The Basic Accounting Equation

Assets = Liabilities + Equity \*

 ^ **BALANCE POINT**

**The Three Elements of the Accounting Equation**

1. Assets (A) - Anything owned by a business that has economic value and will help the business earn revenue.
2. Liabilities (L) - Creditor claims on total assets resulting from past transactions; obligations of the entity to third parties.
3. Equity (E) - Ownership claims on total assets. \* Name will vary depending upon the type of business, i.e. In a corporation the name is Stockholder's Equity; a sole proprietor uses the name Owner's Equity.

**When any two elements of the equation are known, the third can always be calculated.**

**For Example:**

**If Assets = $50,000 and Liabilities = $18,500, what is the amount of Equity?**

Using the Accounting Equation, plug in the known amounts:

A=L+E $50,000 = $18,500 + E

Subtract the Liabilities from both sides:

A-L=L-L +E $50,000 - $18,500 = $18,500 - $18,500 + E

Combine amounts:

A-L=E $31,500 = E

**The equation MUST STAY IN BALANCE AT ALL TIMES** - A change to any one element requires a corresponding change to at least one other element. Therefore, the purchase of an asset (an increase in asset) requires either a decrease in another asset (cash paid) or an increase in a liability (accounts payable) or an increase in equity (owner put asset into service in business).

For example, a corporation with Assets of $750,000, Liabilities of $570,000, and Stockholders equity of $180,000 purchases equipment at a cost of $120,000 and borrows the full amount to pay for the purchase. The assets (equipment) will increase by $120,000 and the liabilities (loan) increase by $120,000.

Equation before purchase:

$750,000 = $570,000 + $180,000

 A = L + E

The business purchases equipment for $120,000 obtaining a loan for the full amount:

$870,000 = $690,000 + $180,000

 A = L + E

Assets have increased by $120,000 and the liabilities have increased by $120,000, so the equation has stayed in balance.

**Equity vs. Liabilities**

To illustrate how liabilities and equity work to stay in balance, consider the purchase of a home.

If the cost of the house is $200,000 and the buyer provides a down payment of $40,000 and obtains a mortgage for $160,000, the elements would be entered in the equation as shown below.

House = Mortgage + Down Payment

$200,000 = $160,000 + $40,000 A = L + E

After the first mortgage payment of $1,000 principal, the equation would change as shown. \*\* $200,000 = $159,000 + $41,000 A = L + E

Notice that the equation stays in balance; the asset has not changed, but equity increases as the liability decreases.

\*\*Note that this example does not consider the interest that is typically associated with this type of scenario.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PRACTICE:** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **SECTION I****Calculate the missing amounts.** |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Assets | = | Liabilities | + | Equity |  |  |  |  |  |  |  |  |
|  | 1. | 410,000.00  | = |  200,000.00  | + |  |  |  |  |  |  |  |  |  |
|  | 2. |  | = |  5,400.00  | + |  7,700.00  |  |  |  |  |  |  |  |  |
|  | 3. |  24,255.00  | = |  | + |  11,150.00  |  |  |  |  |  |  |  |  |
|  | 4. | 1,150,000.00  | = |  545,700.00  | + |  |  |  |  |  |  |  |  |  |
|  | 5. | 750,500.00  | = |  | + |  350,500.00  |  |  |  |  |  |  |  |  |
|  | 6. |  | = |  880,500.00  | + |  305,250.00  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **SECTION II****The following are attempts to restate the Basic Accounting Equation. Indicate which attempts are correct** **and which are incorrect.**  |
|  | 1. | Assets | = | Liabilities | + | Equity |  | Correct / Incorrect |  |  |  |  |
|  | 2. | Liabilities | + | Assets | = | Equity |  | Correct / Incorrect |  |  |  |  |
|  | 3. | Assets | - | Liabilities | = | Equity |  | Correct / Incorrect |  |  |  |  |
|  | 4. | Assets | = | Equity | + | Liabilities |  | Correct / Incorrect |  |  |  |  |
|  | 5. | Liabilities | + | Equity | = | Assets |  | Correct / Incorrect |  |  |  |  |
|  | 6. | Equity | - | Assets | = | Liabilities |  | Correct / Incorrect |  |  |  |  |
|  | 7. | Assets | = | Liabilities | - | Equity |  | Correct / Incorrect |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **SECTION III****Answer each of the following:** |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| The assets of Some Company are $250,000 and the total equity is $95,000. What is the amount of total liabilities? |  |  |  |
| The liabilities of Some Company are $45,000 and the total equity is $21,000. What is the amount of Some Company's total assets? |  |
| The total assets of Some Company are $1,345,000 and its liabilities are equal to one half the assets. What is the amount of total equity? |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **ANSWERS:** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **Section I** |  |  | **Section II** |  |  | **Section III** |  |  |  |  |  |  |  |  |
|  |  | 1. 210,000.00
 |  |  | 1. Correct
 |  |  | 1. 155,000.00
 |  |  |  |  |  |  |  |  |
|  |  | 1. 13,100.00
 |  |  | 1. Incorrect
 |  |  | 1. 66,000.00
 |  |  |  |  |  |  |  |  |
|  |  | 1. 13,105.00
 |  |  | 1. Correct
 |  |  | 1. 672,500.00
 |  |  |  |  |  |  |  |  |
|  |  | 1. 604,300.00
 |  |  | 1. Correct
 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1. 400,000.00
 |  |  | 1. Correct
 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1. 1,185,750.00
 |  |  | 1. Incorrect
 |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | 1. Incorrect
 |  |  |  |  |  |  |  |  |  |  |  |  |