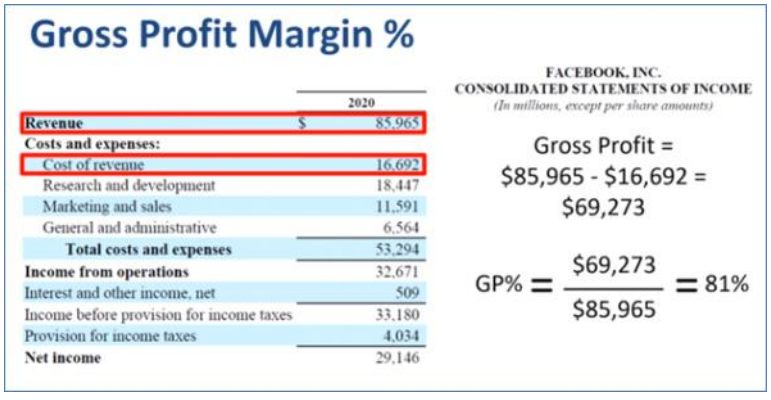


Total cost of Revenue includes:

Cost of automotive sales revenue includes direct parts, material and labor costs, manufacturing overhead, including depreciation costs of tooling and machinery, shipping and logistic costs, vehicle connectivity costs, allocations of electricity and infrastructure costs related to our Supercharger network, and reserves for Cost of automotive sales revenues also includes adjustments to warranty expense and charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand.

Gross Profit Margin%= Total Revenue / Gross Profit

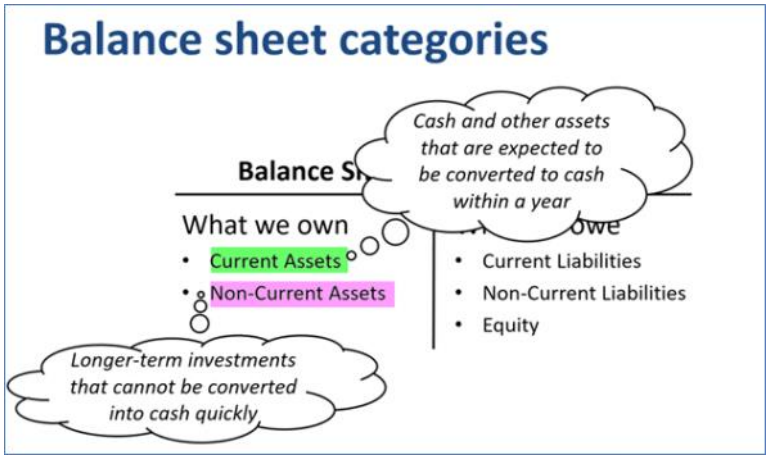


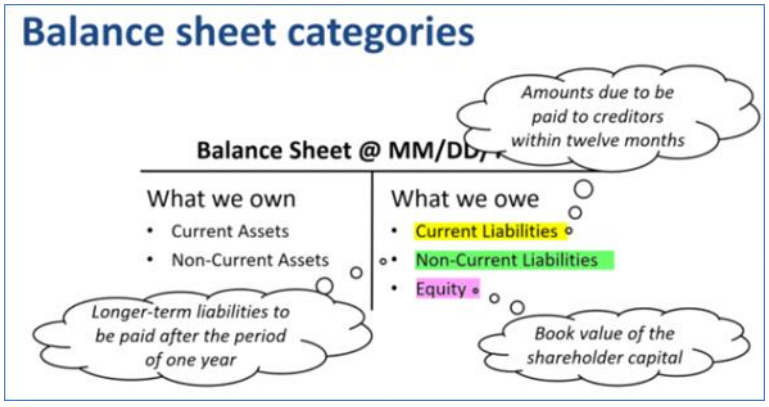


Lecture 7: Balance Sheet:

Balance Sheet:

- A financial statement that reports a company's assets, liabilities, and shareholder equity at a specific point in time.
- Balance sheets provide the basis for computing rates of return for investors and evaluating a company's capital structure
- Ex: It is like camera - specific point in time





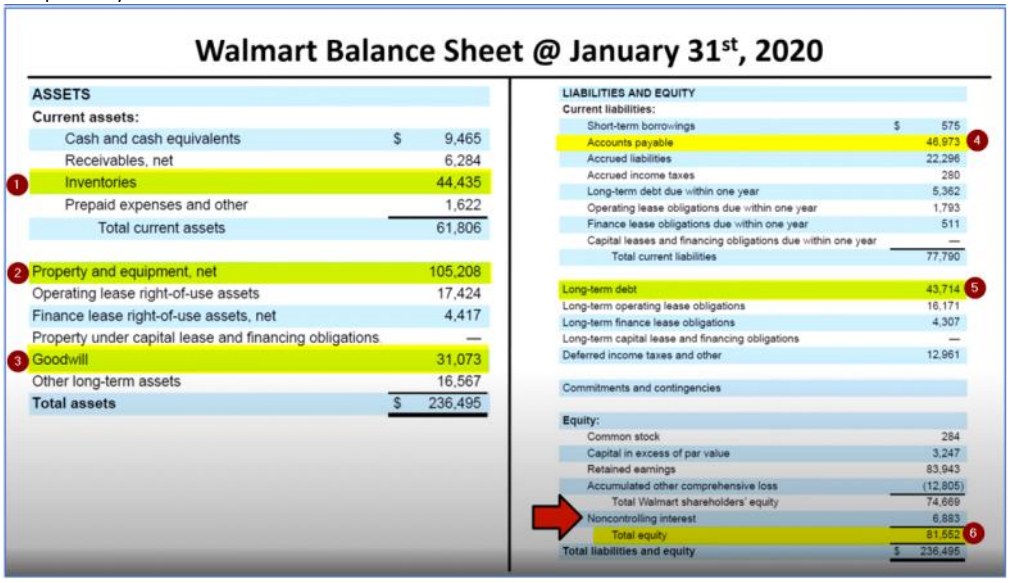
Example:

Balance Sheet of Walmart:

It follows Account rules i.e.:

Asset = Liability + Equity

In depth analysis of Balance Sheet:



Properties and Equipment useful life:

(Amounts in millions)	**Estimated Useful Lives**
Land	N/A
Buildings and improvements	3-40 years
Fixtures and equipment	1-30 years
Transportation equipment	3-15 years
Construction in progress	N/A

3. Accruals

Thursday, February 8, 2024 6:07 PM

Lecture 1: Accruals

Accruals:

- Accounting method that records revenues and expenses when they are incurred, regardless of when cash is exchanged.
- The term "accrual" refers to any individual entry recording revenue or expense in the absence of a cash transaction.
- "Accruals" are recorded on a balance sheet as either an asset or a liability

There are two type of Accruals:

I. Expense Accruals

(Please Note: If accrued expenses are recorded correctly, the balance should be a credit balance. This is because accrued expenses are liabilities)

II. Revenue Accruals

(Please Note: Accrued revenue is typically recorded as a debit to an "accrued revenue" account and a credit to a "sales" or "revenue" account, and the amount of accrued revenue is adjusted periodically to reflect the current amount of revenue that has been earned but not yet received.)

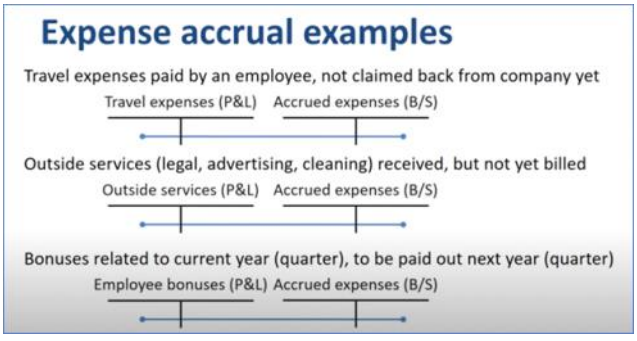
Expense Accruals: (CR)

- **Definition:** Expense accrual is a component of accrual accounting where expenses are recognized on the income statement when they are incurred, regardless of when the actual payment is made.

Purpose: The purpose of expense accrual is to match expenses with the revenues they generate. This helps in presenting a more accurate picture of a company's financial performance during a specific accounting period.

Process: When expenses are incurred but not yet paid by the end of the accounting period, they are accrued. This involves recognizing the expenses in the income statement and creating a corresponding liability on the balance sheet, often in an account called "Accrued Expenses" or a similar name.

Example: Suppose a company receives a utility bill for services provided in December but doesn't make the payment until January. To accurately reflect the company's financial position in December, an expense accrual is made. The utility expense is recognized in December's income statement, and an accrued expense liability is recorded on the balance sheet.

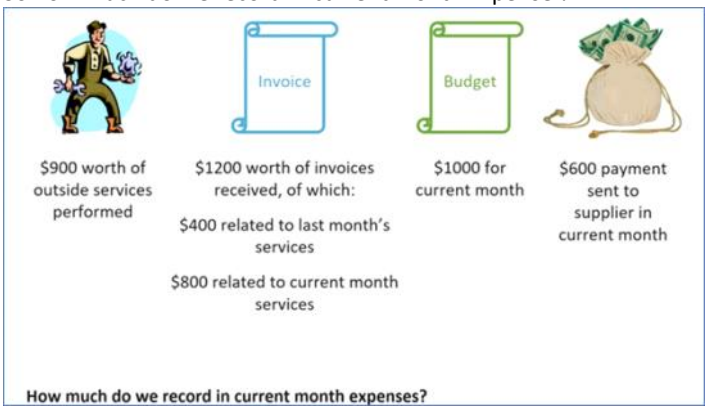


More Example of Expense Accruals:

Ques: This month an outside company performed service of $900 of maintenance work.
Also, we have received an invoice of $1200. Where $400 is related to last month service and $800 is related to current month service.
This month company budget is $1000.

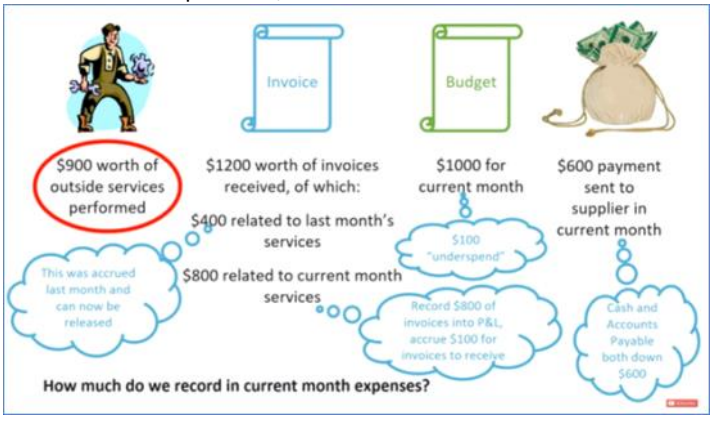
Company already spend $100 to supplier in the current month.

So how much do we record in current month Expense ?



Solution:

- Current month expense is $900.



- Last month expense was recorded as $400 billed by outside service company

DR	CR
Outside service : $400 (Expenses A/C)	Accruals Expense : ($400) (Liabilities A/C)

- This month (Above transaction is reclassified in Liabilities A/C):

DR	CR
Accruals Expense : $400 (Liabilities A/C)	Account Payable : ($400) (Liabilities A/C)

Also, this month expenses is $800 billed by billed by outside service company:

DR	CR
Outside service : $800 (Expenses A/C)	Accruals Expense : ($800) (Liabilities A/C)

Hence $400 + $800 = $1,200.00 amount bill is invoiced by the outside service company. But still $100 of Outside service company work, which bill has not been received

- For $100 of Outside service company work, which bill has not been received

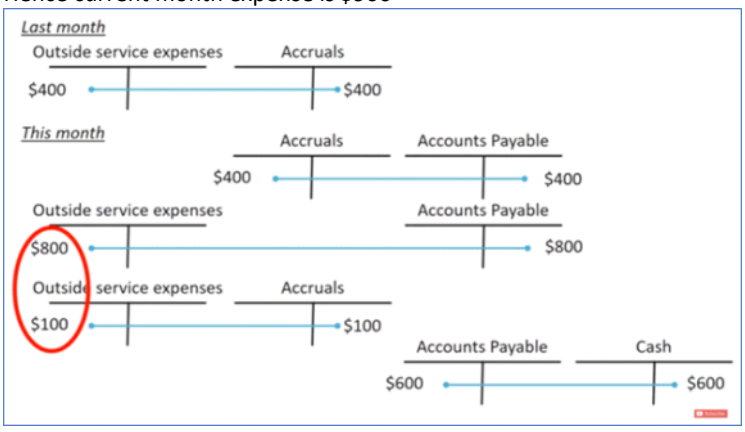
DR	CR
Outside service : $100 (Expenses A/C)	Accruals Expense : ($100) (Liabilities A/C)

- Actual amount payment $600 send to supplier:

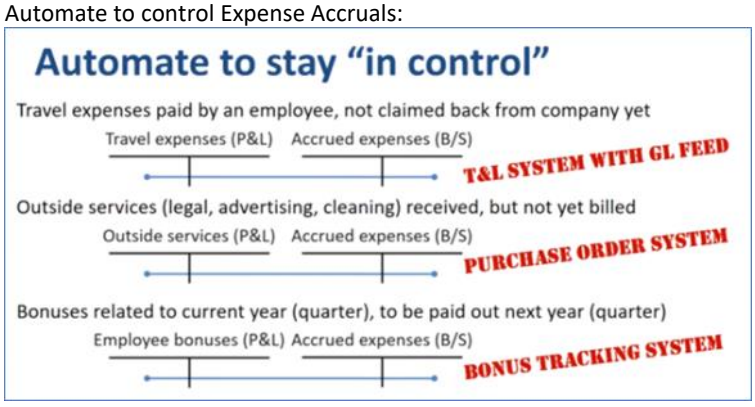
DR	CR

Account Payable : $600 (Liabilities A/C)	Cash : ($600) (Asset A/C)

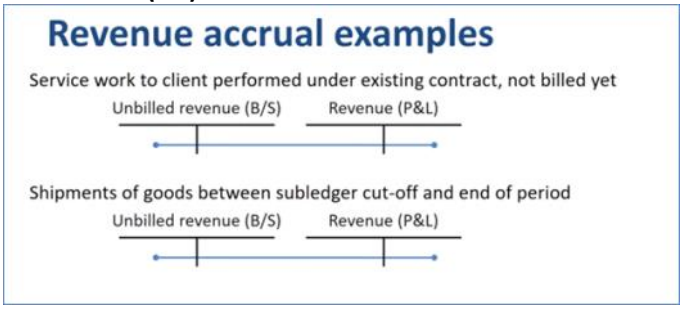
- Hence current month expense is $900



Automate to control Expense Accruals:



Revenue Accruals: (DR)



- Revenue accruals are a component of accrual accounting where revenues are recognized on the income statement when they are earned or realized, rather than when the cash is received.
- This means that revenue is recognized in the financial statements when the goods or services are delivered, regardless of when the payment is actually received.

Here's how revenue accruals work:

- ✓ **Recognition of Revenue:** Under accrual accounting, revenue is recognized when it is earned, meaning that the company has fulfilled its obligations to deliver goods or services to the customer.
- ✓ **Timing of Cash Receipt:** The actual receipt of cash may occur later than the recognition of revenue. This delay could be due to credit terms, where customers are allowed to pay at a later date.
- ✓ **Accrual Entry:** To match revenues with the periods in which they are earned, companies make revenue accrual entries. This involves recognizing the revenue in the income statement and creating a corresponding asset on the balance sheet, often in an account called "Accrued Revenue" or a similar name.
- ✓ **Adjustment when Cash is Received:** When the cash is received, the previously accrued revenue is adjusted. The accrued revenue account is decreased, and the cash account is increased to reflect the actual receipt of funds.

Example:

Suppose a company provides services to a customer in December but does not receive payment until January. In December, the company would make a revenue accrual entry, recognizing the revenue in that month even though the cash hasn't been received. In January, when the cash is received, the accrued revenue account is adjusted to reflect the actual cash transaction.

Revenue accruals help ensure that financial statements provide a more accurate representation of a company's financial performance during a specific period by aligning revenues with the period in which they are earned, not just when cash is received.

Difference between Accruals accounting and Account Payable:

- ◇ Accrual accounting is a method of recognizing revenues and expenses when they are incurred, regardless of when cash is exchanged.
- ◇ Accounts payable, on the other hand, is a specific account on the balance sheet that represents the amount a company owes to its creditors for goods and services received on credit.
- ◇ Accounts payable is a component of the accrual accounting system because it reflects the amounts that have been accrued but not yet paid.

Difference between Expense Accrual and Account Payable:

1. Expense Accrual:
   - Timing: Expense accrual involves recognizing expenses in the financial statements before the actual payment is made. This means that the expense is recorded when it is incurred, regardless of when the payment occurs.
   - Entry: A journal entry is made to recognize the expense as an accrual. The entry typically involves debiting an expense account and crediting a liability account (accrued liabilities or a similar account).
   - Example: If a company incurs expenses, such as utilities or rent, in a particular month but doesn't pay the bills until the following month, it would record the expense accrual in the month when the costs were incurred.
2. **Accounts Payable:**
   - Timing: Accounts payable, on the other hand, is the actual amount of money a company owes to its suppliers or vendors for goods and services received but not yet paid for.
   - Entry: When a company receives goods or services on credit, an accounts payable liability is created. The entry involves debiting an expense account (such as supplies, services, or inventory) and crediting the accounts payable account.
   - Example: If a company receives a shipment of inventory on credit, it would increase its accounts payable until the invoice is paid.

In summary, the key difference lies in the timing of recording expenses and the associated accounting entries. Expense accrual recognizes expenses when they are incurred, regardless of payment timing, and involves creating a liability. Accounts payable, on the other hand, represents the actual amounts owed for goods and services received on credit, and it is recorded when the company has a legal obligation to pay. While both involve recognizing expenses, they serve different purposes in the financial reporting process

Difference between Revenue Accrual and Account Receivables:

1. **Revenue Accrual:**
   - **Definition**: Revenue accrual involves recognizing revenue in the financial statements when it is earned or realized, even if the payment has not been received.
   - **Timing:** The accrual is made when the company fulfills its obligations to deliver goods or services, indicating that revenue has been earned.
   - **Accounting Entry:** In the accrual accounting process, an adjusting entry is made to recognize the revenue in the income statement and create a corresponding asset on the balance sheet (often called "Accrued Revenue" or "Unearned Revenue" depending on whether the revenue is earned in advance or not yet earned).

2. **Accounts Receivable:**
   - **Definition:** Accounts receivable is an asset account on the balance sheet that represents the amounts owed to a company by customers for goods or services that have been delivered but not yet paid for.
   - **Timing**: Accounts receivable arise when a sale is made on credit, and payment is expected to be received in the future.
   - **Accounting Entry:** When the sale occurs, the revenue is recognized in the income statement, and a corresponding increase is made to accounts receivable. When the customer pays, the accounts receivable balance is reduced, and the cash account is increased.

Key Differences:

- **Timing:** Revenue accrual occurs at the point when the revenue is earned, while accounts receivable represent amounts expected to be received in the future.
- **Recording Location:**
  - ✓ Revenue accrual affects both the income statement (by recognizing revenue) and the balance sheet (by creating an asset or liability).
  - ✓ Accounts receivable, on the other hand, is solely a balance sheet item.
- **Nature:** Revenue accrual deals with recognizing revenue regardless of cash receipt, while accounts receivable specifically deals with amounts owed by customers.

In summary, revenue accrual is part of the process of recognizing revenue when it is earned, and it involves both the income statement and the balance sheet. Accounts receivable, on the other hand, is solely a balance sheet item representing amounts yet to be collected from customers for goods or services already provided

3. Prepaid & Suspense AC

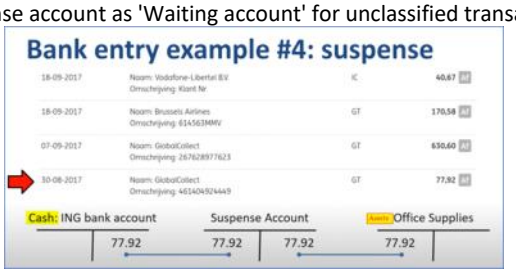
Sunday, January 28, 2024 10:53 AM

Lecture 1: Suspense Account:

Suspense Account:

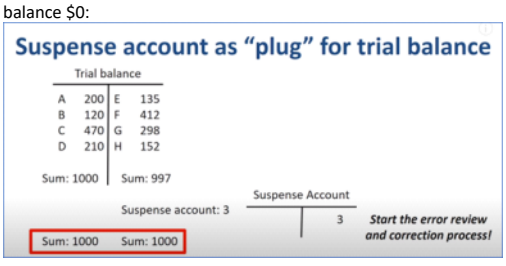
- A suspense account is an account used to temporarily store transactions for which there is uncertainty about where they should be recorded.
- Once the accounting staff investigates and clarifies the purpose of this type of transaction, it shifts the transaction out of the suspense account and into the correct account(s)
- Ideally, the best balance for the suspense account balance to $0.

I. Suspense account as 'Waiting account' for unclassified transaction:



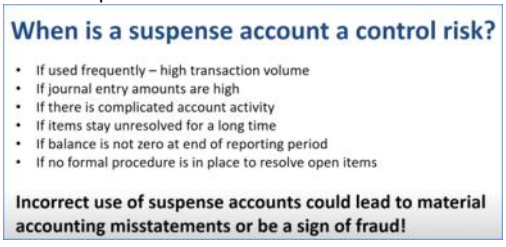
II. Suspense account as 'plug' for Trail Balance:

Suspense account can be used to balance the trail balance/general ledger for a while later we need find the error in general ledger to fix the issue and make suspense a/c balance $0:

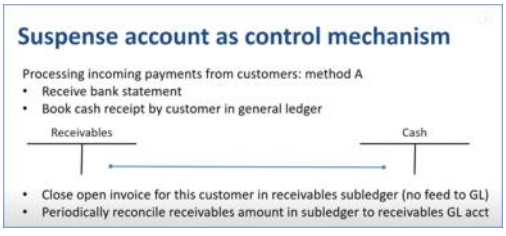


i. Suspense Account as Control Mechanism:

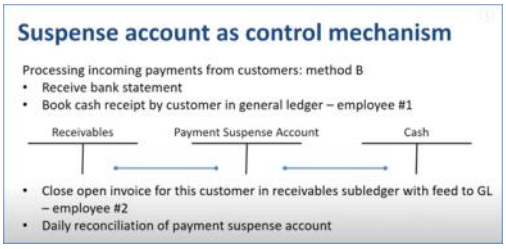
- When suspense account is used to control risk?



Method 1:



Method 2:



Lecture 2: Prepaid Expense:

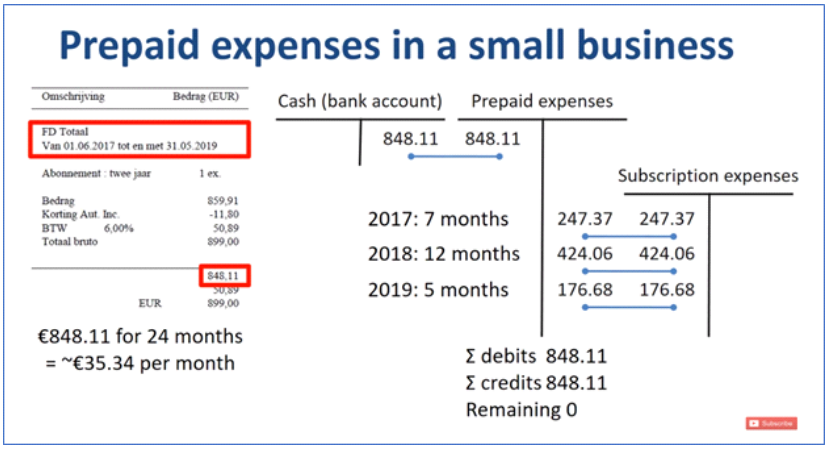
Prepaid Expense:

- A prepaid expense is an expenditure for goods or services that a company pays for in advance of receiving the actual benefits.
- Essentially, it represents a payment for future expenses, and the cost is recorded as an asset on the balance sheet until the benefit is realized.
- Over time, as the prepaid expense is consumed or utilized, it is gradually recognized as an expense on the income statement.

□ As per accounting, Expenses should be recorded during the period in which they are incurred
□ **Prepaid expenses:** a balance sheet account (asset) representing the right to receive future services that have already been paid for but not "consumed"

Example 1:

Newspaper subscription is billed for 24month from date 01.06.2017 to 31.05.2019



Example 2:

Monthly subscription(Insurance) on item is $150. Hence for a year subscription is $1800.
But if we take whole year subscription in advance, then discounted amount needed to be pay $1764

Nominal vs effective discount rate

Monthly charge

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150

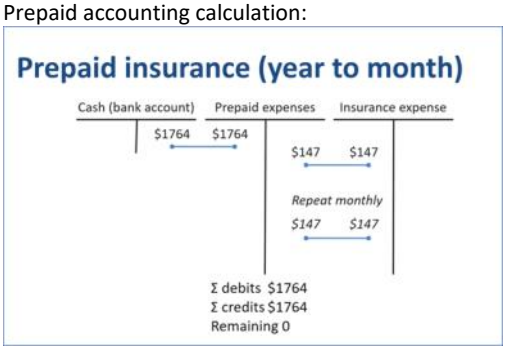
A) Pay monthly 12 * $150 = $1800, or B) pay full year in advance $1764
Nominal discount = $1800 - $1764 = $36 (2% of $1800)

Month end "remaining outstanding debt"

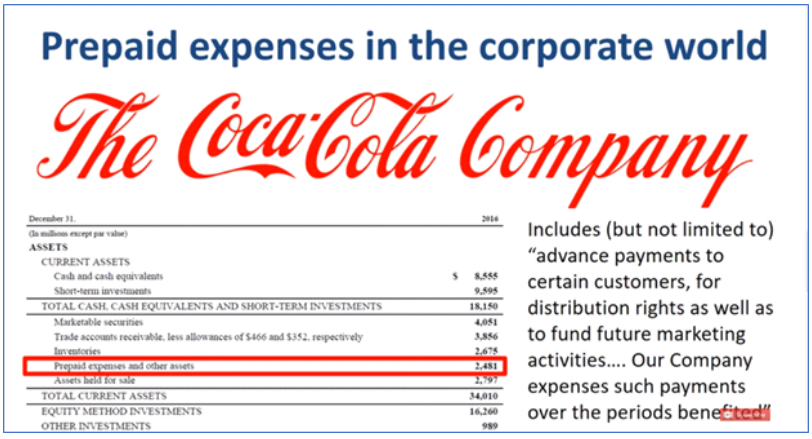
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
$1650	$1500	$1350	$1200	$1050	$900	$750	$600	$450	$300	$150	$0

Effective discount rate = discount / average debt = $36 / $900 = 4%

Prepaid accounting calculation:



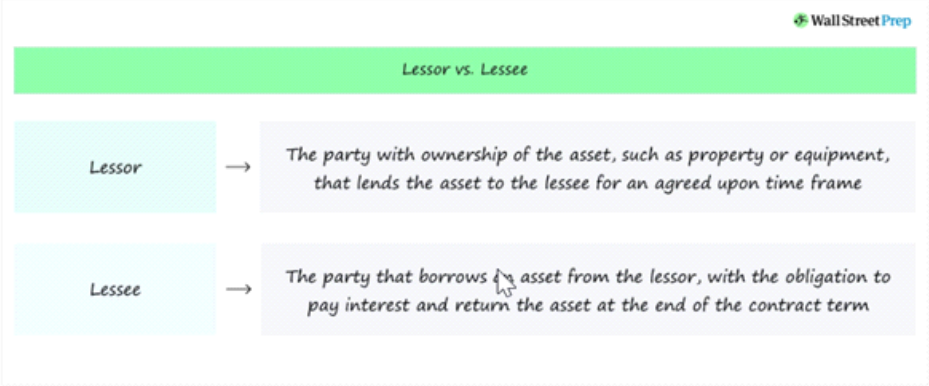
Example 3:

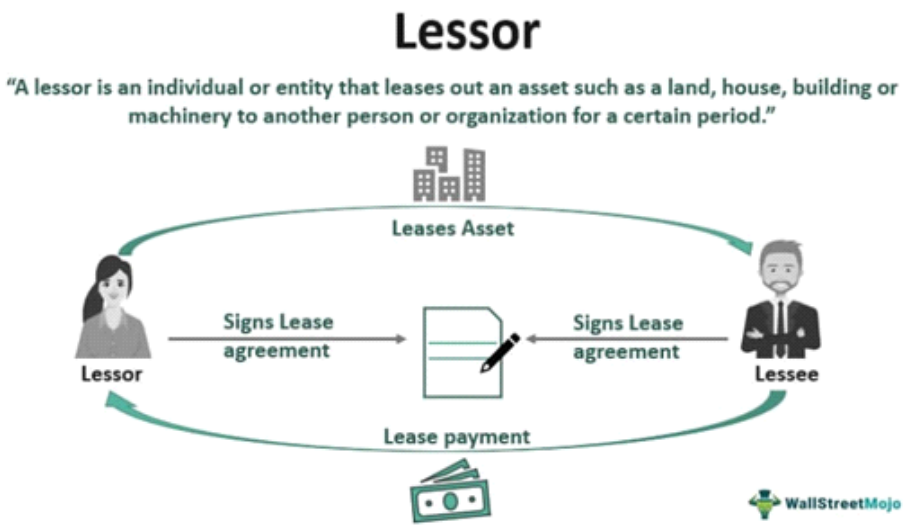


4. Loan & Leases

Sunday, January 28, 2024 7:18 PM

1. Lessor vs Lessee:





2. Type of Leasing:

The three main types of leasing are finance leasing, operating leasing and contract hire.

1. Finance leasing

- A long-term lease over the expected life of the equipment, usually three years or more, after which you pay a nominal rent or can sell or scrap the equipment - the leasing company will not want it any more.
- The leasing company recovers the full cost of the equipment, plus charges, over the period of the lease.
- Although you don't own the equipment, you are responsible for maintaining and insuring it.
- You must show the leased asset on your balance sheet as a capital item, or an item that has been bought by the company.
- Leases of over seven years, and in some cases over five years, are known as 'long funding leases' under which you can claim capital allowances as if you had bought the asset outright.

For detailed guidance on tax and leasing, see **acquire assets and borrow money tax efficiently**. You can also read HM Revenue & Custom's **Business Leasing Manual**.

2. Operating leasing

If you are considering operating leasing, remember the following points:

- it is useful if you don't need the equipment for its entire working life
- the leasing company will take the asset back at the end of the lease
- the leasing company is responsible for maintenance and insurance
- you don't have to show the asset on your balance sheet

3. Contract hire

Contract hire is often used for company cars and:

- the leasing company takes some responsibility for management and maintenance, such as repairs and servicing
- you don't have to show the asset on your balance sheet

https://www.wallstreetmojo.com/lessor/

Benchmark	Finance Lease	Operating Lease
What is it?	A commercial contract in which the lessor allows the lessee to use an asset in favour of regular payments for a usually long period.	A commercial contract in which the lessor allows the lessee to use an asset in favour of regular payments for a usually short period.
Duration	It is a long-term contract	It is a short-term contract
Owner	Ownership is transferred to the lessee (owner of an asset that is rented or leased).	Ownership remains with the lessor (legal owner of the asset).
This lease is also called	Capital lease	Rental lease
The risk of obsolescence lies on the part of the	Lessee	Lessor
Who takes care of or maintains the asset?	Lessee	Lessor
Cancellation of the lease	Can only be done on the occurrence of a specific event.	Can be done at any time.
In this lease, is the bargain purchase or purchasing option given?	Yes. In this lease, the purchasing option is given.	No. In this lease, no such option is given.

From <https://www.shiksha.com/online-courses/articles/difference-between-finance-lease-and-operating-lease/>

Termination Type

Thursday, July 25, 2024 7:17 PM

1. Rule of 78:

- The Rule of 78 is a method used to calculate the interest on a loan, typically short-term loans or installment loans, in which the interest is front-loaded.
- This means that more interest is paid at the beginning of the loan term, and less interest is paid as the loan progresses.
- It gets its name from the sum of the digits of the first twelve months of the year (1 + 2 + 3 + ... + 12 = 78).

Here's a simple explanation of how it works:

1. **Total Interest Calculation**: First, calculate the total interest that will be paid over the life of the loan.
2. **Sum of Digits**: For a 12-month loan, sum the digits from 1 to 12. This equals 78. For loans with different terms, sum the digits from 1 to the number of months in the loan term.
3. **Monthly Interest Allocation**:
   - Each month's interest is a fraction of the total interest.
   - For a 12-month loan, the first month's interest is 12/78 of the total interest, the second month's interest is 11/78, and so on, with the last month's interest being 1/78.
4. **Higher Early Payments**: Because more interest is allocated to the earlier payments, if you pay off the loan early, you will end up paying more interest than you would with a simple interest loan.

Example

- Loan Amount: $10,000
- Total Interest: $1,200
- Loan Term: 12 months

Step 1: Sum of the Digits

For a 12-month loan, sum the digits from 1 to 12: 1+2+3+4+5+6+7+8+9+10+11+12 = 78

Step 2: Monthly Interest Allocation

Each month's interest is calculated as a fraction of the total interest, using the sum of the digits.

Interest Allocation:

- Month 1: $\frac{12}{78} \times 1,200 = 184.62$
- Month 2: $\frac{11}{78} \times 1,200 = 169.23$
- Month 3: $\frac{10}{78} \times 1,200 = 153.85$
- Month 4: $\frac{9}{78} \times 1,200 = 138.46$
- Month 5: $\frac{8}{78} \times 1,200 = 123.08$
- Month 6: $\frac{7}{78} \times 1,200 = 107.69$
- Month 7: $\frac{6}{78} \times 1,200 = 92.31$
- Month 8: $\frac{5}{78} \times 1,200 = 76.92$
- Month 9: $\frac{4}{78} \times 1,200 = 61.54$
- Month 10: $\frac{3}{78} \times 1,200 = 46.15$
- Month 11: $\frac{2}{78} \times 1,200 = 30.77$
- Month 12: $\frac{1}{78} \times 1,200 = 15.38$

Total Interest Allocation:

184.62 + 169.23 + 153.85 + 138.46 + 123.08 + 107.69 + 92.31 + 76.92 + 61.54 + 46.15 + 30.77 + 15.38 = 1,200.0

Step 3: Monthly Payment Calculation

Assuming equal principal repayment each month, the monthly principal repayment for a $10,000 loan over 12 months is:

$$\frac{10,000}{12} = 833.33$$

Total Monthly Payment Calculation: Monthly Payment=Principal Repayment + Monthly Interest

Monthly Payments:

- Month 1: 833.33 + 184.62 = 1,017.95
- Month 2: 833.33 +169.23 = 1,002.56
- Month 3: 833.33 + 153.85=987.18
- Month 4: 833.33 + 138.46=971.79
- Month 5: 833.33 + 123.08=956.41
- Month 6: 833.33 + 107.69=941.02
- Month 7: 833.33 + 92.31=925.64
- Month 8: 833.33 + 76.92=910.25
- Month 9: 833.33 + 61.54=894.878
- Month 10: 833.33 + 46.15=879.48

- Month 11: 833.33 + 30.77=864.10
- Month 12: 833.33 + 15.38=848.71

This method results in higher initial payments and lower payments towards the end. If the loan is paid off early, more interest has already been paid compared to a simple interest loan, making the Rule of 78 less favorable for early repayment

This method results in paying more interest in the initial months and less towards the end, making early repayment less beneficial compared to a loan with simple interest.