

Introduction to Finance

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MGM237

Lecture 8



Introduction To Finance

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MGM237 Cash Flow Statement

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Chapter

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Cash Flow Statement





Chapter

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Cash Flow Statement

- **Difference Between Net Income & Net Cash Flow.**
- **Usefulness of the Statement of Cash Flows.**
- **Operating, Investing, and Financing Activities.**
- **Preparing a Statement of Cash Flows (Indirect Method).**
- **Analyzing the Statement of Cash Flows.**

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Difference Between Net Income & Net Cash Flow

Introduction to Net Income

•Definition:

Net income is the profit a company retains after deducting all expenses and taxes from its total revenues. It represents the residual earnings available to shareholders and is often referred to as the "bottom line" because it is the final figure on the income statement.

•Based On:

Calculated using **accrual accounting principles**, net income includes all revenues earned and expenses incurred during a specific period, regardless of when the cash transactions actually occur.



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Difference Between Net Income & Net Cash Flow

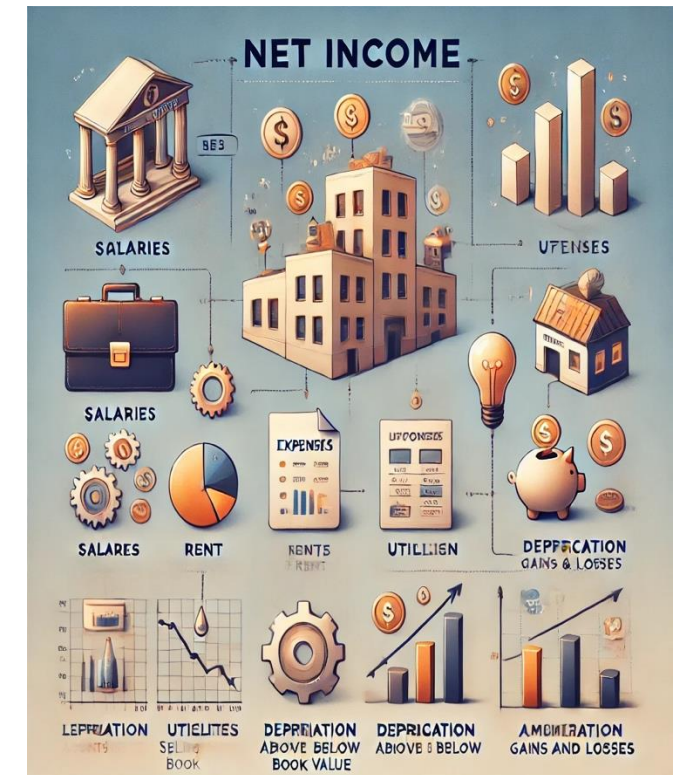
•Components:

• Expenses:

The costs incurred in the process of earning revenues. These include operating expenses like salaries, rent, utilities, cost of goods sold (COGS), depreciation, and amortization.

• Gains and Losses:

Gains are increases in equity from peripheral or incidental transactions, such as selling an asset for more than its book value. Losses are decreases in equity from similar transactions, like selling an asset for less than its book value or losses from lawsuits.



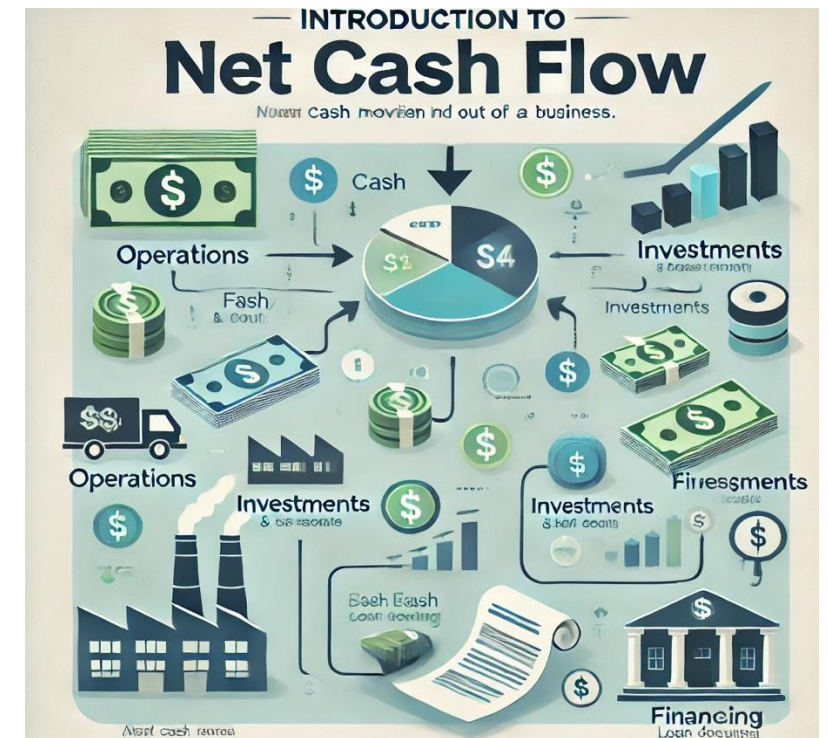
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Difference Between Net Income & Net Cash Flow

Introduction to Net Cash Flow

•Definition:

Net cash flow is the net amount of cash being transferred into and out of a business over a specific period. It represents the company's ability to generate cash from its operations, investments, and financing activities. Unlike net income, which includes non-cash accounting entries, net cash flow focuses solely on actual cash transactions, providing a clear picture of the company's liquidity.



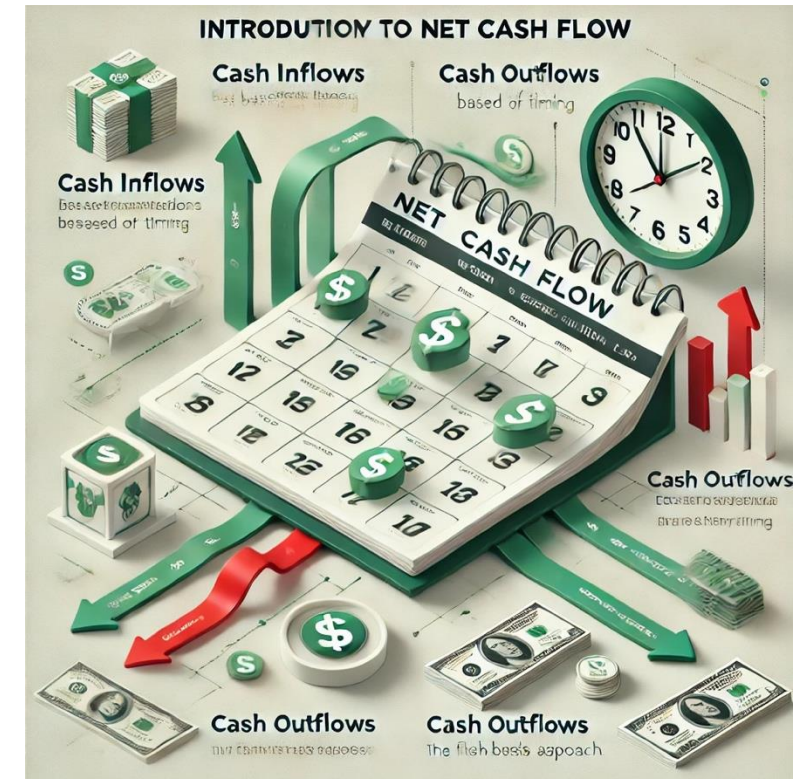
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Difference Between Net Income & Net Cash Flow

Introduction to Net Cash Flow

•Based On:

Calculated based on **actual cash transactions**, net cash flow records when cash is actually received or paid out, regardless of when the associated revenues are earned, or expenses are incurred. This cash basis approach helps assess the company's immediate cash position and its ability to meet short-term obligations.



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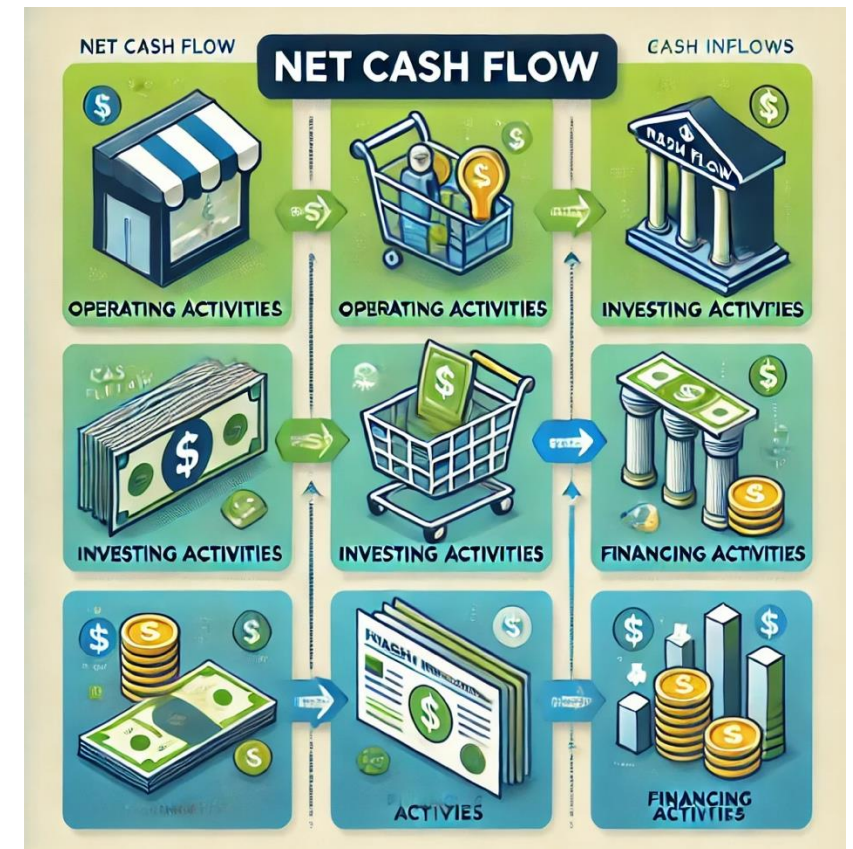
Difference Between Net Income & Net Cash Flow

•Components:

• **Cash Inflows:**

The total cash received by the company during the accounting period. These inflows can arise from various activities:

- **Operating Activities:** Cash received from customers for sales of goods or services.
- **Investing Activities:** Proceeds from the sale of assets or investments.
- **Financing Activities:** Funds obtained from issuing shares or borrowing.



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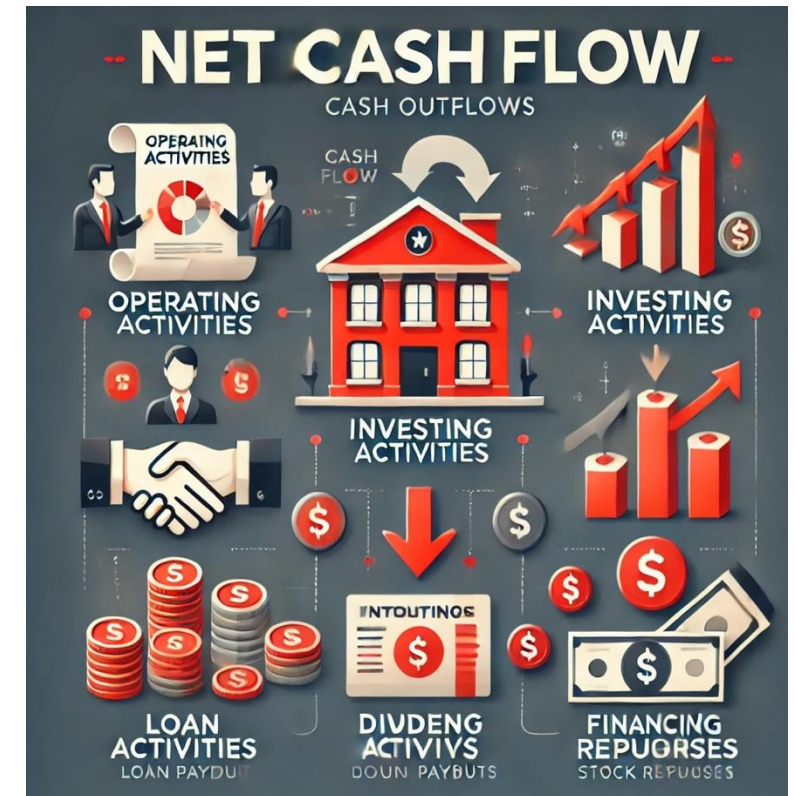
Difference Between Net Income & Net Cash Flow

•Components:

• Cash Outflows:

The total cash paid out by the company during the accounting period. These outflows include:

- **Operating Activities:** Payments to suppliers, employees, and for other operating expenses.
- **Investing Activities:** Cash spent on purchasing assets or making investments.
- **Financing Activities:** Repayment of debt, payment of dividends, or repurchasing shares.



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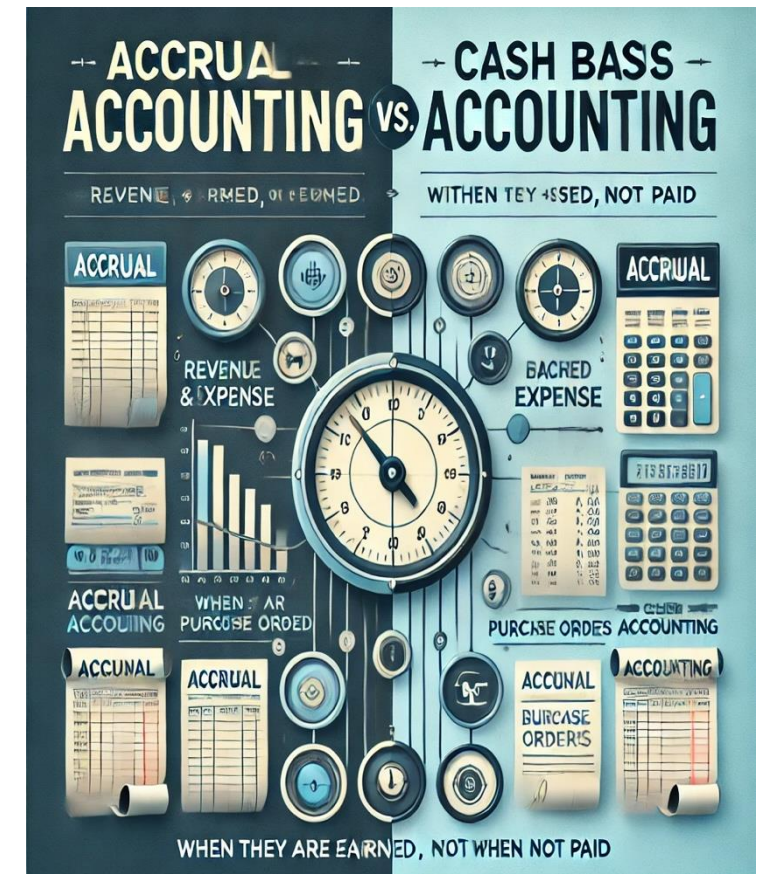
Difference Between Net Income & Net Cash Flow

Accrual vs. Cash Basis Accounting

• Accrual Accounting:

- **Records Revenues When Earned and Expenses When Incurred:**

Under accrual accounting, revenues are recognized when they are earned, and expenses are recognized when they are incurred, regardless of when the cash is actually received or paid. This method provides a more accurate representation of a company's financial position and performance over time.



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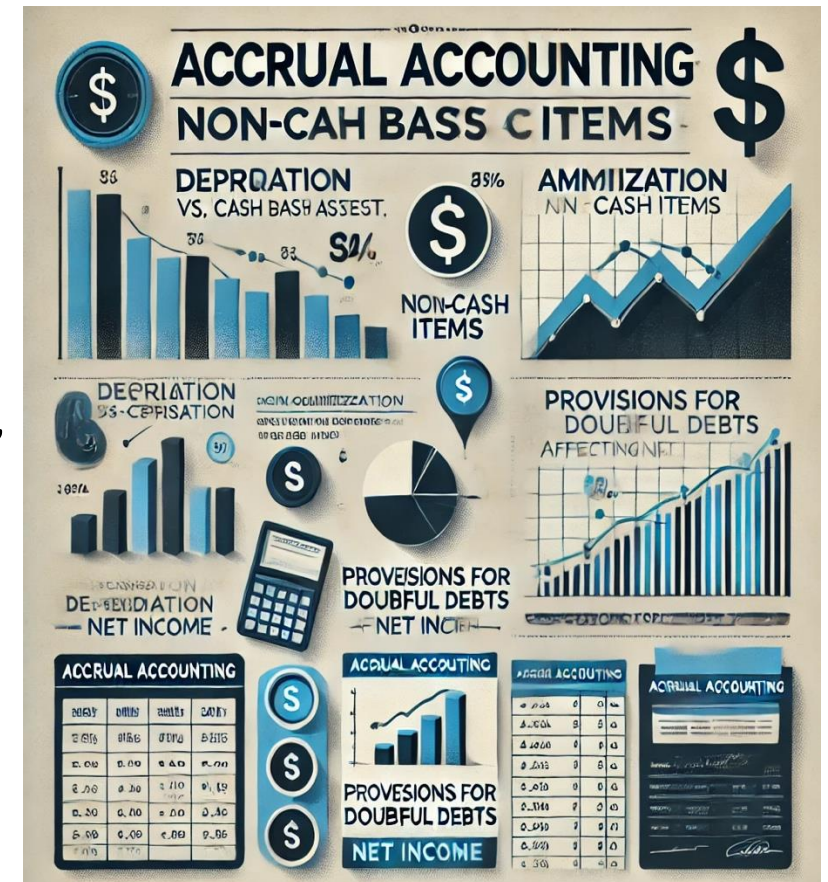
Difference Between Net Income & Net Cash Flow

Accrual vs. Cash Basis Accounting

• Accrual Accounting:

- **Includes Non-Cash Items:**

Accrual accounting accounts for non-cash transactions such as depreciation, amortization, and provisions for doubtful debts. These items affect net income but do not directly impact cash flow.



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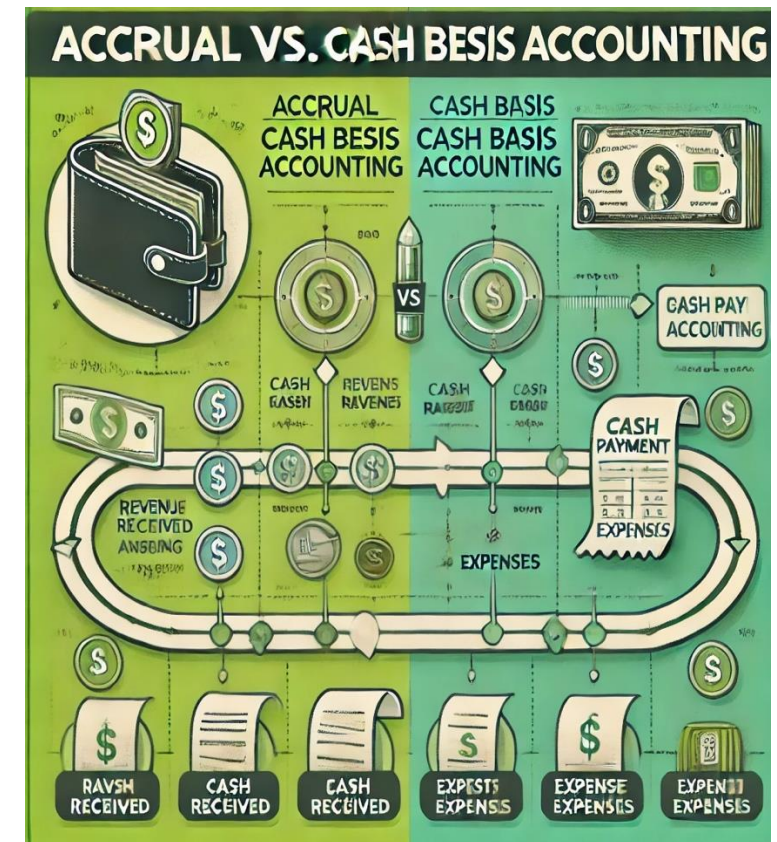
Difference Between Net Income & Net Cash Flow

Accrual vs. Cash Basis Accounting

•Cash Basis Accounting:

- **Records Revenues and Expenses When Cash Is Exchanged:**

In cash basis accounting, revenues are recognized only when cash is received, and expenses are recognized only when cash is paid. This method is simpler but may not provide a complete picture of a company's financial health.



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Difference Between Net Income & Net Cash Flow

Accrual vs. Cash Basis Accounting

•Cash Basis Accounting:

- **Reflects Actual Cash Position:**

Cash basis accounting focuses solely on cash transactions, making it easier to track the actual cash flow. However, it can lead to significant discrepancies between net income and net cash flow, especially in businesses with substantial credit transactions.



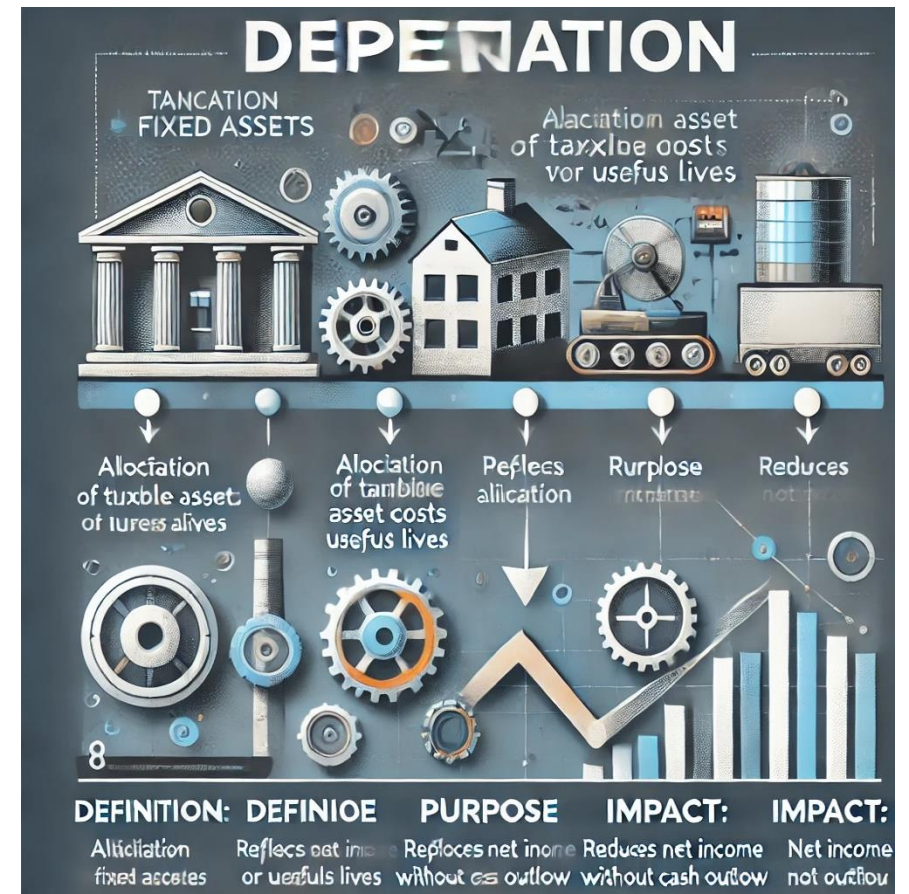
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Difference Between Net Income & Net Cash Flow

Depreciation and Amortization

• Depreciation:

- **Definition:** Allocation of the cost of tangible fixed assets (e.g., machinery, buildings) over their useful lives.
- **Purpose:** Reflects the wear and tear or obsolescence of physical assets.
- **Impact on Net Income:** Reduces net income as it is recorded as an expense but does not involve an actual cash outflow during the period.



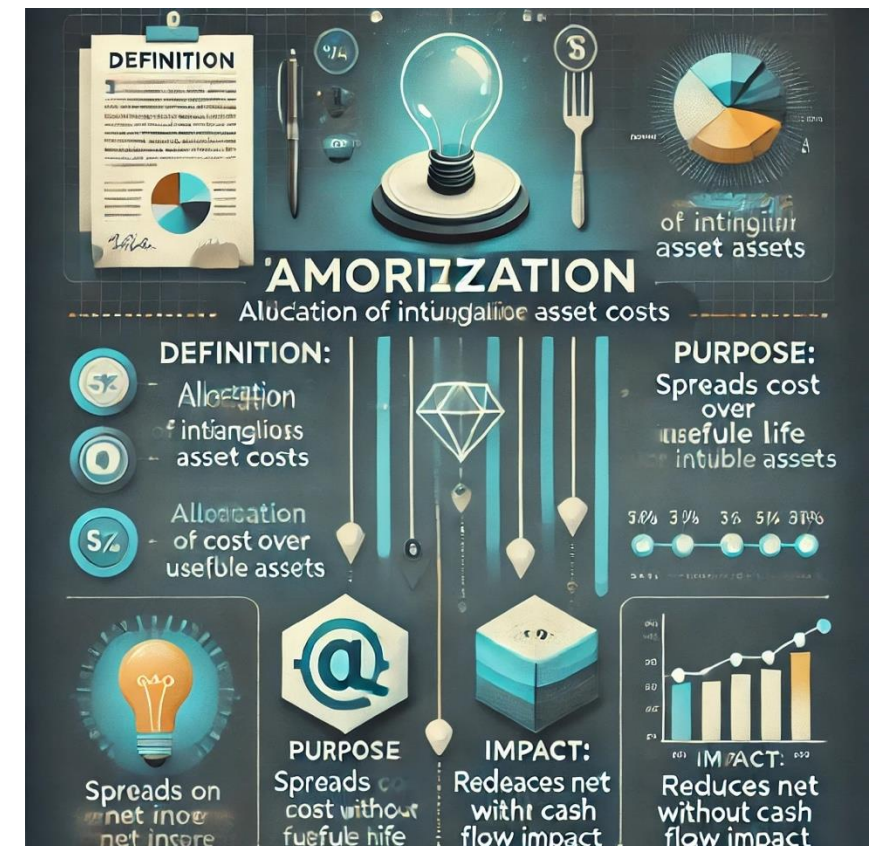
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Difference Between Net Income & Net Cash Flow

Depreciation and Amortization

• Amortization:

- **Definition:** Similar to depreciation but applies to intangible assets (e.g., patents, trademarks).
- **Purpose:** Spreads the cost of intangible assets over their expected useful lives.
- **Impact on Net Income:** Also reduces net income without affecting cash flow.



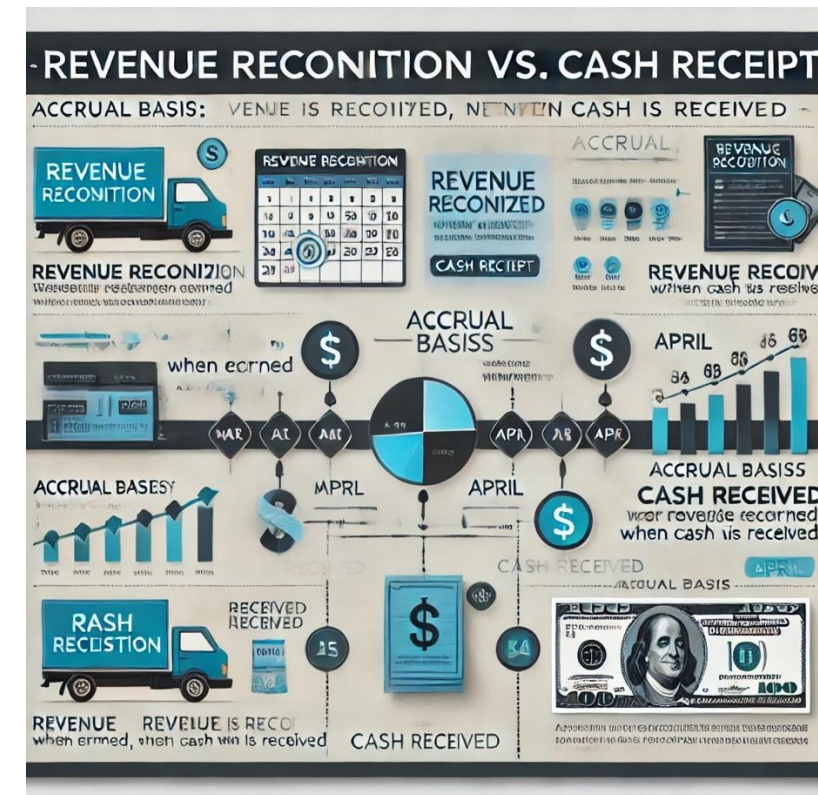
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Difference Between Net Income & Net Cash Flow

Revenue Recognition vs. Cash Receipt

Revenue Recognition:

- **Accrual Basis:** Revenue is recognized when it is earned, regardless of when cash is received.
- **Example:** A company delivers a product in March but receives payment in April. Under accrual accounting, the revenue is recorded in March.



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Difference Between Net Income & Net Cash Flow

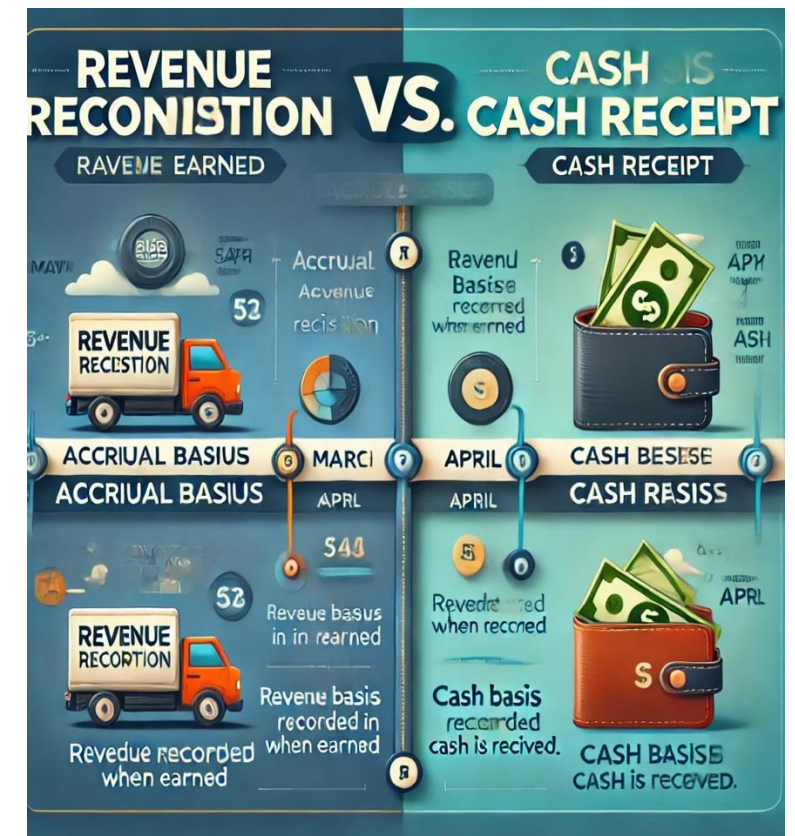
Revenue Recognition vs. Cash Receipt

Revenue Recognition:

- **Accrual Basis:** Revenue is recognized when it is earned, regardless of when cash is received.
- **Example:** A company delivers a product in March but receives payment in April. Under accrual accounting, the revenue is recorded in March.

•Cash Receipt:

- **Cash Basis:** Revenue is recognized only when cash is received.
- **Example:** Using the same scenario, the revenue is recorded in April when the cash is received.



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Difference Between Net Income & Net Cash Flow

Expense Recognition vs. Cash Payment

Expense Recognition:

- **Accrual Basis:** Expenses are recognized when they are incurred, not necessarily when cash is paid.
- **Example:** A company incurs utility expenses in May but pays the bill in June. The expense is recorded in May.

•Cash Payment:

- **Cash Basis:** Expenses are recognized only when cash is paid.
- **Example:** Expense is recorded in June when the payment is made.



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Difference Between Net Income & Net Cash Flow

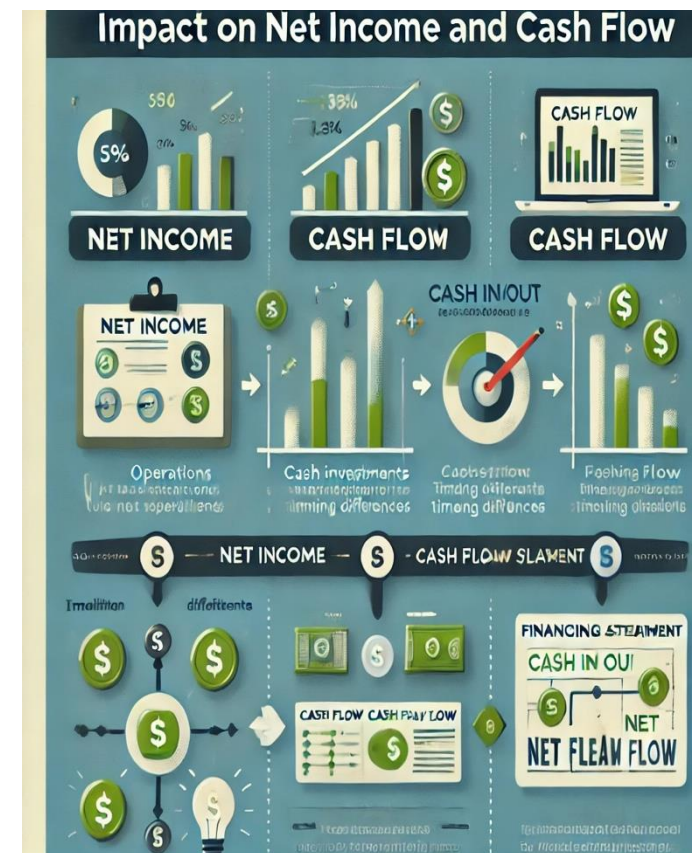
3. Impact on Net Income and Cash Flow

•Accrual Accounting:

- **Net Income:** Reflects revenues and expenses when earned/incurred, providing a measure of profitability.
- **Cash Flow:** May differ from net income due to timing differences, non-cash items, and changes in working capital.

•Cash Flow Statement:

- **Reconciliation:** Adjusts net income for timing differences to arrive at net cash flow.
- **Liquidity Insight:** Provides information on actual cash available for operations, investments, and financing.



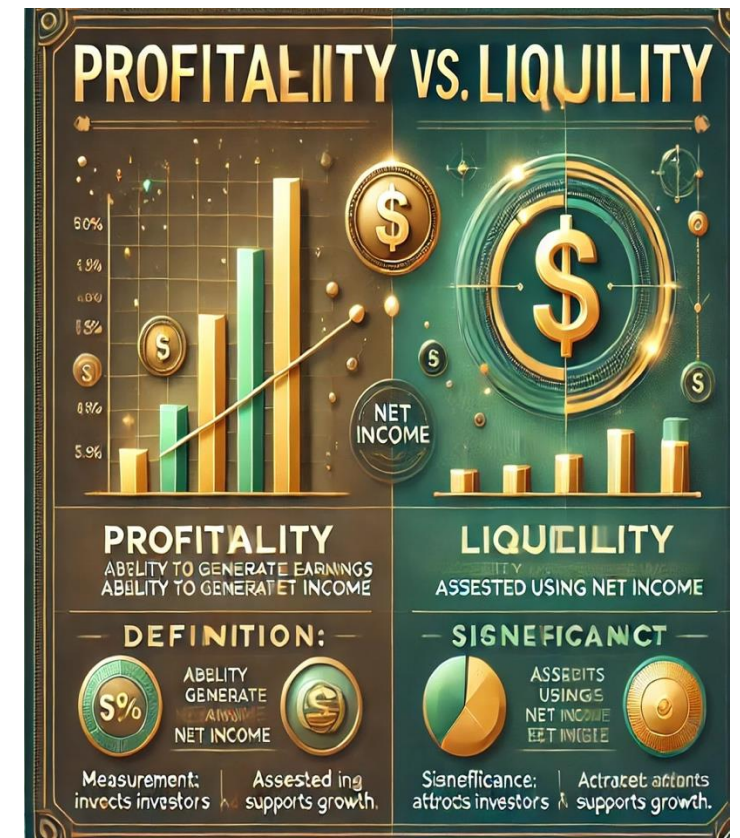
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Difference Between Net Income & Net Cash Flow

Profitability vs. Liquidity

•Profitability:

- **Definition:** Refers to a company's ability to generate earnings relative to its revenue, assets, or equity over time.
- **Measurement:** Primarily assessed using net income, which indicates the profit after all expenses and taxes.
- **Significance:** High profitability suggests efficient management and strong business performance, attracting investors and supporting growth initiatives.



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Difference Between Net Income & Net Cash Flow

Profitability vs. Liquidity

•Liquidity:

- **Definition:** Refers to a company's ability to meet its short-term obligations using its current assets.
- **Measurement:** Assessed through net cash flow, particularly operating cash flow, which shows the actual cash generated from core business activities.
- **Significance:** High liquidity ensures that a company can promptly settle its debts and operational expenses, preventing financial distress and maintaining operational continuity.



Usefulness of the Statement of Cash Flows

Purpose of the Cash Flow Statement

1. Company's Ability to Generate Cash

- **Cash Generation from Operations:**

- **Core Business Activities:** The statement highlights how effectively a company generates cash from its primary business operations, such as selling goods or providing services.
- **Sustainability:** Consistent cash generation indicates a sustainable business model capable of supporting ongoing operations without relying excessively on external financing.

- **Importance:**

- **Liquidity Assessment:** Determines whether the company has enough cash to meet its short-term obligations.
- **Profit Conversion:** Shows how much of the net income is being converted into actual cash, revealing the quality of earnings.

Usefulness of the Statement of Cash Flows

2. Financial Flexibility

•Capacity to Adapt:

- **Investment Opportunities:** Demonstrates the company's ability to invest in new projects, expand operations, or acquire assets without needing additional financing.
- **Debt Management:** Reflects the ability to repay existing debts, reducing reliance on external lenders and improving creditworthiness.

•Strategic Planning:

- **Capital Allocation:** Informs management on how to allocate resources efficiently between operations, investments, and financing.
- **Risk Mitigation:** Provides insights into the company's ability to withstand economic downturns or unexpected financial challenges by maintaining adequate cash reserves.

Usefulness of the Statement of Cash Flows

3. Complements: Income Statement and Balance Sheet

•Holistic Financial View:

- **Income Statement:** Focuses on profitability by detailing revenues and expenses, but it includes non-cash items like depreciation.
- **Balance Sheet:** Provides a snapshot of the company's financial position at a specific point in time, showing assets, liabilities, and equity.
- **Cash Flow Statement:** Bridges the gap between the Income Statement and Balance Sheet by showing how changes in these statements affect the company's cash position over a period.

•Reconciliation:

- **Linking Statements:** The Cash Flow Statement reconciles net income from the Income Statement with changes in the Balance Sheet, adjusting for non-cash transactions and changes in working capital.
- **Comprehensive Analysis:** Enables a more thorough analysis by illustrating how operational performance translates into cash movements, ensuring that stakeholders have a complete understanding of financial dynamics.

Usefulness of the Statement of Cash Flows

4. Assessing Liquidity and Solvency

liquidity: Ability to Meet Short-Term Obligations

- **Definition:**

- **Liquidity** refers to a company's capacity to fulfill its short-term financial commitments using its most liquid assets. It measures how quickly a company can convert its assets into cash to pay off its current liabilities.

- **Importance:**

- **Operational Continuity:** Ensures that the company can continue its operations without interruptions due to cash shortages.
- **Creditworthiness:** High liquidity ratios enhance the company's attractiveness to creditors and investors, indicating lower financial risk.

Usefulness of the Statement of Cash Flows

- **Cash Flow Statement Insights:**

- **Operating Cash Flow:**

- Positive cash flow from operating activities indicates that the company generates sufficient cash to cover its short-term liabilities.

- **Changes in Working Capital:**

- Adjustments in accounts receivable, accounts payable, and inventory levels affect liquidity and are reflected in the Cash Flow Statement.

2. Solvency: Ability to Meet Long-Term Obligations

- **Definition:**

- **Solvency** refers to a company's ability to meet its long-term debts and financial obligations. It assesses whether a company can sustain its operations into the foreseeable future without the risk of bankruptcy

Usefulness of the Statement of Cash Flows

2. Solvency: Ability to Meet Long-Term Obligations

•Importance:

- **Financial Stability:** Ensures that the company can honor its long-term commitments, maintain investor confidence, and support sustainable growth.
- **Risk Assessment:** Low solvency ratios may indicate potential difficulties in securing future financing or servicing existing debt, increasing financial risk.

•Cash Flow Statement Insights:

- **Financing Activities:**
Cash flows related to debt issuance or repayment are crucial indicators of a company's solvency.
- **Investing Activities:**
Significant investments in long-term assets may impact future cash flows and, consequently, solvency.

Chapter 08

Operating, Investing, and Financing Activities.



Income Statement Items
& Balance sheet current
items (Short term)



Generally Long-Term Asset Items and
investments
Keywords Purchase or sale of fixed
assets

.Make loans to others



Generally Long-Term Liability and
Equity Items
Keywords. (Issuance-Borrowing-
.payment of dividends)

Operating, Investing, and Financing Activities.

Format of the Statement of Cash Flows

Order of Presentation:

1. Operating activities.
2. Investing activities.
3. Financing activities.



Direct Method

Indirect Method

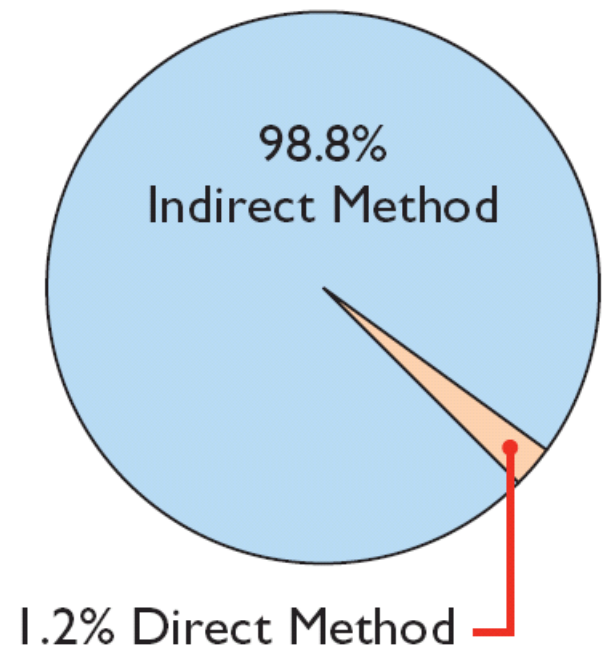
Preparing the Statement of Cash Flows

Indirect and Direct Methods

Companies favor the indirect method for two reasons:

1. It is easier and less costly to prepare, and
2. It focuses on the **differences** between **net income** and **net cash flow** from operating activities.

Usage of Methods



Operating, Investing, and Financing Activities.

Operating Activities (Indirect method)		
Net income	xx	
<u>Adjustments to reconcile net income to net cash flow</u>		
Depreciation & Amortization expense	x	Add
Loss on sale of fixed assets	x	Add
Gain on sale of fixed assets	(x)	Deduct
<u>Changes in current assets and current liabilities</u>		
increase in current assets (A/R-N/R-Inventory)	(x)	Deduct
Decrease in current assets.	x	Add
Increase in current liabilities (A/P-N/P- Bank Overdraft)	x	Add
Decrease in current liabilities	(x)	Deduct
Net cash flow provided by operating activity	xx	

Current Assets

Accounts Receivable

Note Receivable

Inventory

Prepaid Expense

**Indirect relationship****Current liabilities**

Accounts Payable

Note Payable

Expense payable

Unearned Revenue

**Direct relationship**

	2023	2024
Inventories	80000	60000

Decrease in inventory of \$ 20000

This decrease reflects an **increase (+)** in cash with \$20000 because this decrease comes from inventory sales

	2023	2024
Accounts payable	50000	10000

Decrease in A/P of \$ 40000

This decrease still the same
(Decrease) (-) in cash with \$40000
because this decrease comes from
payment of a part of liabilities

Summary of Conversion to Net Cash Provided by Operating Activities— Indirect Method

		Adjustment Required to Convert Net Income to Net Cash Provided by Operating Activities
Noncash Charges	Depreciation expense	Add
	Patent amortization expense	Add
	Depletion expense	Add
Gains and Losses	Loss on sale of plant asset	Add
	Gain on sale of plant asset	Deduct
Changes in Current Assets and Current Liabilities	Increase in current asset account	Deduct
	Decrease in current asset account	Add
	Increase in current liability account	Add
	Decrease in current liability account	Deduct

Mohamed company reported net income of \$ 50000 for the year. During the year accounts receivable increased by 7000, accounts payable decreases by 3000 and Depreciation Expense of 5000 was recorded, **Net cash provided by operating Activities for the year is...**

A- \$45000

B- \$65000

C- \$49000

D- \$50000

Cash flow From operating Activities:

Net income

50000

Adjustment to reconcile Net income to Net Cash

Increase in accounts receivable

(7000)

Decrease in Accounts Payable

(3000)

Depreciation Expense

5000

Net Cash flow provided by operating Activities.

45000

The correct Answer is (A)

A company had Net income of \$ 180000. depreciation exp. is \$26000. During The year Accounts receivable and inventory increases \$ 15000 and 40000 Respectively. Prepaid expense . and Accounts payable decreased \$2000 \$ 4000 respectively. There was also a loss on the sale of equipment of \$3000 .

How much cash was provided by operating Activities .

- A) \$146000 B) 152000 C) \$22600 D) \$23800

Cash flow From operating Activities:

Net income

180000

Adjustment to reconcile Net income to Net Cash

Depreciation Expense

26000

Increase in accounts receivable

(15000)

Increase in inventory

(40000)

Decrease in Prepaid expenses

2000

Decrease in accounts payable

(4000)

Loss on sale of equipment

3000

Net Cash flow provided by operating Activities.

152000

The correct Answer is (B)

Classification of Cash Flows

Investing activities

Cash inflows:

From **sale** of property, plant, and equipment(Fixed Assets).

From **sale** of investments.

From collection of principal on loans to other entities.

Cash outflows:

To **purchase** property, plant, and equipment (Fixed Assets).

To **purchase** investments or equity securities.

To **make loans** to other entities.

- Gain on sale of PPE (Property, Plant, and Equipment): \$7,000
- Purchases of PPE (Property, Plant, and Equipment) during the year totaled \$120,000
- Proceeds from sale of PPE (receipts from sale): \$92,000
- Collection of loans during the year: \$5,000
- Purchase cost of investments: \$45,000
- New loans made to others: \$35,000

Requirement: Compute cash flow from investing activities.

Cash flow From investing Activities:

Purchases of PPE	(120000)
Proceeds from sale of PPE	92000
Purchase Cost of Investments	(45000)
Collection of loans during the year	5000
New Loans Made to other	(35000)
Net cash flow from investing Activities	(103000)

Classification of Cash Flows

Financing activities

Cash inflows:

- From **sale** (Issuance) of common stock.
- From **issuance** of long-term debt (bonds and notes).
- From **sale** of treasury stocks.

Cash outflows:

- To pay dividends to stockholders.
- To redeem (Pay) long-term debt .
- To reacquire (Purchase) treasury stock.

following information concerning Maldives Company:

- Issuing share capital: \$20,000
- Net income: \$40,000
- Increase in account payable: \$13,000
- Depreciation expense: \$18,000
- Payment of dividends: \$1,000
- Increase in account receivable: \$7,000
- Collection of long-term notes receivable: \$5,000
- Loss on sale of land: \$10,000
- Acquisition of equipment: \$40,000
- Payment of long-term debt: \$13,000
- Proceeds from sale of land: \$32,000
- Decrease in inventories: \$5,000

Questions:

1. Using the indirect method, net cash provided by **operating activities** is equal to:

1. a. \$85,000
2. b. \$66,000
3. c. **\$79,000**
4. d. \$52,000

Cash flow From <u>operating</u> Activities:	
Net income	40,000
Depreciation expense	18,000
Loss on sale of land	10,000
Increase in accounts payable	13000
Increase in Accounts receivable	(7000)
Decrease in Inventories	5000
Net cash flow from operating Activities	79000

Questions:

1. Net cash provided by (used for) **investing activities** is equal to:

1. a. \$(2,000)
2. b. **\$(3,000)**
3. c. \$2,000
4. d. \$3,000

Cash flow From investing Activities:	
Collection of long-term notes receivable	5000
Acquisition of Equipment	(40,000)
Proceeds from sale of land	32000
Net cash flow from investing Activities	(3000)

Questions:

1. Net cash provided by (used for) **financing activities** is equal to:

1. a. \$(7,000)
2. b. \$(18,000)
3. c. \$7,000
4. d. **\$(6,000)**

Cash flow From Financing Activities:	
Issuance of shares capital	20,000
Payment of dividends	(1000)
Payment of long-term debt	(13000)
Net cash flow from Financing Activities	6000

1. All the following activities are presented on the statement of cash flows except:

- a. Financing activities.
- b. Operating activities.
- c. Investing activities.
- d. **Advertising activities.**

2. Activities that create long-term liabilities are usually:

- a. Investing activities.
- b. **Financing activities.**
- c. Advertising activities.
- d. Operating activities.

3. Activities impacting long-term assets:

- a. **Investing activities.**
- b. Financing activities.
- c. Marketing activities.
- d. Operating activities.

4. Issuing bonds payable is reported on the statement of cash flows under:

- a. Investing activities.
- b. Operating activities.
- c. **Financing activities.**
- d. Noncash activity.

5. Selling equipment is reported on the statement of cash flows under:

- a. Operating activities.
- b. **Investing activities.**
- c. Financing activities.
- d. Noncash investing and financing activities.

6. To compute the cash flow provided by operating activities using the indirect method, an increase in prepaid insurance should be:

- a. Added to increases in current assets.
- b. Added to net income.
- c. Included in payments to suppliers.
- d. **Subtracted from net income.**

7. Paying cash dividends is:

- a. Operating activities.
- b. Investing activities.
- c. **Financing activities.**
- d. Noncash investing and financing activities.

8. To compute the cash flow provided/used by operating activities using the indirect method, a gain on the sale of PPE would be:

- a. Reported in the investing activities section.
- b. Ignored, as the gain did not generate any cash.
- c. **Deducted from net income in the operating activities section.**
- d. Added to net income in the operating activities section.

9. To compute the cash flow provided/used by operating activities using the indirect method, an increase in accounts payable should be:

- a. **Added to net income in the operating activities section.**
- b. Deducted from net income in the operating activities section.
- c. Reported in the investing activities section.
- d. Reported in the financing activities section.

10. Which is an example of a cash flow from an investing activity?

- a. Receipt of cash from the issuance of bonds payable.
- b. Payment of cash to repurchase outstanding capital stock.
- c. **Receipt of cash from the sale of equipment.**
- d. Payment of cash to suppliers for inventory.

Using Cash Flows to Evaluate a Company

Free Cash Flow

$$= \text{Cash Provided by Operating Activities} - \text{Capital Expenditures} - \text{Cash Dividends}$$

Free cash flow describes the cash remaining from operations after adjustment for capital expenditures and dividends.



Thank You