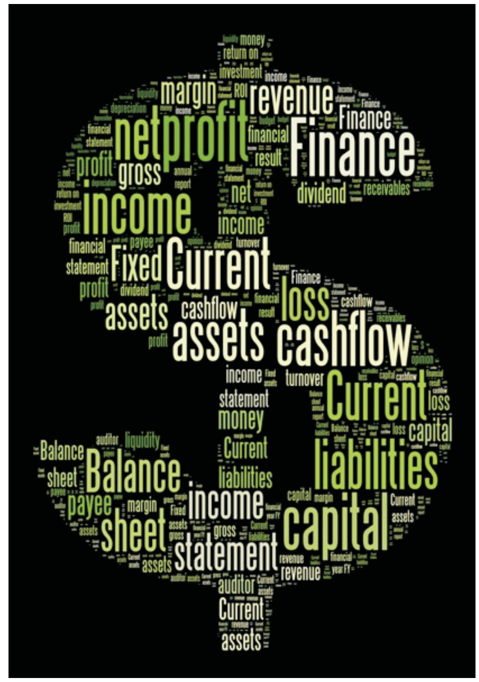
Accounting Equation

THE ACCOUNTING EQUATION is accounting's most basic and most fundamental concept. It is the relationship between assets, liabilities, and owner's equity: *Assets = Liabilities + Owner's Equity*. The equation must always remain in balance. Accounting software is designed so that a transaction is rejected should the components be out of balance. From Accounting 101 to your 10-year anniversary as an accountant and beyond, you will continue to use the accounting equation.



Objective:

Summarize assets, liabilities, and owner's equity and their relationship in the accounting equation.

Key Terms:

accounting equation
accounts
accounts payable
accounts receivable
asset
cash account
current assets
current liabilities
equity
expenses
fixed assets
intangible assets
intellectual property
inventory
investments
liability
liquidity
long-term assets
long-term liabilities
owner's equity
prepaid insurance
prepaid rent
revenue
salaries and wages payable
supplies

The Accounting Equation: The Foundation of Double-Entry Accounting

The **accounting equation** is Assets = Liabilities + Owner's Equity. This equation is the foundation of double-entry accounting. The equation indicates that a company can pay for a purchase with assets (e.g., purchase a $400 phone with $400 in cash) or the company can pay for the purchase by borrowing. Liabilities can also be paid with assets (cash) or by taking on more liability (debt).

ASSET ACCOUNTS

Accounts are records or statements that organize and summarize transactions in the form of credits, debits, accruals, and adjustments that have occurred and have an effect on assets, equity, liability, or revenue. Typically, an account is financial assets held by an organization (bank, credit union, accounting service, financial advisory firm) for a customer. In accounting, similar items or transactions are recorded in accounts. Different account types help organize transactions.

An **asset** is a company-owned resource that has future economic value that can be measured and expressed in dollars. Asset account categories include current assets and long-term assets.

Current Assets

Current assets are cash and other resources expected to be converted into cash or be used up within one year. Current asset accounts are listed on the balance sheet in order of liquidity. **Liquidity** is the degree to which an asset or security can be quickly bought or sold (converted into cash). Following are some current accounts and related terms.

A **cash account** is an account used to record the amount of money held in bank accounts.

Accounts receivable are the amounts due as the result of selling goods or services on credit (also called on account).

Inventory is items produced or purchased for resale.

Prepaid rent and **prepaid insurance** are the amount of future rent expense and the amount of future insurance expense, respectively, paid in advance of the rental or insurance period. The amount reported on the balance sheet is the amount that has not yet been used or has not expired.

Supplies are consumable items that commonly have shorter life spans than equipment and

FIGURE 1. Current assets are cash and other resources expected to be converted into cash or be used up within one year.

machines. Supplies are restocked for use as needed. Examples of supplies are pens, copy paper, paper clips, staplers, and sticky notes.

FIGURE 2. Supplies are consumable assets and are not subject to depreciation (devaluation).

Long-Term Assets

Long-term assets are resources not intended to be turned into cash or to be consumed within one year of the balance sheet date. **Investments** are part of a company's assets (such as stock in another company) purchased in hopes of generating future income. Investments are not consumed today but used in the future to create wealth. Funds held for construction are an example. Long-term asset categories include fixed assets and intangible assets.

Fixed assets are tangible, long-term assets used in business operations: property, plant, and equipment (PPE). Except for land, fixed assets are depreciated (devalued) over their useful life. Among fixed assets are land, buildings, machinery, and office equipment / computer equipment / furniture.

Intangible assets are intellectual property and typically are not physical (tactile) in nature. **Intellectual property** is a set of intangibles owned and legally protected by a company from outside use or implementation without consent. Included are copyrights, patents, goodwill, trade names and trademarks, trade secrets (e.g., the Coca-Cola formula), and ideas.

FIGURE 3. Intangible assets are intellectual property: items of value to an organization that are typically not physical in nature. Intellectual property is a set of intangibles owned and legally protected by a company from outside use or implementation without consent.

LIABILITY ACCOUNTS

A **liability** is an obligation or amount owed, usually to a lender or supplier. A liability often has the word "payable" in the account title, signifying the amount is payable to another party.

DIGGING DEEPER...

UNCOVERING ADDITIONAL FACTS: Depreciation

Fixed assets are depreciated to allocate the cost of their use in a business. Research fixed asset depreciation methods to become familiar with this topic. The cost of intangible assets is allocated, as well. Find out how accounting for intangible assets differs from accounting for fixed assets.

Current Liabilities

Current liabilities are obligations coming due within one year. The amounts will be paid with current assets (cash or accounts receivable that have been paid and thus converted to cash). Accounts payable and salaries and wages payable are among current liabilities.

Accounts payable are amounts owed to suppliers.

Salaries and wages payable are amounts owed to employees for time worked.

Long-Term Liabilities

Long-term liabilities are obligations coming due after one year. Examples of long-term liabilities are:

- A five-year loan on a vehicle
- A 20-year mortgage on a building
- Pension obligations

EQUITY ACCOUNTS

Equity is the value of an asset less the value of all liabilities on that asset. The formula to calculate equity is Equity = Asset Value – Liabilities.

Owner's Equity

Owner's equity is the proprietor's investment in the business, item, or project. It is the difference between assets and liabilities. Owner's equity accounts include:

- Capital account (tracks additions)
- Drawing account (tracks withdrawals)

Revenue is the income generated from the sale of goods or services associated with the main operations of an organization.

- Revenue is essentially sales less any returns or sales discounts.
- Revenue increases owner's equity.

Expenses

Expenses are monies spent or costs incurred in an organization's efforts to generate revenue; they represent the cost of doing business.

- Any item that represents the cost of doing business can have an expense account associated with it. The business manager decides the level of detail necessary for the organization. Examples are advertising expense, communication expense, and supplies expense.
- Expenses decrease owner's equity.

ACCOUNTING EQUATION RELATIONSHIP

The accounting equation's relationship between assets, liabilities, and owner's equity must always remain in balance. If you add something to one side of the equation, you must also add something to the other side of the equation.

The basic accounting equation, as stated earlier, is Assets = Liabilities + Owner's Equity. Recall that revenue and expenses roll up under owner's equity and that revenue increases owner's equity while expenses decrease owner's equity. Like any equation, the accounting equation can be manipulated as long as it stays in balance. For example, the following equation is also valid because it is in balance: Assets – Liabilities = Owner's Equity.

Summary:

At face value, the accounting equation seems quite basic. However, when you dive into it, you will find a great deal of detail. Assets can be categorized as current, long-term, fixed, or intangible. Liabilities are separated into current and long-term. Owner's equity relates to revenue and expenses, too.

Each time you record a transaction, you are affecting at least two accounts and changing the values in the accounting equation. The more you understand and study the effects of transactions on the accounting equation, the better accountant you will become.

Checking Your Knowledge:

1. List three examples of current assets.
2. What does the acronym PPE represent?
3. What is a current liability?
4. How do revenues and expenses affect owner's equity?
5. What is the accounting equation?

Expanding Your Knowledge:

Choose a classmate with whom to work. Then, each of you create an individual list of five accounts. Read each other's list, and categorize each account as asset, liability, or owner's equity.

Web Links:

Accounting Equation Guide

http://www.accountingtools.com/basic-accounting-formula

How the Accounting Equation Stays in Balance

http://www.accountingverse.com/accounting-basics/accounting-equation.html