

Chapter 1 part two

Introduction to Financial Statement

- 2.1 The Accounting Equation
- 2.2 The Balance Sheet
- 2.3 The Income Statement
- 2.4 Cash Flow Statement

1

The Financial Statements

Learning Objective

3. **Apply** the accounting equation to business organizations

2.1 The Accounting Equation

<https://www.youtube.com/watch?v=56xscQ4viWE>



Assets

=

Liabilities

+

**Owner's
Equity**

The building blocks of the **basic accounting equation**.

Assets (what it owns)

Liabilities (what it owes to others)

Equity (the difference between assets and liabilities or what it owes to the owners)



Assets

=

Liabilities

+

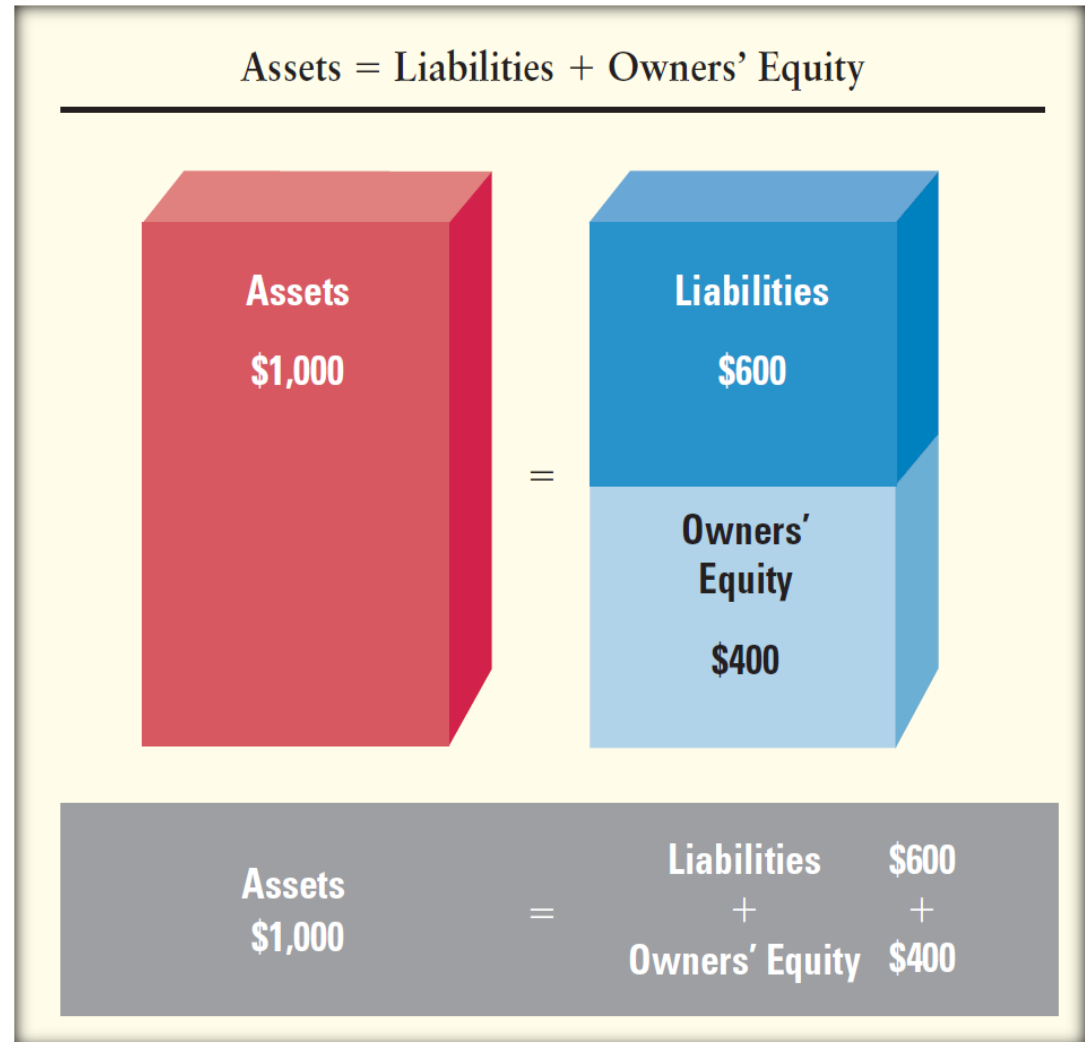
**Owner's
Equity**

APPLY THE ACCOUNTING EQUATION (會計等式) TO BUSINESS ORGANIZATIONS

For Example:

A sole proprietorship 獨資公司 business owes 欠債 **\$600** and you, the owner personally invested 投資 **\$400** of your own cash into the business. The assets owned by the business will then be calculated as:
\$600 (what it owes) + \$400 (what you invested) = \$1000 (what the company has in assets)

In a sole-proprietorship, equity 權益 is actually Owner's Equity 股東權益. If the business in question is a corporation 股份有限公司, equity will be held by stockholders 股東, which uses stockholder's equity but the basic equation is the same.



What are we accounting for?

- Assets 資產 : Economic resources 經濟資源 controlled by the entity 實體 which are expected to produce future economic benefits to the entity, e.g. cash 現金, equipment 設備, inventory 存貨/庫存

What are we accounting for?



Claims on assets come from two sources:

Liabilities 負債 are “outsider claims.” They are debts that are payable 應付 to outsiders 外部, called creditors 債權人, for example, a creditor who has loaned money to a company, has a claim - a legal right - to a part of that company’s assets until the company repays the debt.

Owner’s equity 股東權益 (also called capital 資本, or stockholders’ equity for a corporation) represents the “insider 內部 claims” of a business. Equity means ownership, so the company’s stockholder’s equity is the stockholders’ interest in the asset of the corporation.

APPLY THE ACCOUNTING EQUATION TO BUSINESS ORGANIZATIONS

Owners' Equity

A diagram illustrating the accounting equation. It consists of three blue rounded rectangular boxes arranged horizontally. The first box on the left contains the word "Assets" in white. To its right is a minus sign ("−"). The second box in the middle contains the word "Liabilities" in white. To its right is an equals sign ("="). The third box on the right contains the words "Owner's Equity" in white, arranged in two lines.

$$\text{Assets} - \text{Liabilities} = \text{Owner's Equity}$$

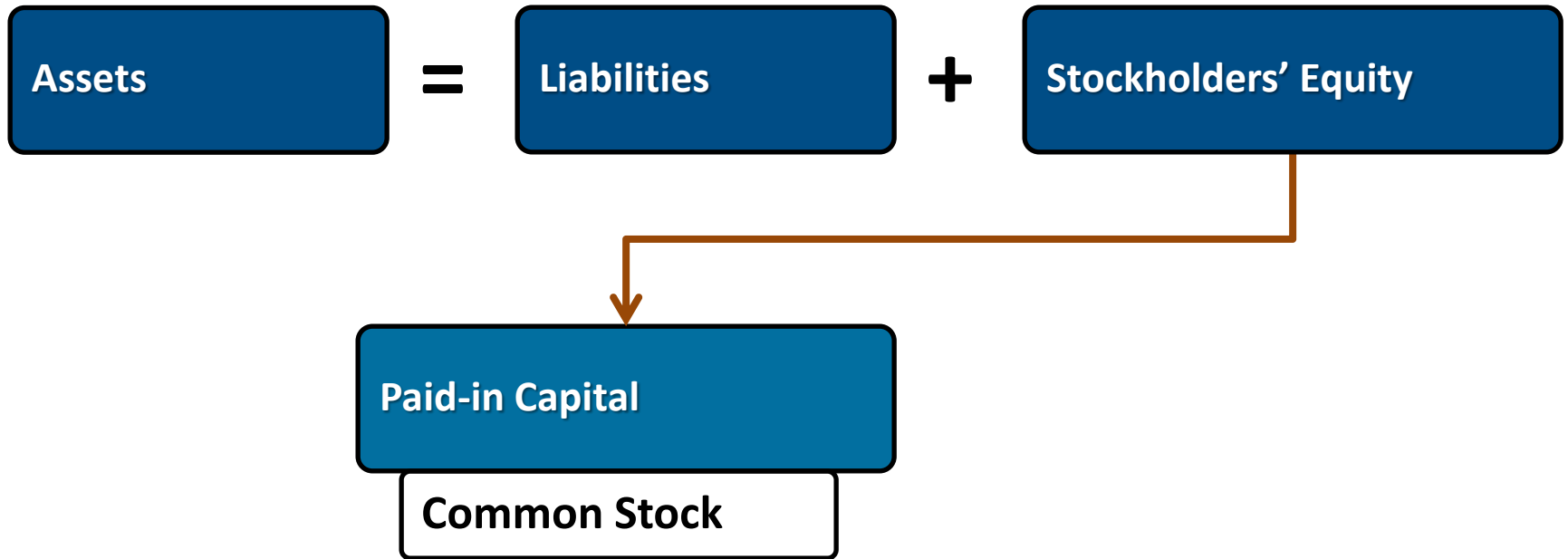
The accounting equation can be written as

- ◆ Assets = Liabilities + Stockholders' Equity
- ◆ Assets = Liabilities + Paid-in Capital + Retained Earnings

Illustration 2.1

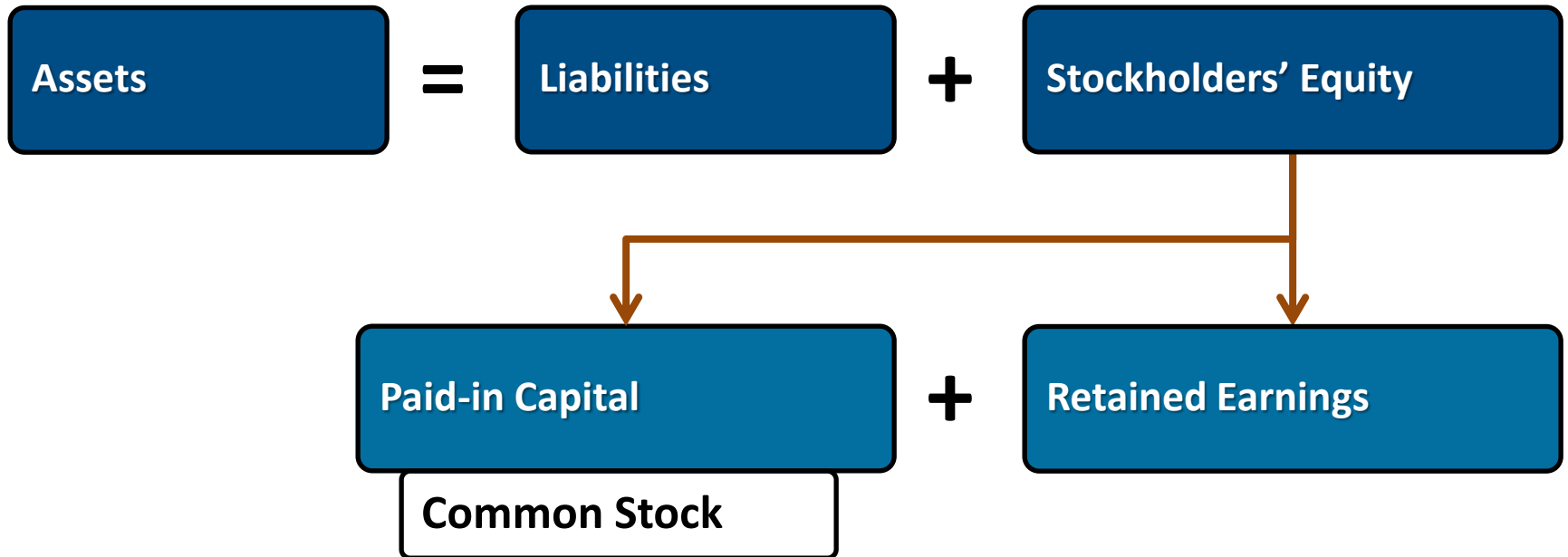
1. If the assets of a business are \$360,000 and the liabilities are \$120,000, how much is the owners' equity?
2. If the owners' equity in a business is \$180,000 and the liabilities are \$100,000, how much are the assets?

Owners' Equity



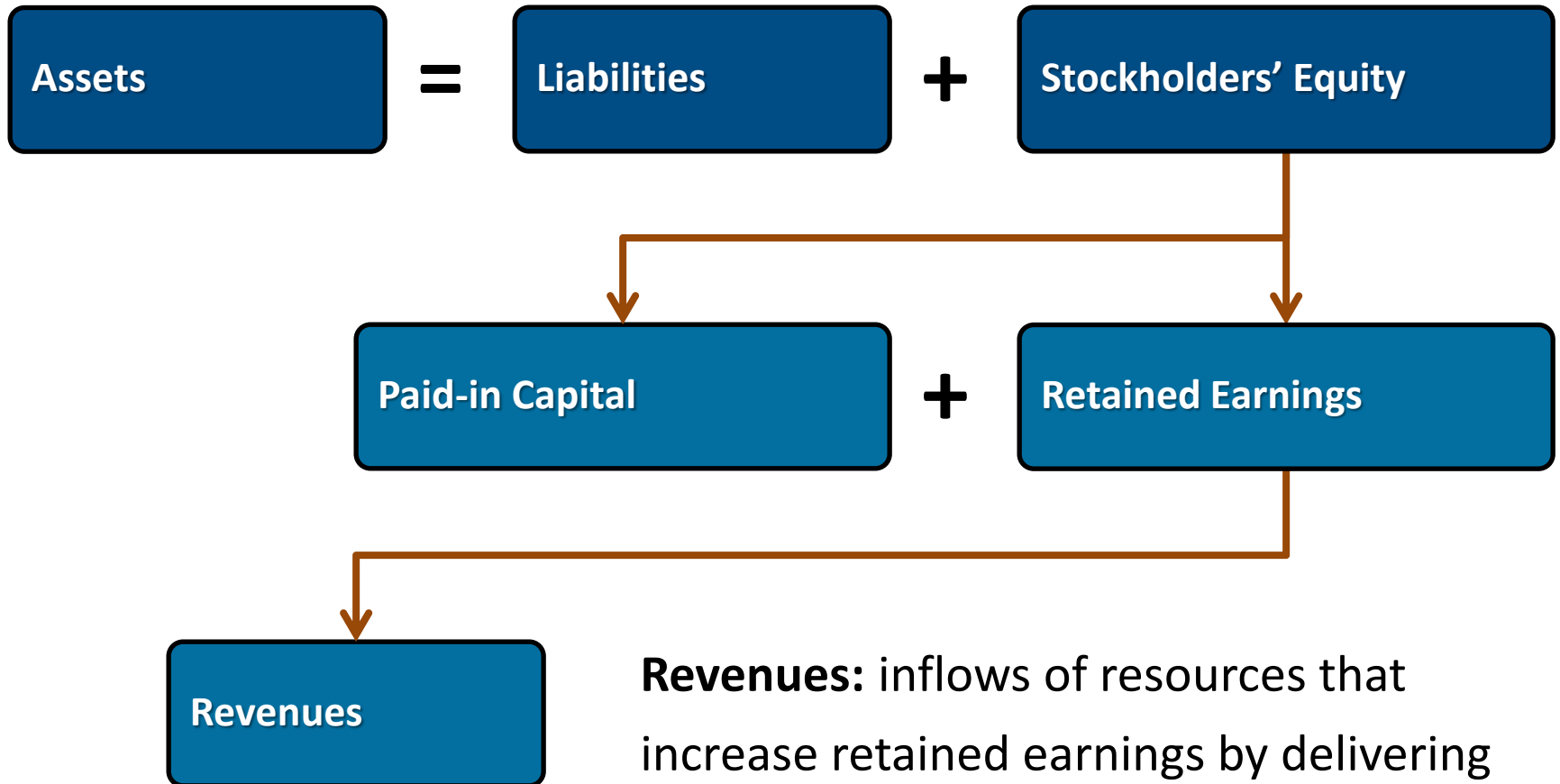
Paid-in capital: amount stockholders have invested in the corporation

Owners' Equity



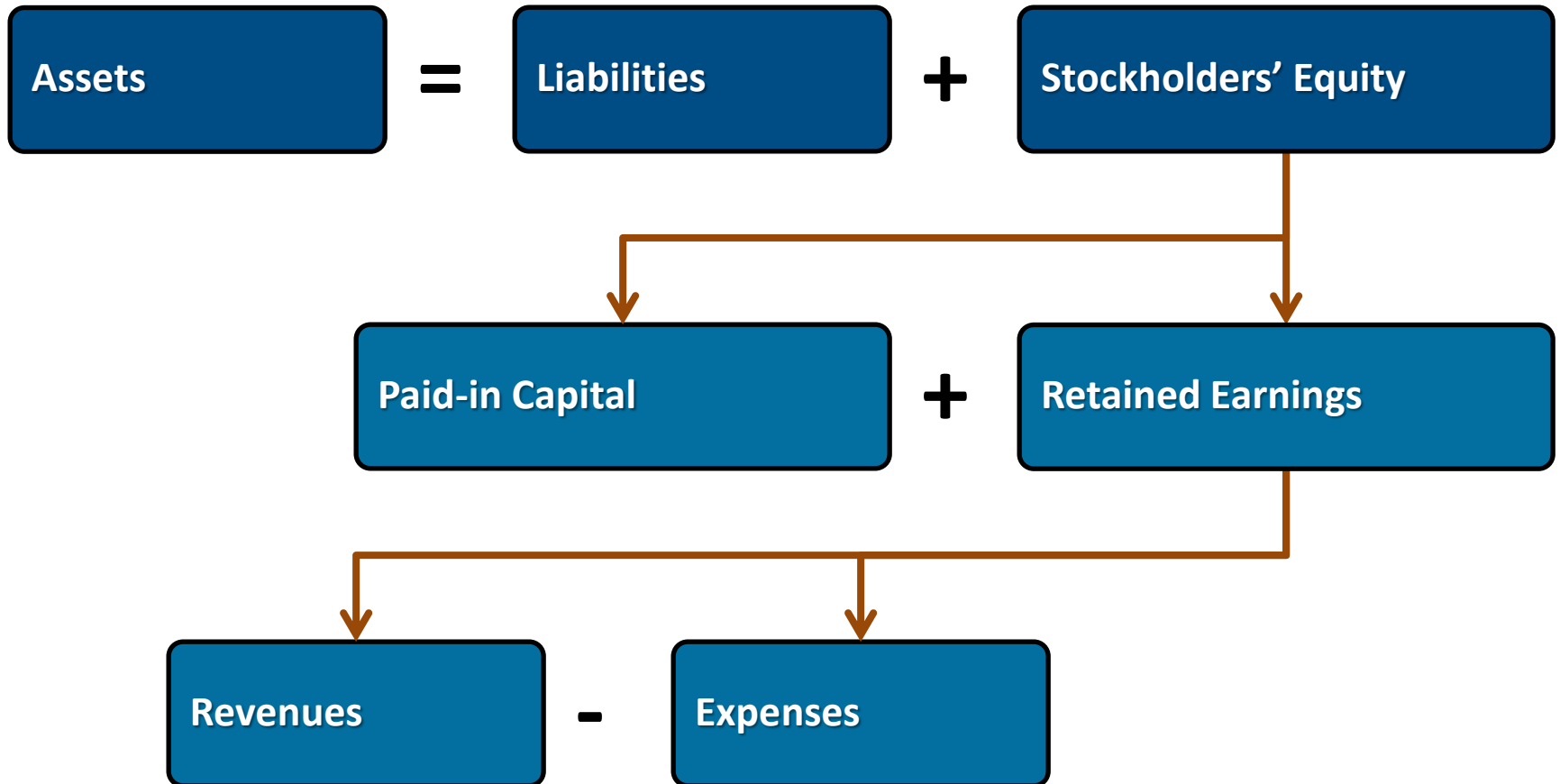
Retained earnings: amount earned and kept for use in the business

Owners' Equity



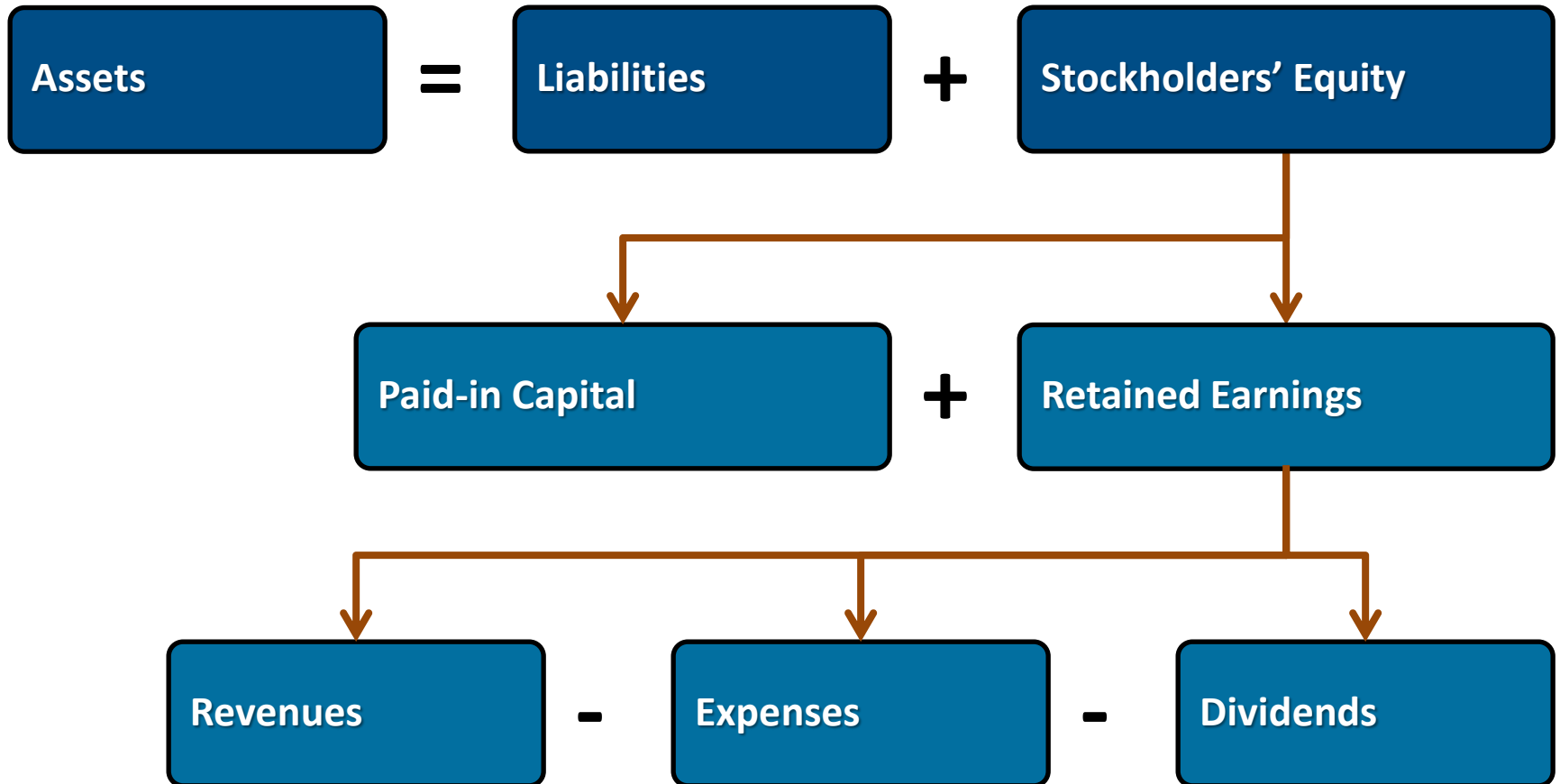
Revenues: inflows of resources that increase retained earnings by delivering goods or services to customers

Owners' Equity



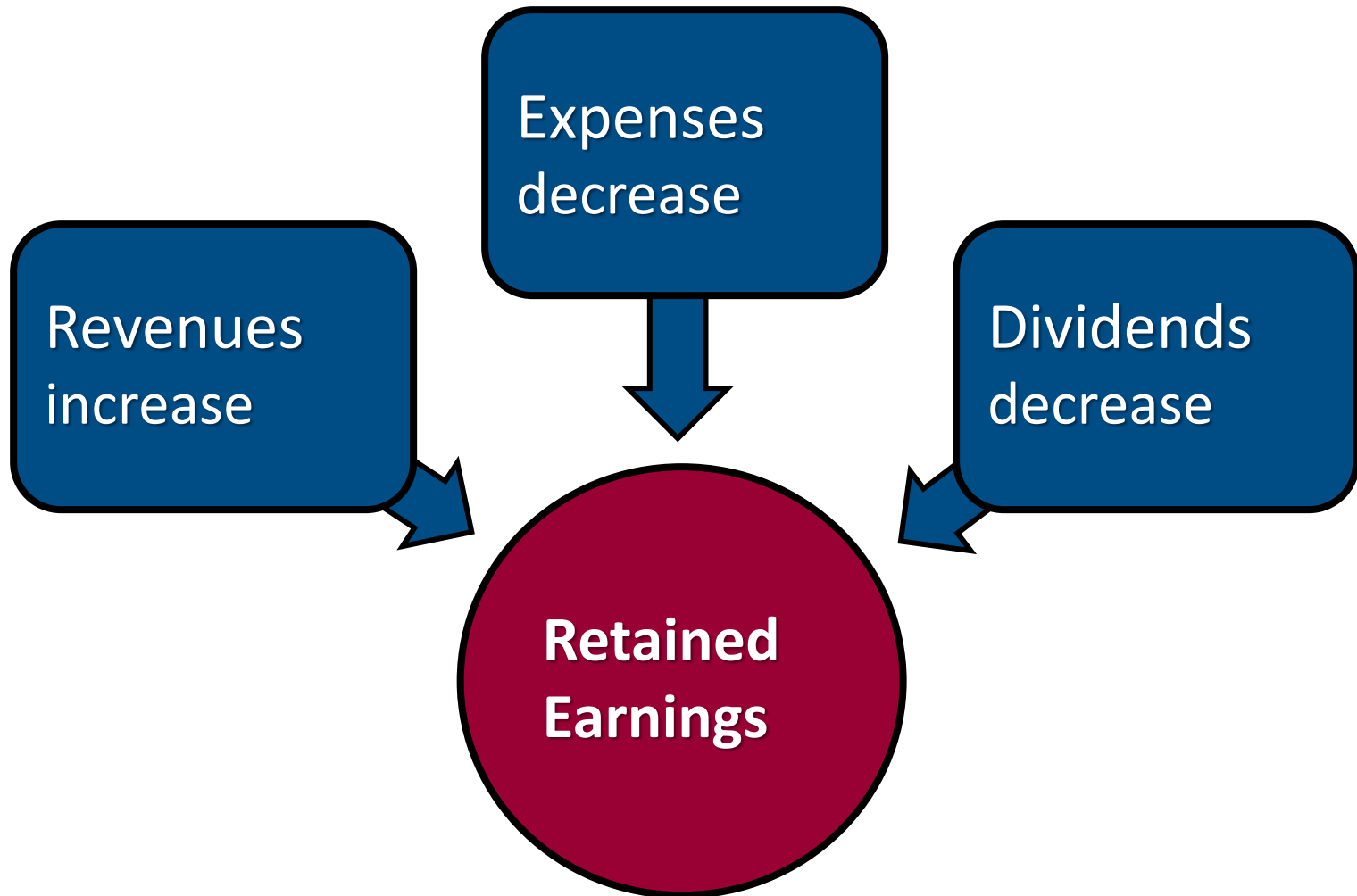
Expenses: resource outflows that decrease retained earnings due to operations

Owners' Equity



Dividends: distributions to stockholders (usually cash) generated by net income

Owners' Equity



Let's review

What are we accounting for?

- ✓ Income / Revenues : increase in economic benefits during an accounting period that result in an increase in equity, e.g. sales revenue
- ✓ Expense: decrease in economic benefits during an accounting period that result in a decrease in equity, e.g. salaries and rent expense
- ✓ **Dividends:** distributions to stockholders (usually cash) generated by net income

Owners' Equity

Exhibit 1-5 | The Components of Retained Earnings

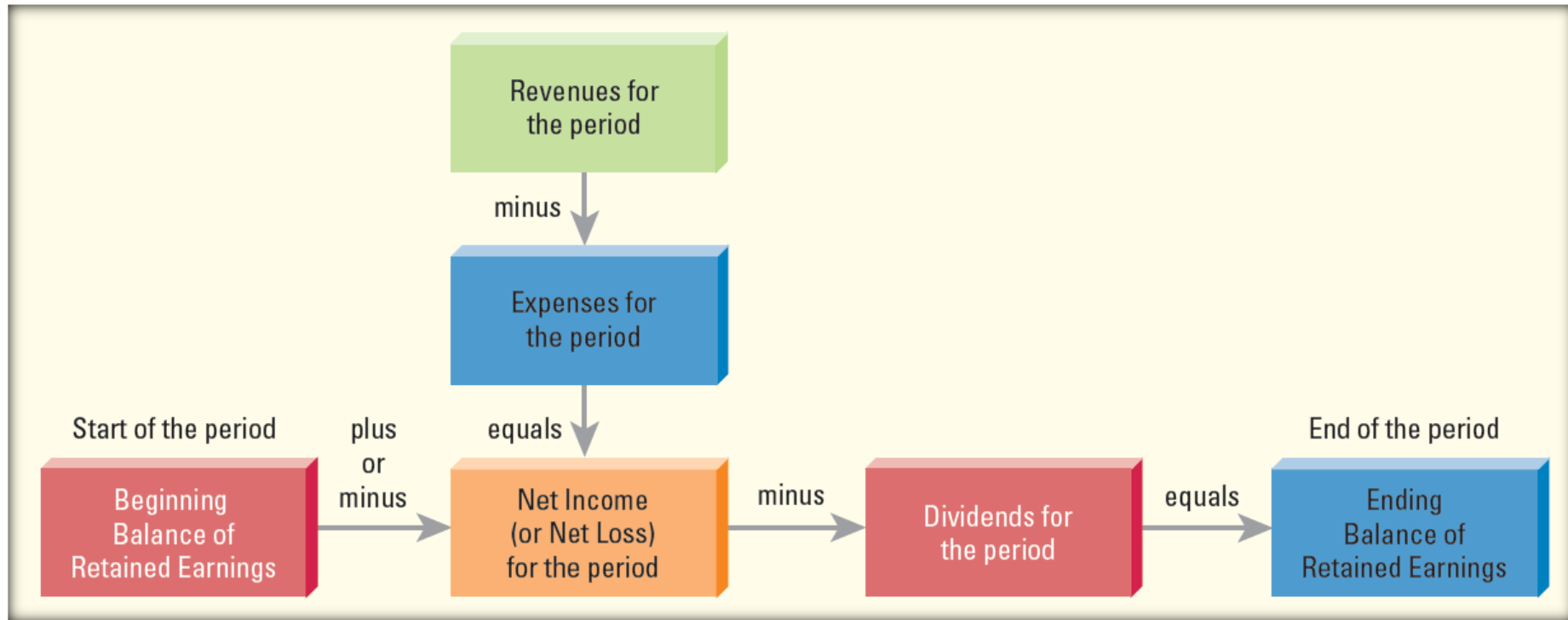


Illustration 2.2

Blue Diamond Corporation has current assets of **\$360** million; property, plant, and equipment of **\$600** million; and other assets totaling **\$220** million. Current liabilities are **\$210** million and long-term liabilities total **\$560** million.

Requirements

1. Use these data to write Blue Diamond Corporation's accounting equation.
2. How much in resources does Blue Diamond Corporation have to work with?
3. How much does Blue Diamond Corporation owe creditors?
4. How much of the company's assets do the Blue Diamond Corporation stockholders actually own?

Assets

=

Liabilities

+

Stockholders' Equity

1

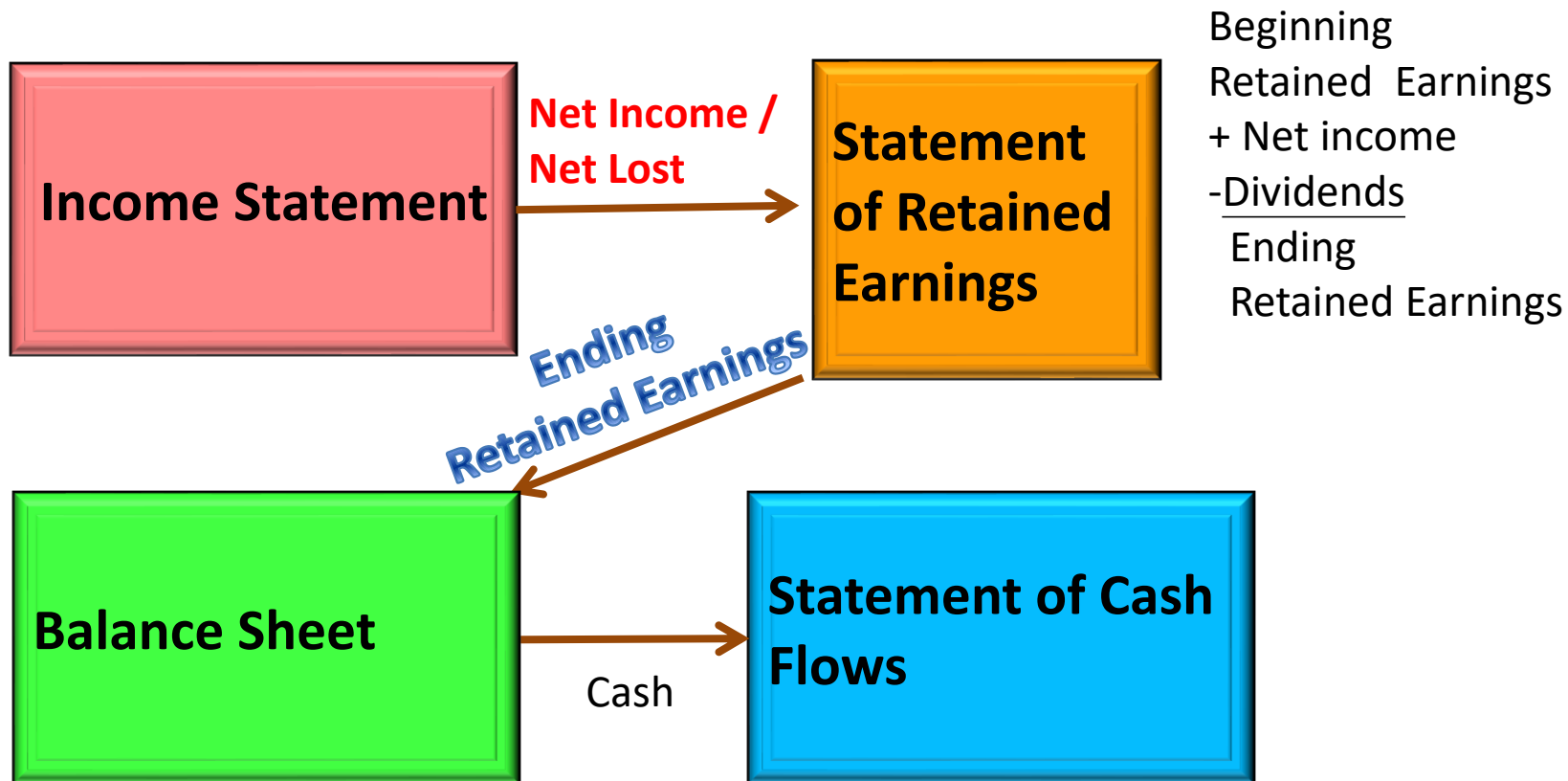
The Financial Statements

Learning Objective

4. **Evaluate** business operations through the financial statements

EVALUATE BUSINESS OPERATIONS THROUGH THE FINANCIAL STATEMENTS

Data flow from one financial statement to the next



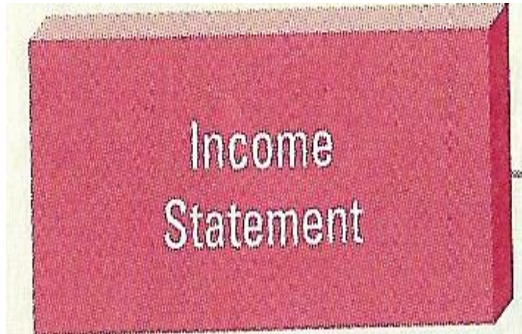
The Income Statement Measures Operating Performance

Income Statement

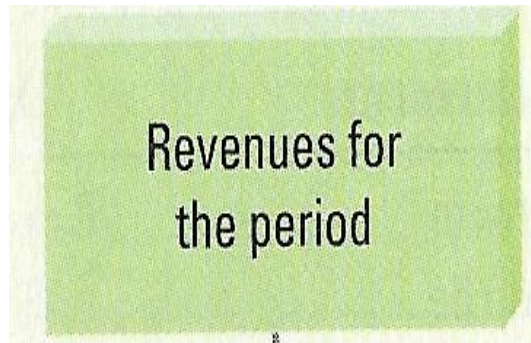
- ◆ Also called **statement of operations**
- ◆ Reports
 - ▶ Revenues and gains
 - ▶ Expenses and losses
 - ▶ Bottom line of net income or net loss *for the period*

Net Income = Total Revenues and Gains - Total Expenses and Losses

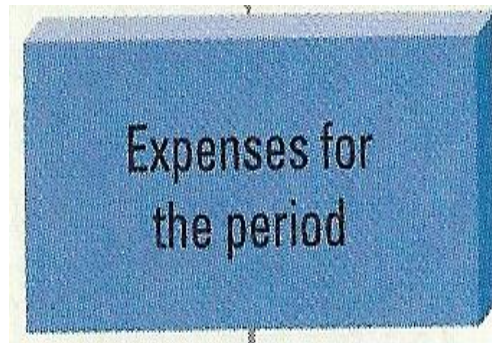
Income statement - Measures Operation Performance



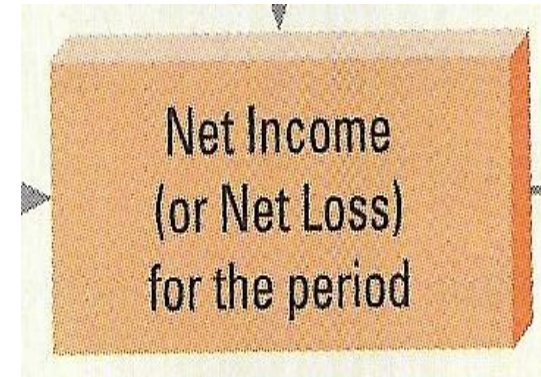
The income statement or statement of operations, reports revenues and expenses for the period



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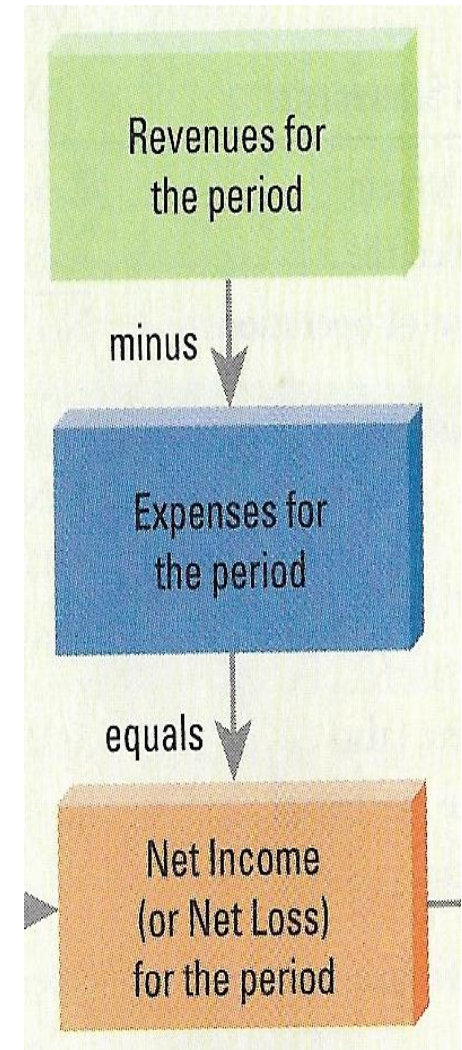
=



Example Corporation
Income Statement
For the year ended December 31, 2019

Sales (all on credit)	\$500,000
Cost of goods sold	380,000
Gross profit	<u>120,000</u>
Operating expenses	
Selling expenses	35,000
Administrative expenses	45,000
Total operating expenses	<u>80,000</u>
Operating income	40,000
Interest expense	<u>12,000</u>
Income before taxes	28,000
Income tax expense	<u>5,000</u>
Net income after taxes	<u><u>\$ 23,000</u></u>

We measure net income as follows:



Example Corporation
Income Statement
For the year ended December 31, 2019

Sales (all on credit)	\$500,000
Cost of goods sold	380,000
Gross profit	<u>120,000</u>
Operating expenses	
Selling expenses	35,000
Administrative expenses	45,000
Total operating expenses	<u>80,000</u>
Operating income	40,000
Interest expense	<u>12,000</u>
Income before taxes	28,000
Income tax expense	<u>5,000</u>
Net income after taxes	<u><u>\$ 23,000</u></u>

Revenues:

1. Interest / interest expense
2. Other income

Expenses:

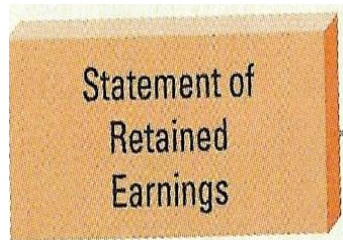
1. Cost of revenue / cost of goods sold
2. reserch Development
3. Selling General and administrative

The Statement of Retained Earnings Shows What a Company Did with Its Net Income

Retained Earnings

- ◆ Portion of net income reinvested into the business
- ◆ Net income increases retained earnings
- ◆ Net losses and dividends decrease retained earnings
- ◆ Net income (net loss) flows from the income statement to the statement of retained earnings

The Financial Statement – The statement of Retained Earning



- shows what a company did with its net income
- which is that portion of net income the company has kept over a period of years.
- Net income increases retained earnings, and net losses and dividends decrease retained earning.

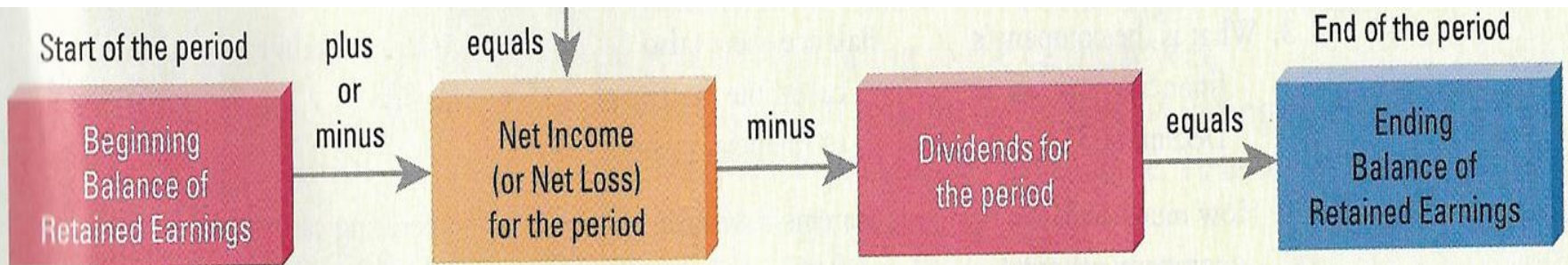


Illustration 2.3

During the year , Aynsley, Inc., has \$280,000 in revenues, \$145,000 in expenses, and \$6,000 in dividend declarations and payments.

**What is the net income of Aynsley, Inc., for the year is?
Stockholders' equity changed by ?**

Revenues - expenses = net income

net income - dividend = change in Stockholders' equity

The Balance Sheet Measures Financial Position

Balance Sheet

- ◆ Also called **statement of financial position**
- ◆ Reports three items:
 - ▶ Assets
 - ▶ Liabilities
 - ▶ Stockholders' equity
- ◆ Dated at the *moment in time* when the accounting period ends

Example Company
Balance Sheet
December 31, 2019

ASSETS

Current assets	
Cash	\$ 2,100
Petty cash	100
Temporary investments	10,000
Accounts receivable - net	40,500
Inventory	31,000
Supplies	3,800
Prepaid insurance	1,500
Total current assets	<u>89,000</u>
Investments	<u>36,000</u>
Property, plant & equipment	
Land	5,500
Land improvements	6,500
Buildings	180,000
Equipment	201,000
Less: accum depreciation	(56,000)
Prop, plant & equip - net	<u>337,000</u>
Intangible assets	
Goodwill	105,000
Trade names	200,000
Total intangible assets	<u>305,000</u>
Other assets	<u>3,000</u>
Total assets	<u>\$ 770,000</u>

LIABILITIES

Current liabilities	
Notes payable	\$ 5,000
Accounts payable	35,900
Wages payable	8,500
Interest payable	2,900
Taxes payable	6,100
Warranty liability	1,100
Unearned revenues	1,500
Total current liabilities	<u>61,000</u>
Long-term liabilities	
Notes payable	20,000
Bonds payable	400,000
Total long-term liabilities	<u>420,000</u>
Total liabilities	<u>481,000</u>

STOCKHOLDERS' EQUITY

Common stock	110,000
Retained earnings	229,000
Less: Treasury stock	(50,000)
Total stockholders' equity	<u>289,000</u>

Total liabilities & stockholders' equity	<u>\$ 770,000</u>
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Assets on the Balance Sheet

Current Assets

- ◆ Expected to be converted to cash, sold, or consumed during the next 12 months or within the business's operating cycle if longer than a year
- ◆ Includes
 - ▶ Cash and cash equivalents →
 - ▶ Short-term investments
 - ▶ Accounts and notes receivable
 - ▶ Inventory
 - ▶ Prepaid expenses

Cash is the liquid asset that's the medium of exchange

Cash equivalents include money-market accounts or other financial instruments that are easily convertible to cash

Assets on the Balance Sheet

Current Assets

- ◆ Expected to be converted to cash, sold, or consumed during the next 12 months or within the business's operating cycle if longer than a year
- ◆ Includes
 - ▶ Cash and cash equivalents
 - ▶ Short-term investments
 - ▶ Accounts and notes receivable
 - ▶ Inventory
 - ▶ Prepaid expenses



Includes stocks and bonds of other companies that the company intends to sell within the next year

Assets on the Balance Sheet

Current Assets

- ◆ Expected to be converted to cash, sold, or consumed during the next 12 months or within the business's operating cycle if longer than a year
- ◆ Includes
 - ▶ Cash and cash equivalents
 - ▶ Short-term investments
 - ▶ Accounts receivable →

Amounts collectible from customers from the sale of goods and services
 - ▶ Inventory
 - ▶ Prepaid expenses

Assets on the Balance Sheet

Current Assets

- ◆ Expected to be converted to cash, sold, or consumed during the next 12 months or within the business's operating cycle if longer than a year
- ◆ Includes
 - ▶ Cash and cash equivalents
 - ▶ Short-term investments
 - ▶ Accounts receivable
 - ▶ Inventory → Merchandise that a company sells to customers
 - ▶ Prepaid expenses

Assets on the Balance Sheet

Current Assets

- ◆ Expected to be converted to cash, sold, or consumed during the next 12 months or within the business's operating cycle if longer than a year
- ◆ Includes
 - ▶ Cash and cash equivalents
 - ▶ Short-term investments
 - ▶ Accounts receivable
 - ▶ Inventory
 - ▶ Prepaid expenses



Amounts paid in advance for costs that include advertising, rent, insurance, and supplies

Assets on the Balance Sheet

Long-term Assets

◆ Expected to benefit the company for long periods of time

◆ Includes

- ▶ Property and equipment
- ▶ Accumulated depreciation
- ▶ Long-term investments
- ▶ Intangibles



Tangible assets that include land, buildings, computers, and equipment

Assets on the Balance Sheet

Long-term Assets

- ◆ Expected to benefit the company for long periods of time
- ◆ Includes
 - ▶ Property and equipment
 - ▶ Accumulated depreciation
 - ▶ Long-term investments
 - ▶ Intangibles



Amount of the historical cost of plant assets that has been allocated to expense in the income statement over time as the asset has been used in producing revenue

Assets on the Balance Sheet

Long-term Assets

- ◆ Expected to benefit the company for long periods of time
- ◆ Includes
 - ▶ Property and equipment
 - ▶ Accumulated depreciation
 - ▶ Long-term investments
 - ▶ Intangibles



Includes stocks and bonds of other companies that the company does not intend to sell within the next year

Assets on the Balance Sheet

Long-term Assets

- ◆ Expected to benefit the company for long periods of time
- ◆ Includes
 - ▶ Property and equipment
 - ▶ Accumulated depreciation
 - ▶ Long-term investments
 - ▶ Intangibles



Assets with no physical form, such as patents, trademarks, and goodwill

Liabilities on the Balance Sheet

Current Liabilities

- ◆ Debts payable in the next year or within the business's operating cycle if longer than a year
 - ◆ Includes
 - ▶ Accounts payable
 - ▶ Income taxes payable
 - ▶ Accrued expenses
 - ▶ Current maturities of long-term debt
-
- Amounts owed to vendors and suppliers for purchases of inventory

Liabilities on the Balance Sheet

Current Liabilities

- ◆ Debts payable in the next year or within the business's operating cycle if longer than a year
 - ◆ Includes
 - ▶ Accounts payable
 - ▶ Income taxes payable
 - ▶ Accrued expenses
 - ▶ Current maturities of long-term debt
- Tax debts owed to the government

Liabilities on the Balance Sheet

Current Liabilities

- ◆ Debts payable in the next year or within the business's operating cycle if longer than a year
- ◆ Includes
 - ▶ Accounts payable
 - ▶ Income taxes payable
 - ▶ Accrued expenses
 - ▶ Current maturities of long-term debt



Includes other liabilities such as interest payable on borrowed money, accrued liabilities for salaries, utilities, and other expenses that are owed but have not been paid

Liabilities on the Balance Sheet

Current Liabilities

- ◆ Debts payable in the next year or within the business's operating cycle if longer than a year
- ◆ Includes
 - ▶ Accounts payable
 - ▶ Income taxes payable
 - ▶ Accrued expenses
 - ▶ Current maturities of long-term debt



Portion of long-term liabilities that the company will have to pay off within the next year

Liabilities on the Balance Sheet

Long-term Liabilities

- ◆ Debts due beyond one year or the company's normal operating cycle if longer than a year
- ◆ Includes
 - ▶ Long-term notes payable
 - ▶ Bonds payable

Equity on the Balance Sheet

Stockholders' Equity

- ◆ Represents the stockholders' ownership of the business's assets
- ◆ Includes
 - ▶ Common stock
 - ▶ Additional paid-in capital
 - ▶ Retained earnings
 - ▶ Treasury stock
 - ▶ Accumulated other comprehensive income (loss)



Amount represents the par value of the shares issued to stockholders

Equity on the Balance Sheet

Stockholders' Equity

- ◆ Represents the stockholders' ownership of the business's assets
- ◆ Includes
 - ▶ Common stock
 - ▶ Additional paid-in capital → Amount of cash received on initial sale of the company's stock in excess of the par value
 - ▶ Retained earnings
 - ▶ Treasury stock
 - ▶ Accumulated other comprehensive income (loss)

Equity on the Balance Sheet

Stockholders' Equity

- ◆ Represents the stockholders' ownership of the business's assets
- ◆ Includes
 - ▶ Common stock
 - ▶ Additional paid-in capital
 - ▶ Retained earnings →

Portion of net income
reinvested into the business
 - ▶ Treasury stock
 - ▶ Accumulated other comprehensive income (loss)

Equity on the Balance Sheet

Stockholders' Equity

- ◆ Represents the stockholders' ownership of the business's assets
- ◆ Includes
 - ▶ Common stock
 - ▶ Additional paid-in capital
 - ▶ Retained earnings
 - ▶ Treasury stock
 - ▶ Accumulated other comprehensive income (loss)



Amounts paid by the company to repurchase its own stock

Equity on the Balance Sheet

Stockholders' Equity

- ◆ Represents the stockholders' ownership of the business's assets
- ◆ Includes
 - ▶ Common stock
 - ▶ Additional paid-in capital
 - ▶ Retained earnings
 - ▶ Treasury stock
 - ▶ Accumulated other comprehensive income (loss) →

Items of gain or loss that are allowed by the FASB to bypass the income statement and be recorded directly into stockholders' equity

STOCKHOLDERS' EQUITY

Common stock	110,000
Retained earnings	229,000
Less: Treasury stock	(50,000)
Total stockholders' equity	<u>289,000</u>

Stockholder's Equity

- The accounting equation states that :

Assets

=

Liabilities

+

Owner's
Equity

A corporation's owners' equity Stockholders' equity, and this title is descriptive. Remember that a corporation's owners' equity represents the stockholders' ownership of the business's assets. The Apple's Inc.'s stockholder' equity consists of the following:

1. Common stock, represented by shares issued to stockholders.
2. Retained earning as we discussed before **Retained Earnings** - the amount earned by income-producing activities and kept for use in the business.

Asset = Liabilities + Owners' Equity

Assets

**Total
Liabilities**

Owner's equity

The Statement of Cash Flows Measures Cash Receipts and Payments

The Statement of Cash Flows reports three types of activities

- ◆ **Operating:** Cash flows from selling goods and providing services to customers
- ◆ **Investing:** Cash flows from the purchase and sale of long-term assets
- ◆ **Financing:**
 - ▶ Borrowing and repayment of borrowed funds
 - ▶ Equity transactions, such as issuing stock, paying dividends, and repurchase of company stock

The statement of cash flows reports cash receipts and cash payment in each of the above Activities.

Example Corporation
Statement of Cash Flows
For the Year Ended December 31, 2019

Cash Flow from Operating Activities

Net income	\$23,000
Add: depreciation expense	4,000
Increase in accounts receivable	(6,000)
Decrease in inventory	9,000
Decrease in accounts payable	(5,000)
Cash provided (used) in operating activities	<u>25,000</u>

Cash Flow from Investing Activities

Capital expenditures	(28,000)
Proceeds from sale of property	7,000
Cash provided (used) by investing activities	<u>(21,000)</u>

Cash Flow from Financing Activities

Borrowings of long-term debt	10,000
Cash dividends	(5,000)
Purchase of treasury stock	(8,000)
Cash provided (used) by financing activities	<u>(3,000)</u>

Net increase in cash	1,000
Cash at the beginning of the year	1,200

Cash at the end of the year	<u><u>\$ 2,200</u></u>
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Companies Operate by selling goods and services goods
services to customers.

1. Operating activities result in net income or net loss, and they either increase or decrease cash, reports whether operations increased the company's cash balance.
2. Operating activities are most important, and they should be the company's main source of cash.
3. Continuing negative cash flow form operations can lead to bankruptcy.

Companies invest in long-term assets.

1. Both purchases and sales of long-term assets are investing cash flow.
2. Investing cash flows are the next most important after operations.

Companies need money for financing

1. Financing activities include issuing stock, paying dividends, borrowing, and repayments of borrowed funds.
2. The company may also pay loans, pay dividends, and repurchase its own stock. These payments are examples of financing cash flows.

Illustration 2.4

EVALUATE BUSINESS OPERATIONS THROUGH THE FINANCIAL STATEMENTS

Exhibit 1-6

Question	Financial Statement	Answer
How well did the company perform during the year?		
Why did the company's retained earnings change during the year?		
What is the company's financial position at year-end?		
How much cash did the company generate and spend during the year?		

Advance slide in presentation mode to reveal financial statement and answer.

LO 4

Illustration 2.5

Assume SB Technology, Inc., is expanding into Australia. Identify the financial statement where decision makers can find the following information about SB Technology, Inc. In some cases, more than one statement will report the needed data.

Financial Statement (s)

- a. Revenue
- b. Dividends
- c. Current liabilities
- d. Total assets
- e. Selling, general, and administrative expense

Illustration

Identify the financial statement where decision makers can find the following information about SB Technology, Inc.

Financial Statement (s)

- f. Ending cash balance
- g. Cash spent to acquire a building
- h. Ending balance of retained earnings
- i. Net income

Illustration

Identify the financial statement where decision makers can find the following information about SB Technology, Inc.

Financial Statement (s)

- j. Income tax expense
- k. Common stock
- l. Income tax payable
- m. Long-term debt
- n. Adjustments to reconcile
net income to net cash
provided by operations

1

The Financial Statements

Learning Objective

5. **Construct** financial statements and **analyze** the relationships among them

CONSTRUCT FINANCIAL STATEMENTS AND ANALYZE THE RELATIONSHIPS AMONG THEM

Income Statement

- ◆ Reports revenues (net sales) and expenses of the year
- ◆ Reports net income or net loss
 - ▶ If revenues exceed expenses, there is net income
 - ▶ If expenses exceed revenues, there is a net loss

CONSTRUCT FINANCIAL STATEMENTS AND ANALYZE THE RELATIONSHIPS AMONG THEM

Balance Sheet

- ◆ Reports assets, liabilities, and stockholders' equity at the end of the year
- ◆ Reports that assets equal the sum of liabilities plus stockholders' equity
- ◆ Reports retained earnings, which comes from the statement of retained earnings

CONSTRUCT FINANCIAL STATEMENTS AND ANALYZE THE RELATIONSHIPS AMONG THEM

Statement of Cash Flows

- ◆ Reports cash flows from operating, investing, and financing activities
- ◆ Each category results in net cash provided (an increase) or used (a decrease)
- ◆ Reports whether cash and cash equivalents increased (or decreased) during the year
- ◆ Shows the ending cash and cash equivalents balance

Illustration 2.6

Define and provide an example of each of the following

Account	Definition	Example
Asset		
Revenue		
Liability		

► Decision Guidelines

What Do Decision Makers Look For?

Question/Decision	What to look for
Can the company sell its products?	Sales revenue Increasing or Decreasing?
What are the main income measures to watch for trends?	Gross profit, Operating income, and Net income
What percentage of sales revenue ends up as profit?	Divide net income by sales revenue
Can the company collect its receivables?	Compare % increase in receivables to % increase in sales
Can the company pay its liabilities?	Compare assets to liabilities
Where is the company's cash coming from?	Observe the line items on the cash flow statement

Ethics in business and accounting decisions

- ✓ Ethics道德 are shaped by our cultural 文化, socioeconomic社會經濟and religious backgrounds 宗教背景
- ✓ Ethics training starts at home and continues throughout our lives
- ✓ In business, ethics work best when modeled from仿照 the top. Ethical guidelines affect business decisions.

Summary

- ✓ Flow of accounting starts with business transactions 商業交易
- ✓ Users of financial information include investors 投資者, creditors 債權人, government 政府 agencies 代理人, etc.;
- ✓ The conceptual framework 概念框架 of financial accounting is the foundation of the preparation of financial statements;
- ✓ Two accounting equations can be applied to business organizations;
- ✓ Information in financial statements is used to make business decisions, which are informed by economic, legal, and ethical guidelines

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