ACCOUNTING & FINANCIAL STATEMENT ANALYSIS

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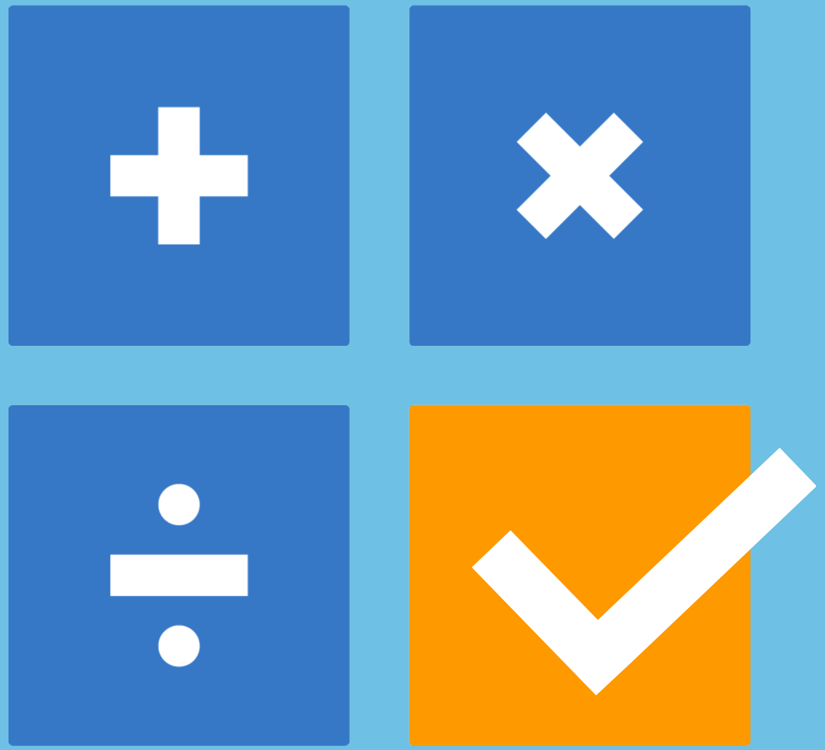
WHAT IS ACCOUNTING?

Accounting is an information science that is used to collect and organize financial data for organizations and individuals

WHAT TYPE OF INFORMATION?

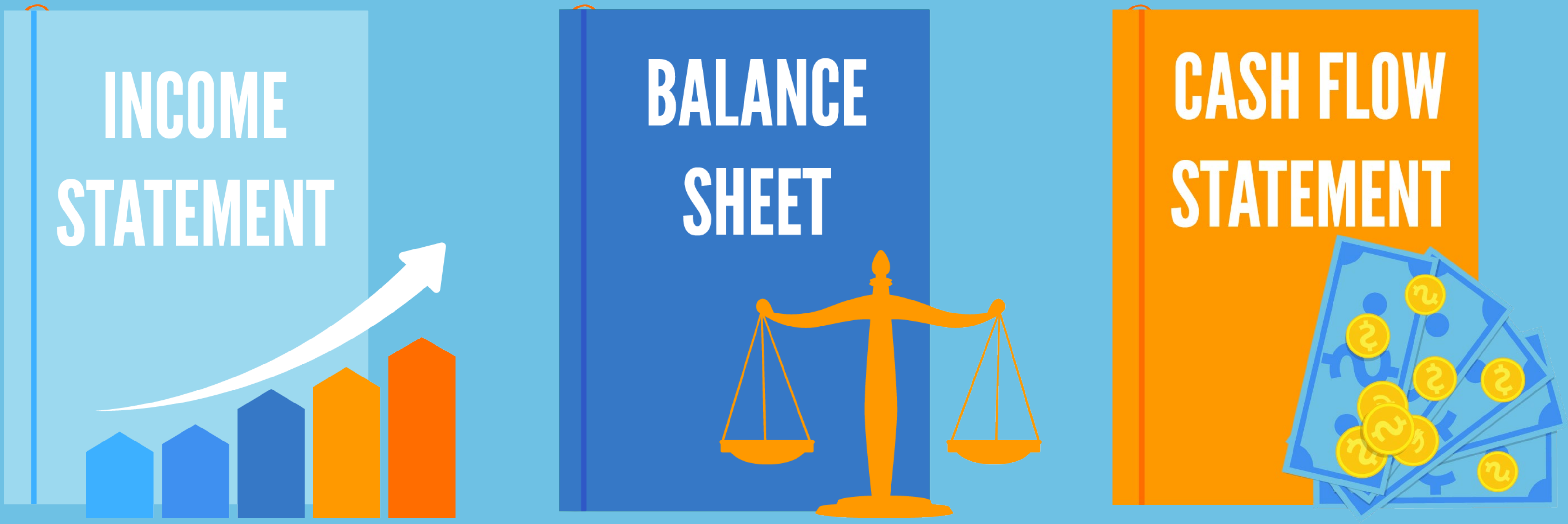
Accounting organizes financial information. Accounting isn't an abstract science – it is much more practical than theoretical. It's one of those things that you'll learn best by doing



TYPES OF ACCOUNTING

- BOOKKEEPING: Ensures that financial information has been gathered systematically
- FINANCIAL ACCOUNTING: Prepared for the company's ownership, its lenders, financial analysts, and for other external stakeholders
- MANAGERIAL ACCOUNTING: Looks into topics like pricing, competition, marginality, budgeting
- TAX ACCOUNTING: Determines the amount of taxes that a company has to pay

THE THREE CORE FINANCIAL STATEMENTS



Income Statement/P&L/ Statement of Earnings

Balance Sheet/ Statement of Financial Position

Cash Flow Statement

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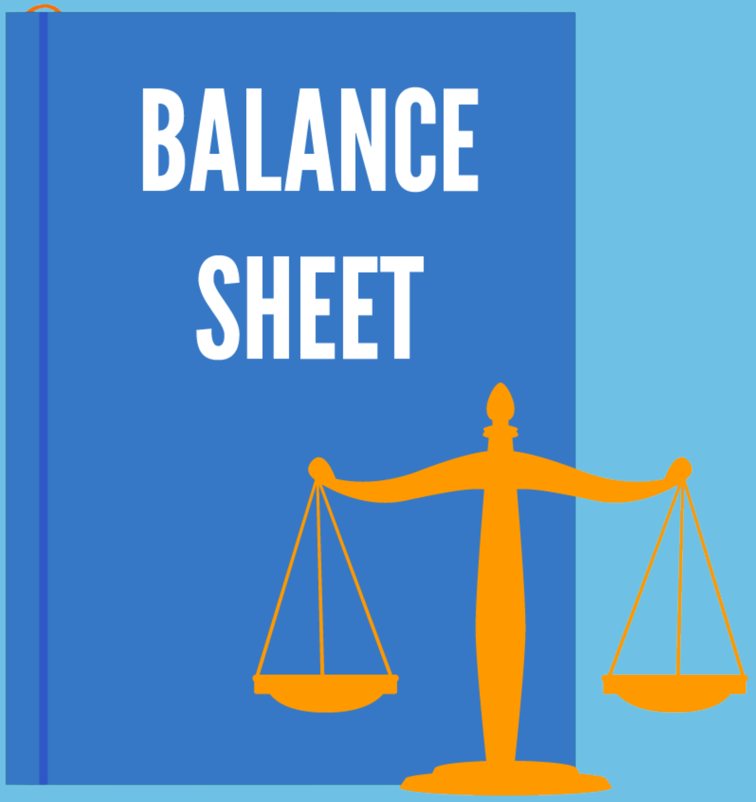
THE THREE CORE FINANCIAL STATEMENTS

Income Statement/P&L/ Statement of Earnings

PURPOSE

- How did the company perform throughout the period under consideration?
- Did it generate a profit or a loss?

THE THREE CORE FINANCIAL STATEMENTS



Balance Sheet/
Statement of Financial Position

PURPOSE

- What does a company owe and own at a certain date?
- What is the company's financial position?

THE THREE CORE FINANCIAL STATEMENTS

Cash Flow Statement

PURPOSE

- How much cash did the company make during the period under consideration?
- Where did the cash come from?

THE MAIN INCOME STATEMENT ITEMS

Income Statement/P&L/ Statement of Earnings

REVENUE:
An inflow of economic resources. Usually, the main type of revenue for a given firm are its day-to-day sales – customers buying the goods that the firm sells.

OTHER REVENUE:
Earnings generated by performing activities that are outside the core area of operations

COST OF GOODS SOLD (COGS):
Expenses that are sustained in order to produce the goods that the firm sells and are directly attributable to the production process

THE MAIN INCOME STATEMENT ITEMS

Income
Statement/P&L/
Statement of Earnings

SELLING, GENERAL AND ADMINISTRATIVE (SG&A):

A large category of costs that includes many items that are not directly related to the production process (for ex. Salaries of non-production personnel, management compensation, rent, general expenses, etc.)

DEPRECIATION & AMORTIZATION (D&A):

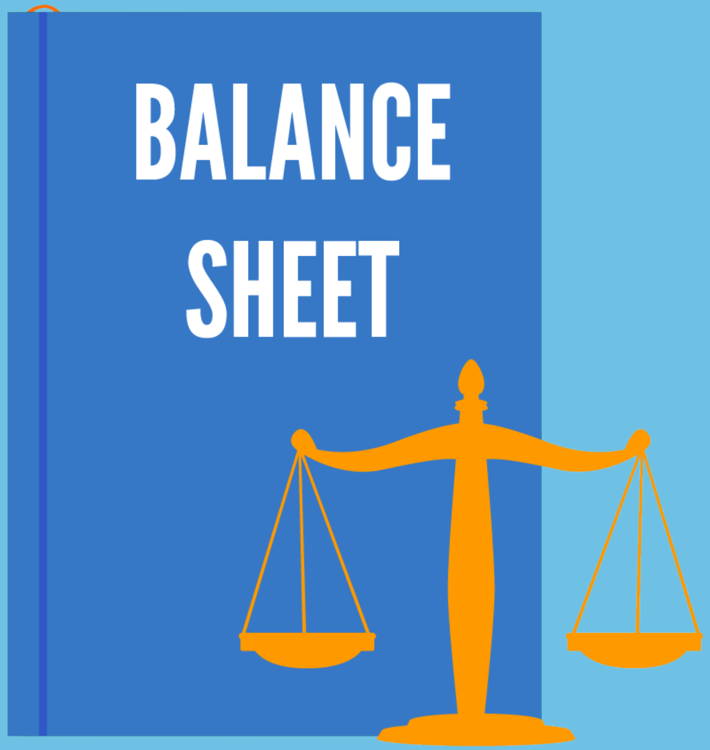
Two accounts that reflect the “using up” of tangible and intangible assets. Depreciation refers to assets of a physical nature, while amortization is the term that is used for intangible assets (goodwill, licenses, copyrights, etc.).

INTEREST EXPENSES:

The finance expense that a company bears for receiving external financing

THE MAIN BALANCE SHEET ITEMS

Assets



Balance Sheet/
Statement of Financial Position

CASH AND CASH EQUIVALENTS:

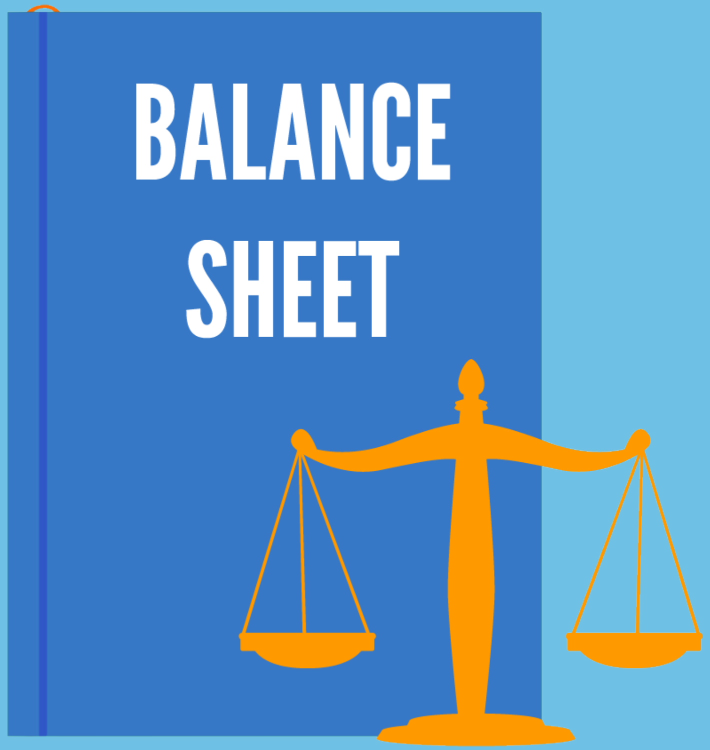
One of the most important drivers for a business. It shows how much of a firm's assets are cash or can easily be converted into cash. It gives us an idea of the liquidity of the company

ACCOUNTS RECEIVABLE:

When customers buy a firm's products they have to pay for them. And until they do, the firm will register this amount in accounts receivable, which indicates the money owed by customers. The firm registers that it has earned a payment from these customers but has not yet received the payment.

THE MAIN BALANCE SHEET ITEMS

Assets



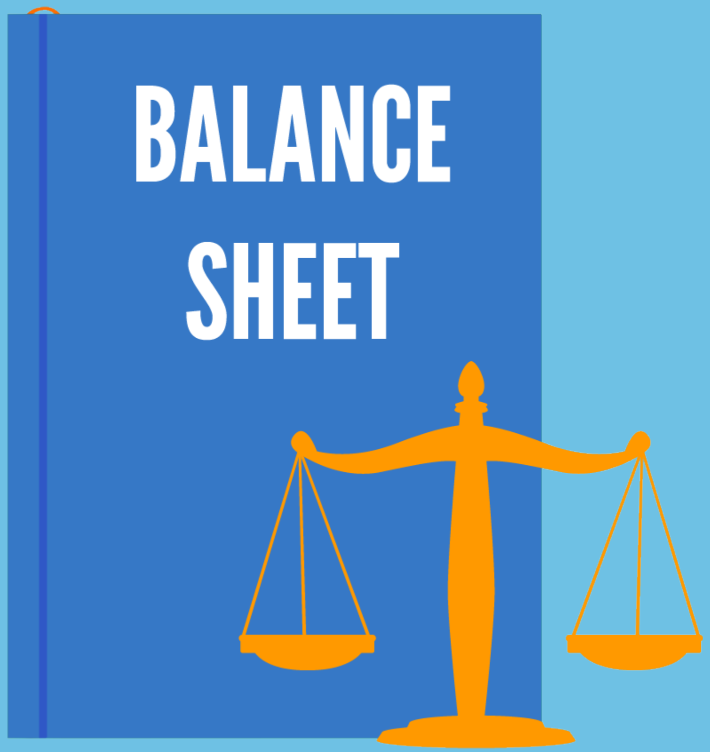
Balance Sheet/
Statement of Financial Position

INVENTORY:
Inventory is the account that shows the value of raw materials, goods that are in the process of elaboration and finished goods that are ready to be sold to customers.

PROPERTY, PLANT & EQUIPMENT (PP&E):
A group of assets that are vital to business operations. Imagine a production company – it certainly needs plants and equipment in order to transform raw materials into finished products. Usually, this is a hefty investment that cannot be easily liquidated.

THE MAIN BALANCE SHEET ITEMS

Liabilities



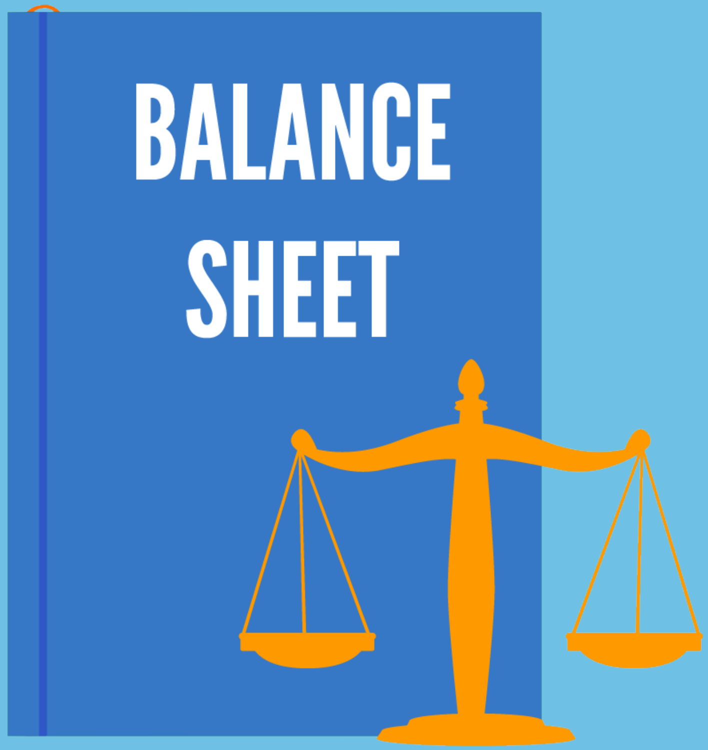
Balance Sheet/
Statement of Financial Position

ACCOUNTS PAYABLE:
When a company buys goods from suppliers and does not pay at the time of the purchase, it registers the amount in accounts payable until the actual payment has been made.

FINANCIAL LIABILITIES:
A financial liability appears on the Balance Sheet of a company when it receives external financing – which is usually a bank loan.

THE MAIN BALANCE SHEET ITEMS

Owners' Equity



Balance Sheet/
Statement of Financial Position

EQUITY:
The firm's capital that it technically "owes" to its owners. This capital would not be repaid to the shareholders, but the company will try to pay them a decent amount of dividends if its business is successful

THE BASIC ACCOUNTING EQUATION

Assets = **Liabilities** + **Equity**

The reason it is called a "Balance Sheet" is because assets must equal liabilities and equity. The two sides have to be equal at all times.

This principle is known as the Accounting equation and is one of the core principles around which Accounting has been built.
ASSETS ARE EQUAL TO LIABILITIES PLUS EQUITY.

T-ACCOUNTS, CREDITS AND DEBITS

BALANCE SHEET

Assets

Cash

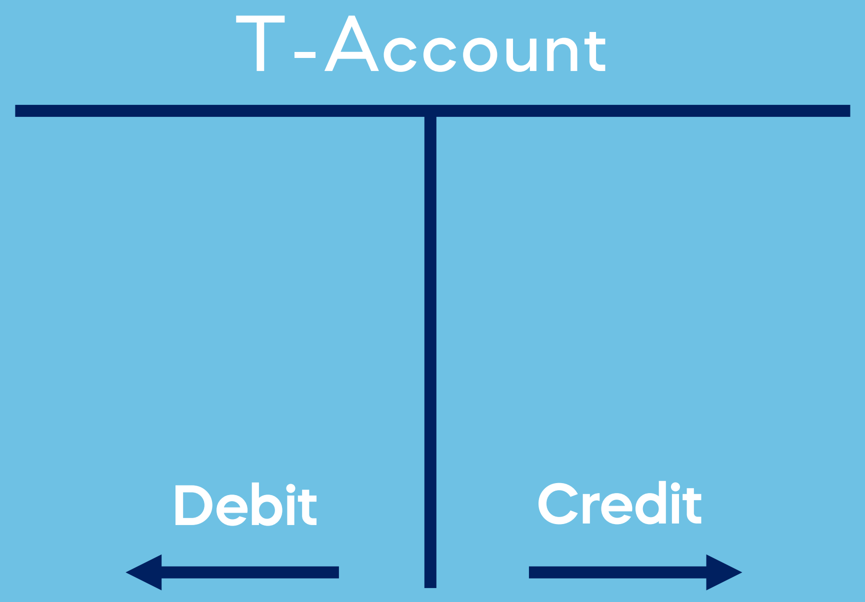
Accounts Receivable

Liabilities & Equity

Trade Payables

Financial Liabilities

T-ACCOUNTS, CREDITS AND DEBITS



DEBIT MEANS “LEFT”, CREDIT MEANS “RIGHT”

T-ACCOUNTS, CREDITS AND DEBITS

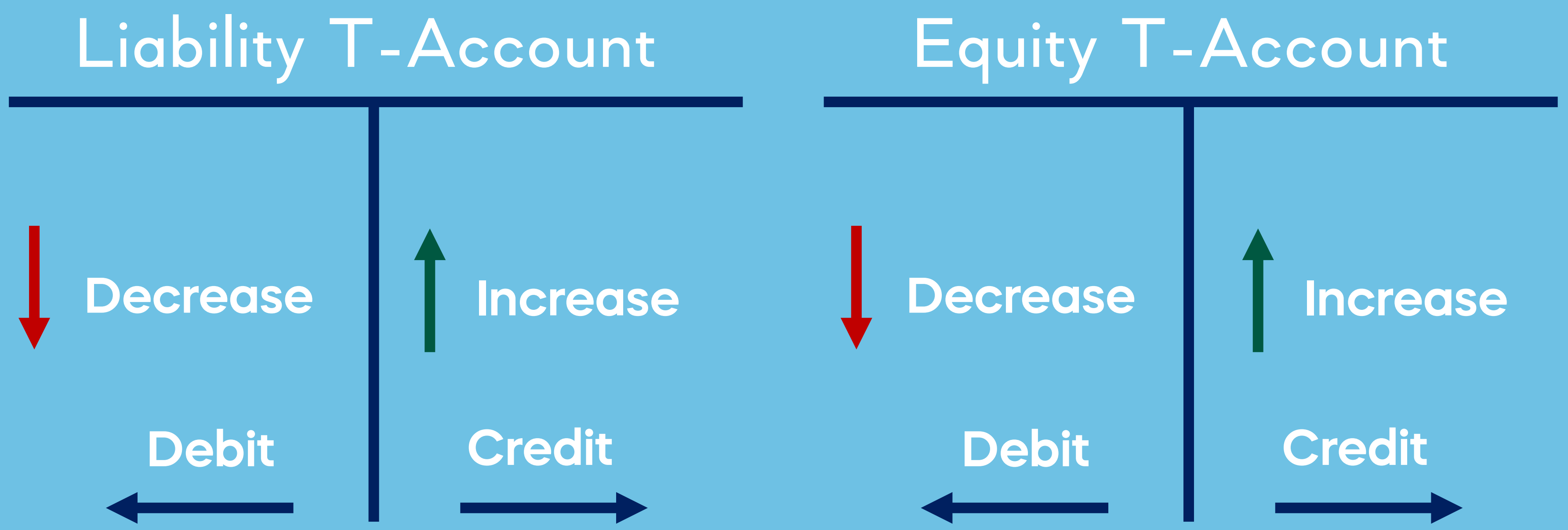
Assets increase to the left

Asset T-Account

Increase	Decrease
Debit	Credit

DEBIT MEANS "LEFT", CREDIT MEANS "RIGHT"

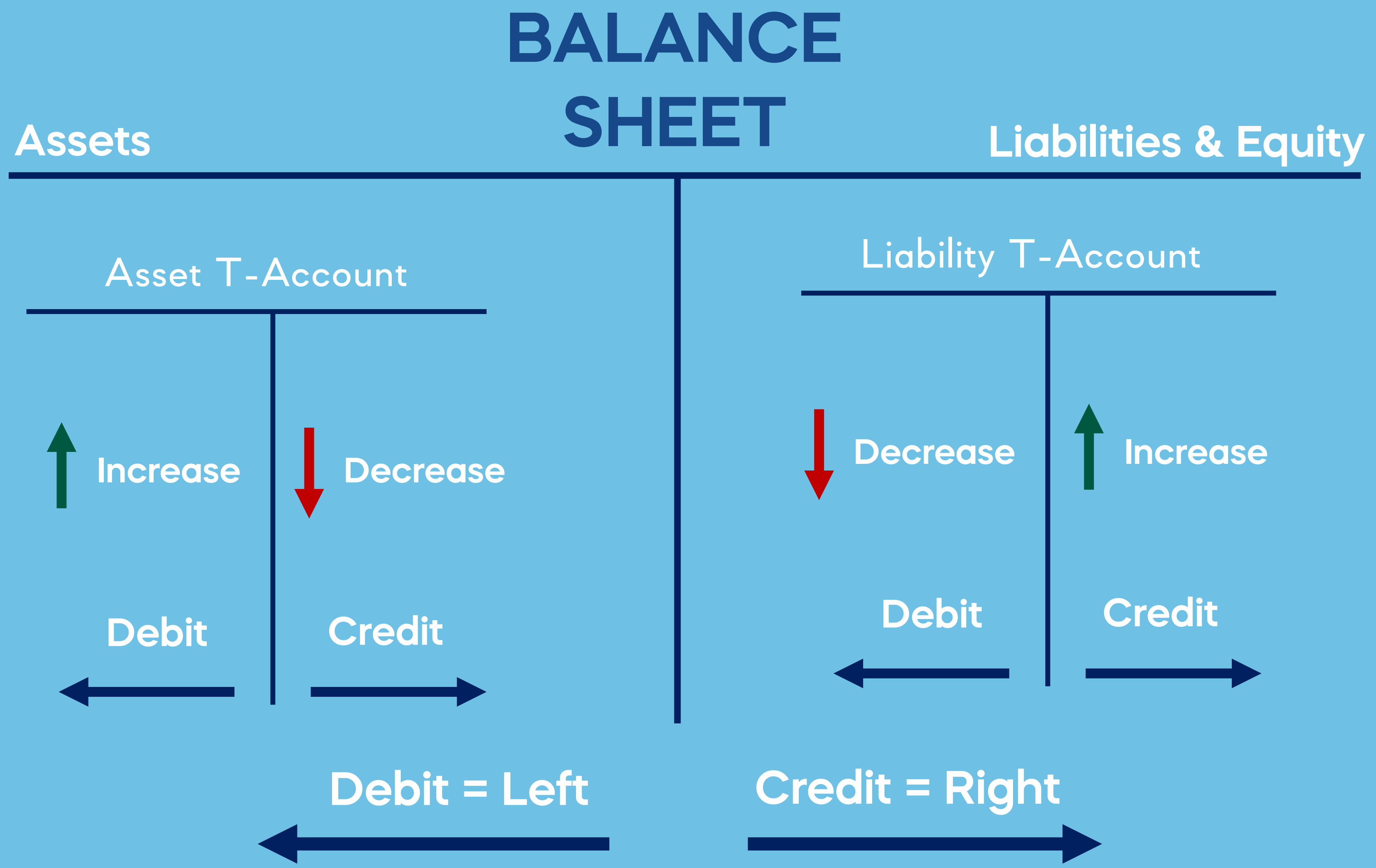
T-ACCOUNTS, CREDITS AND DEBITS



Liabilities and Equity increase to the right

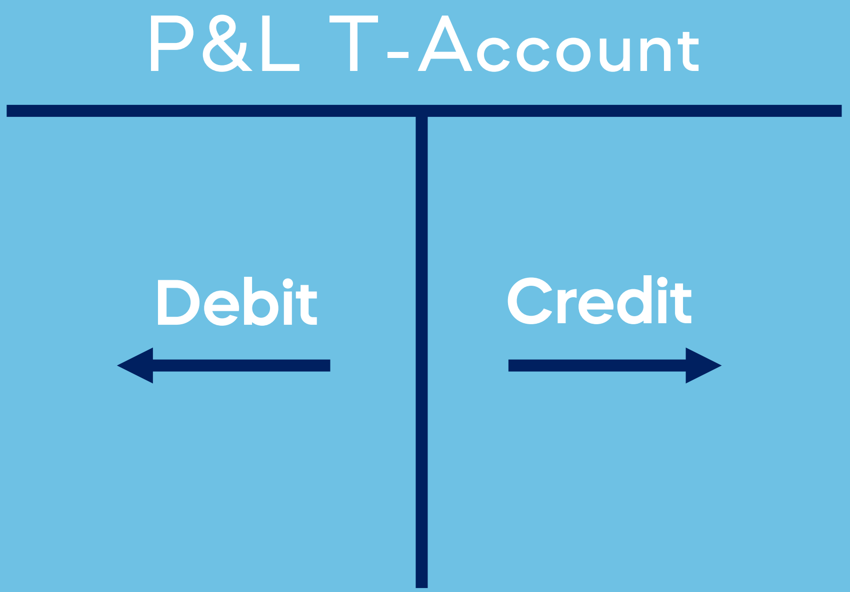
**DEBIT MEANS “LEFT”,
CREDIT MEANS “RIGHT”**

T-ACCOUNTS, CREDITS AND DEBITS



INCOME STATEMENT T-ACCOUNTS

Income
Statement/P&L/
Statement of Earnings



DEBITS ARE ON THE LEFT, WHILE
CREDITS ARE ON THE RIGHT SIDE

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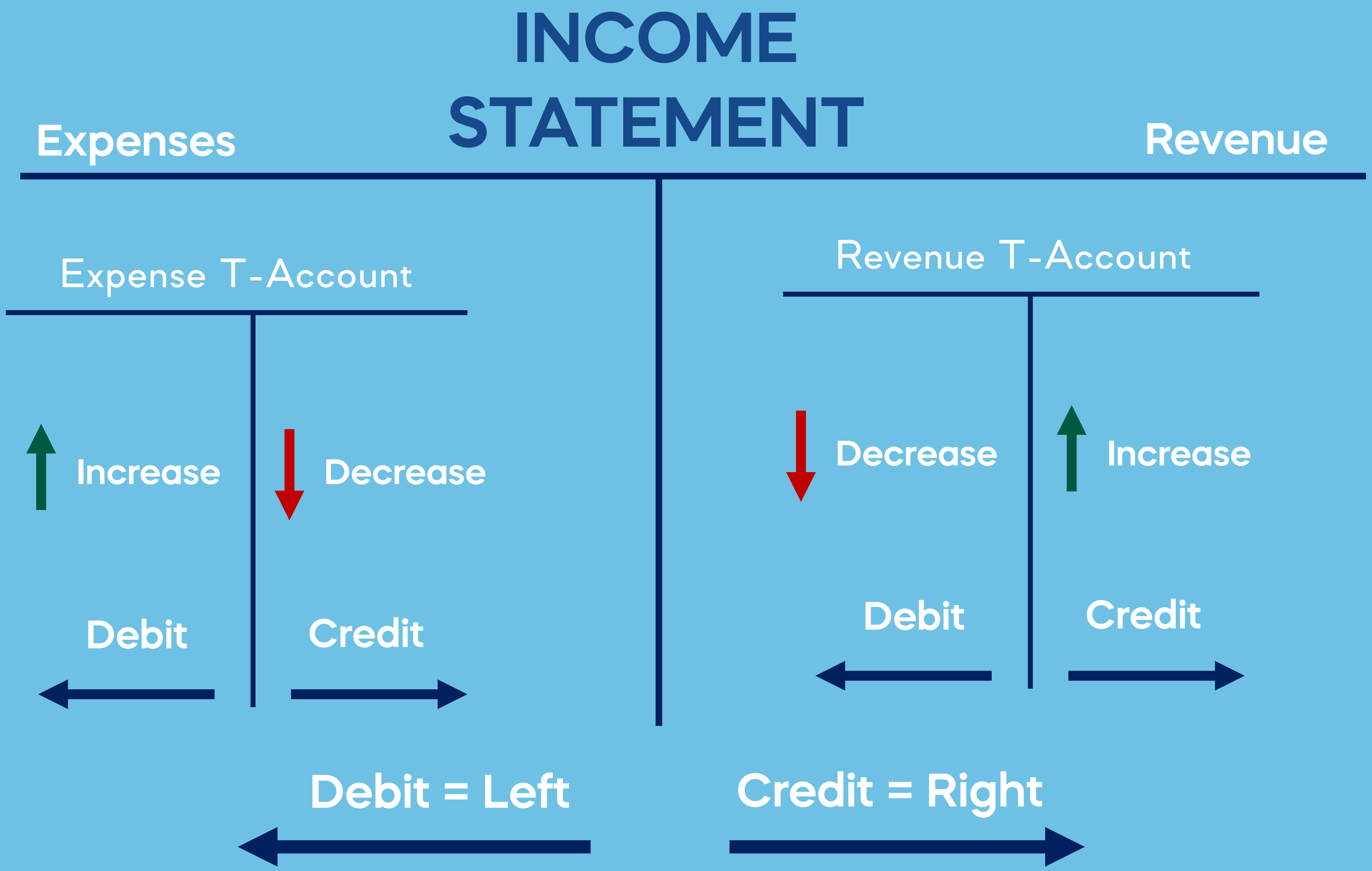
T-ACCOUNTS, CREDITS AND DEBITS



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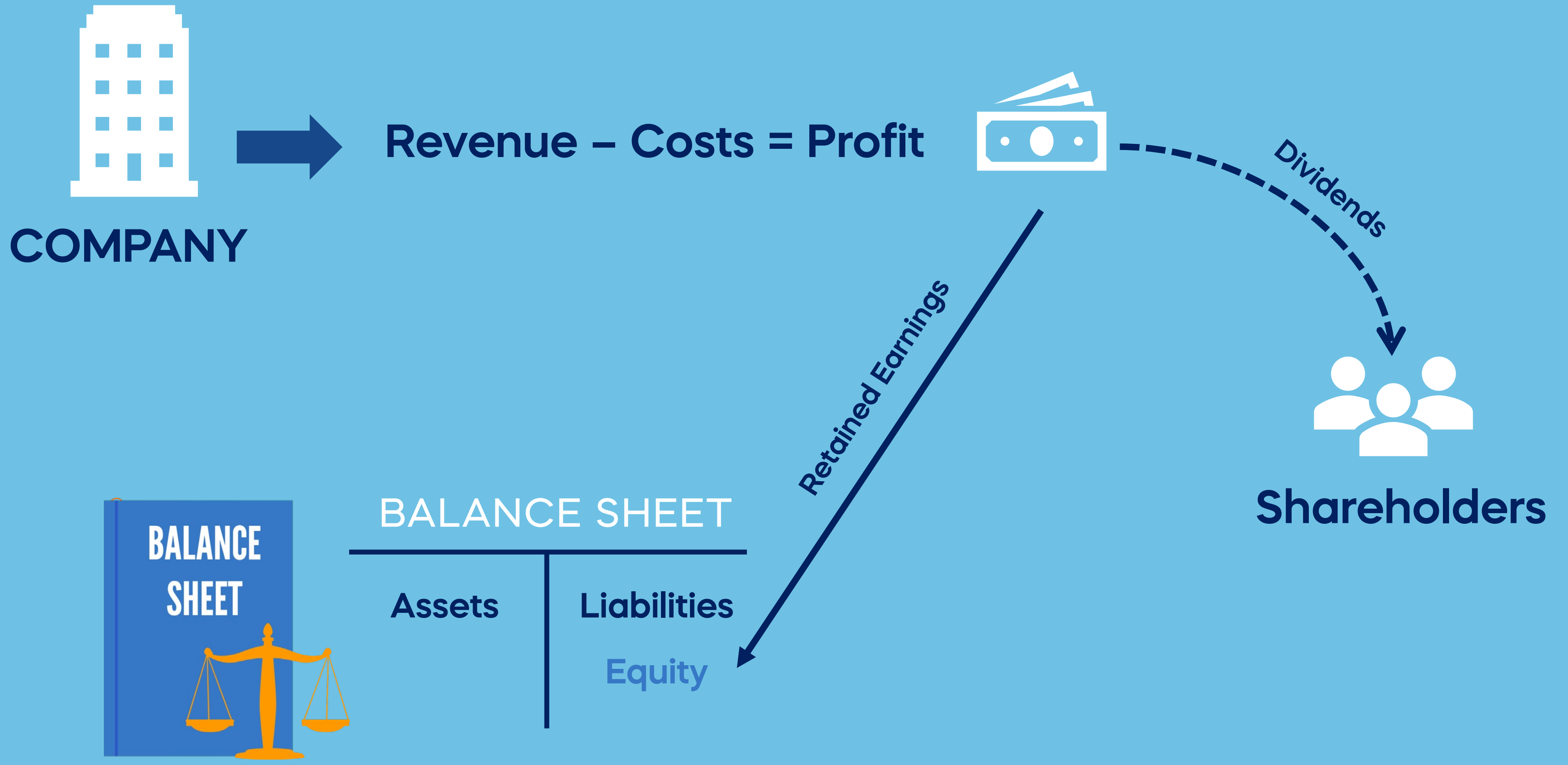
WHEN A FIRM MAKES PROFITS...



REVENUE

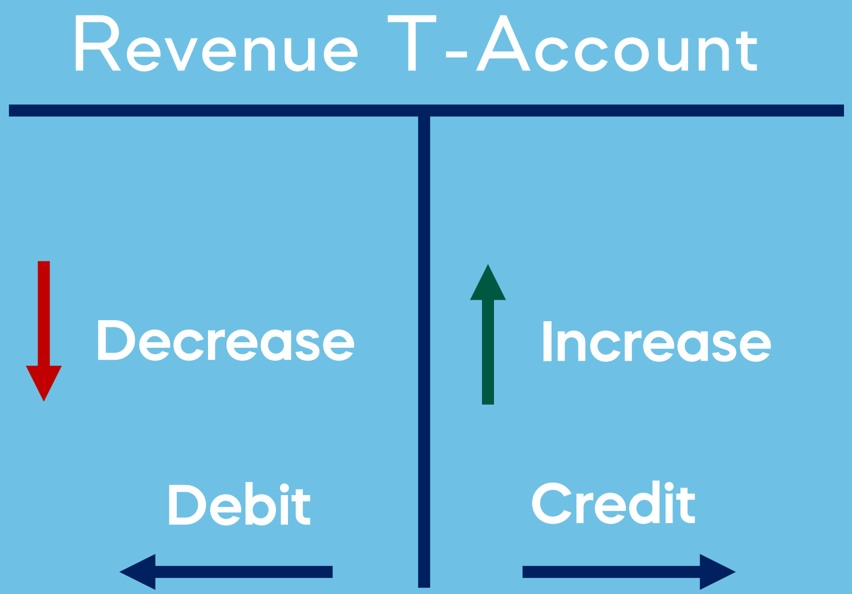
Revenue behaves like Liabilities & Equity

THE HIGHER A COMPANY'S REVENUE, THE HIGHER ITS PROFITS AND EQUITY

↑ REVENUE → ↑ PROFITS → ↑ EQUITY

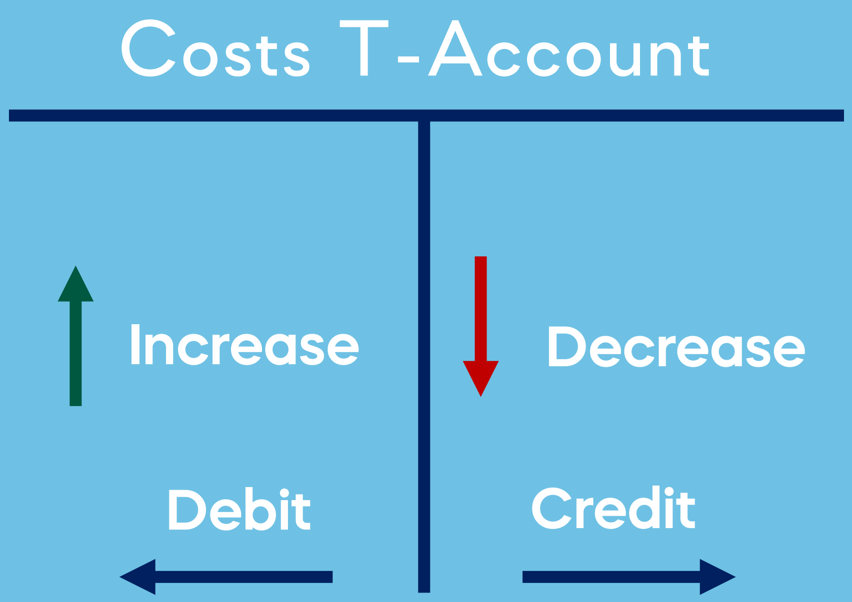
REVENUE

Revenue behaves like Liabilities & Equity

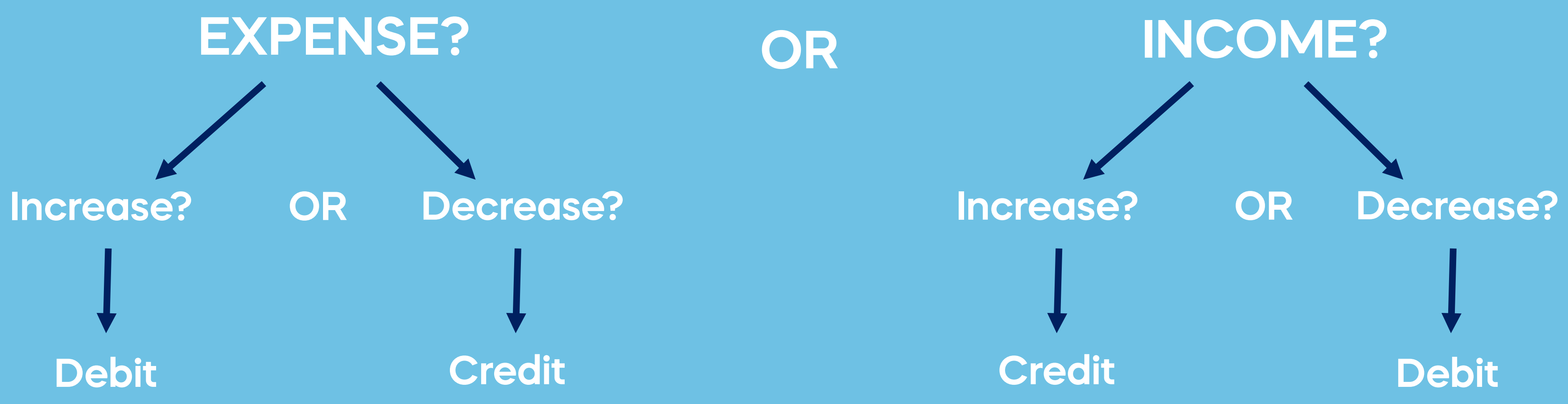


COSTS

Costs behave
like Assets



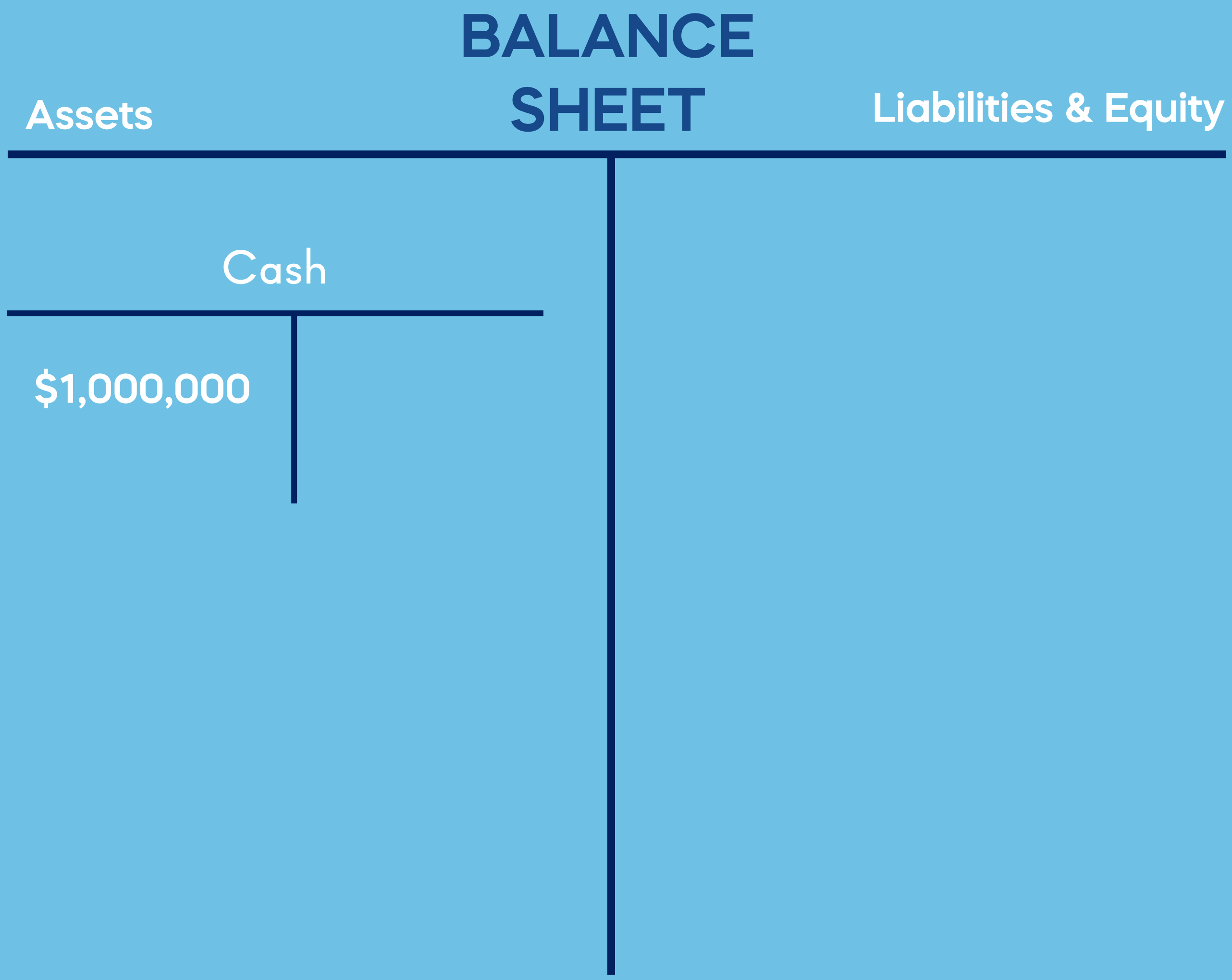
A USEFUL SCHEME



DOUBLE ENTRY BOOKKEEPING

A firm owns one asset

$1,000,000 Cash



DOUBLE ENTRY BOOKKEEPING

A firm owns one asset — $1,000,000 Cash

100% Equity Financing — $1,000,000 Equity

BALANCE SHEET

Assets	Liabilities & Equity
Cash	Equity
$1,000,000	$1,000,000

DOUBLE ENTRY BOOKKEEPING

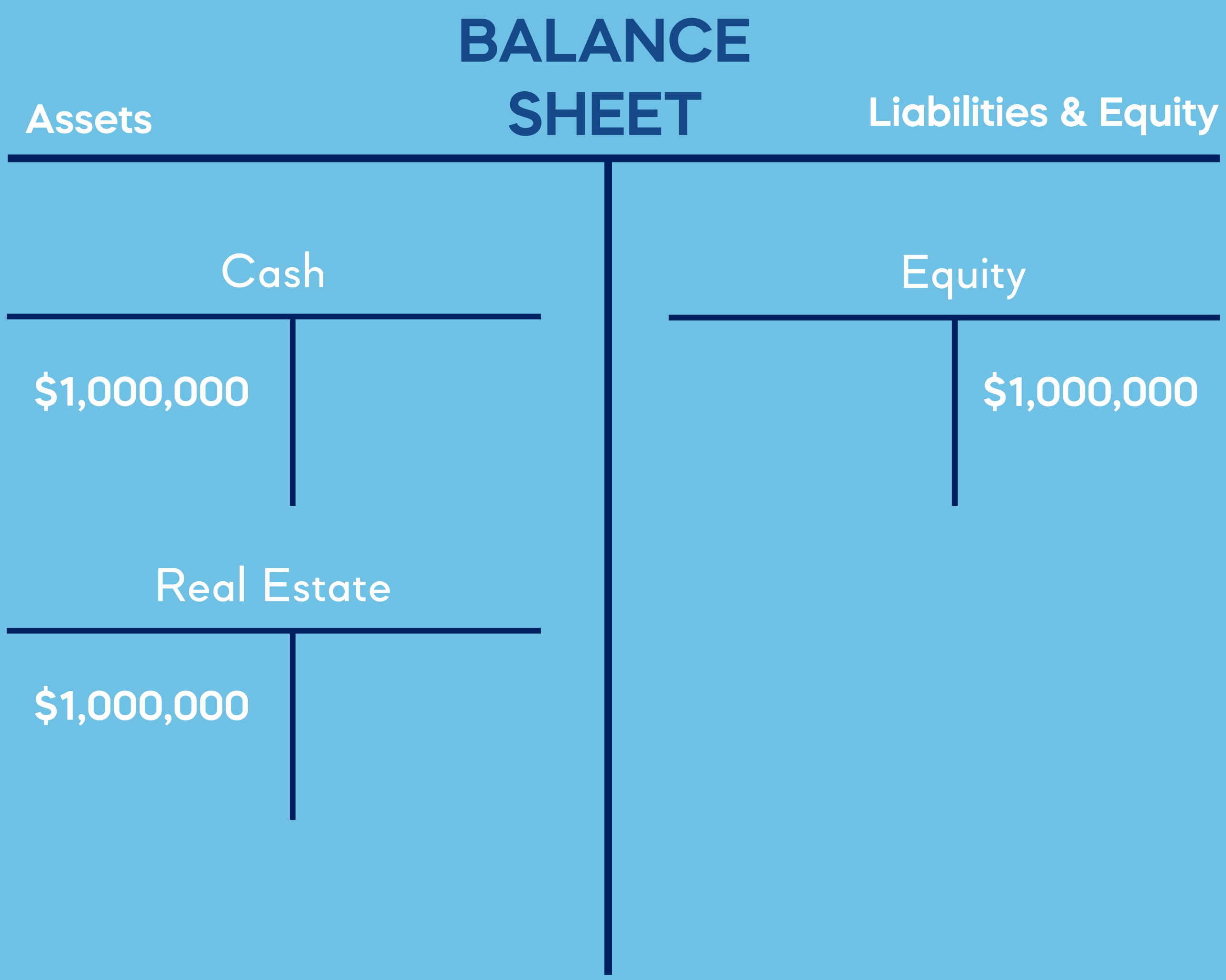
A firm owns one asset — $1,000,000 Cash

100% Equity Financing — $1,000,000 Equity

Acquisition of Real Estate

$1,000,000
Cash (Asset)

$1,000,000
Real Estate (Asset)



DOUBLE ENTRY BOOKKEEPING

A firm owns one asset — $1,000,000 Cash

100% Equity Financing — $1,000,000 Equity

Acquisition of Real Estate

The firm receives a bank loan — $500,000 Bank Loan

BALANCE SHEET

Assets		Liabilities & Equity	
Cash		**Equity**	
$1,000,000			$1,000,000
Real Estate		**Bank Loans**	
$1,000,000			$500,000

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TIMING OF REVENUES

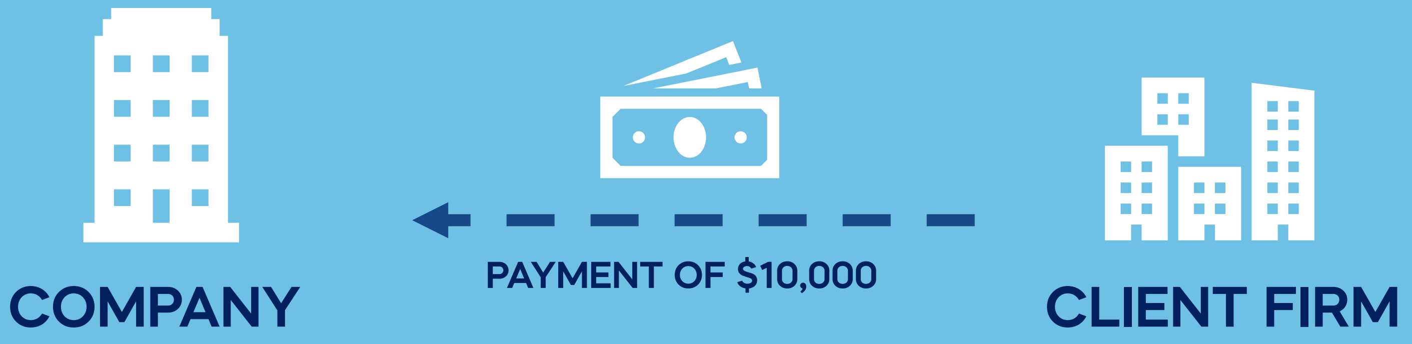
A company sells office equipment

TIMING OF REVENUES

The company delivers the products

TIMING OF REVENUES

The company delivers the products



1. A payment is made **AT** delivery
2. A payment is made **BEFORE** delivery
3. A payment is made **AFTER** delivery

TIMING OF REVENUES

PAYMENT AT DELIVERY

The client pays for the office supplies at delivery

Cash (BS)		Revenue (IS)		Trade Receivables (BS)	
$10,000			$10,000		

TIMING OF REVENUES

PAYMENT AFTER DELIVERY

The client pays for the office supplies 60 days after delivery

Cash (BS)

Revenue (IS)

	$10,000

Trade Receivables (BS)

$10,000	

TIMING OF REVENUES

PAYMENT AFTER DELIVERY

The client pays for the office supplies 60 days after delivery

Cash (BS)	
$10,000	

Revenue (IS)	
	$10,000

Trade Receivables (BS)	
$10,000	$10,000

TIMING OF REVENUES

PAYMENT AFTER DELIVERY

The client pays for the office supplies 60 days after delivery

Cash (BS)

$10,000	

Revenue (IS)

	$10,000

Trade Receivables (BS)

$10,000	$10,000

TIMING OF REVENUES

PAYMENT **BEFORE** DELIVERY

The client pays in advance

Cash (BS)		Revenue (IS)		Trade Receivables (BS)		Prepaid Revenue (BS)	
$10,000							$10,000

TIMING OF REVENUES

PAYMENT BEFORE DELIVERY

The client pays in advance

Cash (BS)

$10,000	

Revenue (IS)

	$10,000

Trade Receivables (BS)

Prepaid Revenue (BS)

$10,000	$10,000

TIMING OF EXPENSES

A company has
to pay rent

1. A payment is made **AT** the date of the invoice
2. A payment is made **AFTER** the date of the invoice
3. A payment is made **BEFORE** the date of the invoice

TIMING OF EXPENSES

PAYMENT AT THE INVOICE DATE

Paying rent at the date of the invoice

Cash (BS)		Rent (IS)		Trade Receivables (BS)	
	$1,000	$1,000			

TIMING OF EXPENSES

PAYMENT **AFTER** THE INVOICE DATE

The company pays its rent 60 days after the invoice is issued

Cash (BS)	
	$1,000

Rent (IS)	
$1,000	

Trade Receivables (BS)	
$1,000	$1,000

TIMING OF EXPENSES

PAYMENT **BEFORE** THE INVOICE DATE

The company pays its rent in advance

Cash (BS)		Rent (IS)		Trade Payables (BS)		Prepaid Expenses (BS)	
	$1,000	$1,000				$1,000	$1,000

FINANCIAL RATIOS

LIQUIDITY

A firm's ability to pay its short- term obligations

PROFITABILITY

A firm's ability to generate profits

SOLVENCY

The ability to meet long-term liabilities

ACTIVITY/EFFICIENCY

The ability to effectively employ resources into business operations

VALUATION

A firm's capability to pay its short- term obligations

FINANCIAL RATIOS

LIQUIDITY

Current Ratio
Quick Ratio

PROFITABILITY

ROA	EBIT%
ROE	Net Income%

SOLVENCY

Debt Ratio
Interest Coverage Ratio

ACTIVITY/EFFICIENCY

DSO	DIO
DPO	NET Trading Cycle

VALUATION

EPS	DEPS
P/E	Dividend Yield

FINANCIAL RATIOS

LIQUIDITY

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

$$\text{Quick Ratio} = \frac{\text{Current Assets - Inventory}}{\text{Current Liabilities}}$$

FINANCIAL RATIOS

SOLVENCY

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

$$\text{Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Interest Expenses}}$$

FINANCIAL RATIOS

PROFITABILITY

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

$$ROE = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

$$ROE = \frac{\text{Net Income}}{\text{Revenue}} \times \frac{\text{Revenue}}{\text{Shareholders' Equity}}$$

$$ROE = \text{Net Profit Margin} \times \text{Equity Turnover}$$

FINANCIAL RATIOS

ACTIVITY/EFFICIENCY

$$DSO = \frac{\text{Accounts Receivable}}{\text{Revenue}} \times 360$$

$$DIO = \frac{\text{Inventory}}{\text{Cost of Goods Sold}} \times 360$$

$$DPO = \frac{\text{Accounts Payable}}{\text{Cost of Goods Sold}} \times 360$$

Net Trading Cycle = DSO + DIO - DPO

FINANCIAL RATIOS

VALUATION

$$\text{EPS} = \frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Weighted average number of common shares outstanding}}$$

$$\text{P/E Ratio} = \frac{\text{Share price}}{\text{EPS}}$$

$$\text{DEPS} = \frac{\text{Adjusted income available for common shares}}{\text{Weighted average number of common shares outstanding}}$$

$$\text{Dividend Yield} = \frac{\text{Dividend per share}}{\text{Current share price}}$$

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