Accounting Equation

(Explanation)

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Introduction to the Accounting Equation

From the large, multi-national corporation down to the corner beauty salon, every business transaction will have an effect on a company's financial position. The financial position of a company is measured by the following items:

- Assets (what it owns)
- Liabilities (what it owes to others)
- Owner's Equity (the difference between assets and liabilities)

The **accounting equation** (or basic accounting equation) offers us a simple way to understand how these three amounts relate to each other. The accounting equation for a sole proprietorship is:

Assets = Liabilities + Owner's Equity

The accounting equation for a corporation is:

Assets = Liabilities + Stockholders' Equity

Assets are a company's resources—things the company owns. Examples of assets include cash, accounts receivable, inventory, prepaid insurance, investments, land, buildings, equipment, and goodwill. From the accounting equation, we see that the amount of assets must equal the combined amount of liabilities plus owner's (or stockholders') equity.

Liabilities are a company's obligations—amounts the company owes. Examples of liabilities include notes or loans payable, accounts payable, salaries and wages payable, interest payable, and income taxes payable (if the company is a regular corporation). Liabilities can be viewed in two ways:

- as claims by creditors against the company's assets, and
- as sources (along with owner's or stockholders' equity) of the company's assets.

Owner's equity or *stockholders' equity* is the amount remaining after liabilities are deducted from assets:

Assets - Liabilities = Owner's (or Stockholders') Equity

Owner's or stockholders' equity also reports the amounts invested into the company by the owners plus the cumulative net income of the company that has not been withdrawn or distributed to the owners.

If a company keeps accurate records using the double-entry system, the accounting equation will always be "in balance," meaning the left side of the equation will be equal to the right side. The balance is maintained because every business transaction *affects at least two of a company's accounts*. For example, when a company borrows money from a bank, the company's assets will increase and its liabilities will increase by the same amount. When a company purchases inventory for cash, one asset will increase and one asset will decrease. Because there are two or more accounts affected by every transaction, the accounting system is referred to as the double-entry accounting or bookkeeping system.

A company keeps track of all of its transactions by recording them in accounts contained in the company's general ledger. Each account in the general ledger is designated as to its type: asset, liability, owner's equity, revenue, expense, gain, or loss account.

Balance Sheet and Income Statement

The balance sheet is also known as the statement of financial position and it reflects the accounting equation. The balance sheet reports a company's assets, liabilities, and owner's (or stockholders') equity at a specific point in time. Like the accounting equation, it shows that a company's total amount of assets equals the total amount of liabilities plus owner's (or stockholders') equity.

The income statement is the financial statement that reports a company's revenues and expenses and the resulting net income. While the balance sheet is concerned with one point in time, the income statement covers a time interval or period of time. The income statement will explain part of the change in the owner's or stockholders' equity during the time interval between two balance sheets.

Examples
In our examples below, we show how a given transaction affects the accounting equation. We also show how the same transaction affects specific accounts by providing the journal entry that is used to record the transaction in the company's general ledger.

In addition, we show the effect of each transaction on the balance sheet and income statement. (Our examples assume that the accrual basis of accounting is being followed.)

Pages 4 – 26 illustrate transactions involving a sole proprietorship.

Pages 26 – 47 illustrate almost identical transactions as they would take place in a corporation.

Accounting Equation for a Sole Proprietorship: Transactions 1 - 2

We present eight transactions to illustrate how a company's accounting equation stays in balance.

When a company records a business transaction, it is not entered into an accounting equation, per se. Rather, transactions are recorded into specific accounts contained in the company's general ledger. Each account is designated as an asset, liability, owner's equity, revenue, expense, gain, or loss account. The amounts in the general ledger accounts are then used to prepare the balance sheets and income statements.

In our transactions, we will use the following accounts:

- Cash
- Accounts Receivable
- Equipment
- Notes Payable
- Accounts Payable
- J. Ott, Capital
- J. Ott, Drawing
- Service Revenues
- Advertising Expense
- Temp Service Expense

(To view a more complete listing of accounts for recording transactions, visit our Explanation of Chart of Accounts.)

Sole Proprietorship Transaction #1.

Let's assume that J. Ott forms a sole proprietorship called Accounting Software Co. (ASC). On December 1, 2023, J. Ott invests personal funds of $10,000 to start ASC. The effect of this transaction on ASC's accounting equation is:

Assets	=	Liabilities	+	Owner's Equity
+$10,000	=	No Effect	+	+$10,000

As you can see, ASC's assets increase by $10,000 and so does ASC's owner's equity. As a result, the accounting equation will be in balance.

You can interpret the amounts in the accounting equation to mean that ASC has assets of $10,000 and the source of those assets was the owner, J. Ott. Alternatively, you can view the accounting equation to mean that ASC has assets of $10,000 and there are no claims by creditors (liabilities) against the assets. As a result, the owner has a claim for the remainder or residual of $10,000.

This transaction is recorded in the asset account Cash and the owner's equity account J. Ott, Capital. The general journal entry to record the transaction in these accounts is:

Date	Account Name	Debit	Credit
Dec. 1, 2023	Cash	10,000	
	J. Ott, Capital		10,000

After the journal entry is recorded in the accounts, a balance sheet can be prepared to show ASC's financial position at the end of December 1, 2023:

Accounting Software Co.
Balance Sheet
December 1, 2023

ASSETS			**LIABILITIES**		
Cash	$	10,000	Liabilities	$	0
			OWNER'S EQUITY		
			J. Ott, Capital		10,000
Total assets	$	10,000	Total liabilities & owner's equity	$	10,000

The purpose of an income statement is to report revenues and expenses. Since ASC has not yet earned any revenues nor incurred any expenses, there are no amounts to be reported on an income statement.

Sole Proprietorship Transaction #2.

On December 2, 2023, J. Ott withdraws $100 of cash from the business for his personal use. The effect of this transaction on ASC's accounting equation is:

Assets	=	Liabilities	+	Owner's Equity
-$100	=	No Effect	+	-$100

The accounting equation remains in balance since ASC's assets have been reduced by $100 and so has the owner's equity.

This transaction is recorded in the asset account Cash and the owner's equity account J. Ott, Drawing. The general journal entry to record the transactions in these accounts is:

Date	Account Name	Debit	Credit
Dec. 2, 2023	J. Ott, Drawing	100	
	Cash		100

Since the transactions of December 1 and December 2 were in balance, the sum of both transactions should also be in balance:

Transaction	Assets	=	Liabilities	+	Owner's Equity
1	+$10,000	=	No Effect	+	+$10,000
2	-$100	=	No Effect	+	-$100
Totals	$9,900	=	$0	+	$9,900

The totals indicate that ASC has assets of $9,900 and the source of those assets is the owner of the company. You can also conclude that the company has assets or resources of $9,900 and the only claim against those resources is the owner's claim.

The December 2 balance sheet will communicate the company's financial position as of midnight on December 2:

Accounting Software Co.
Balance Sheet
December 2, 2023

ASSETS			**LIABILITIES**		
Cash	$	9,900	Liabilities	$	0
			OWNER'S EQUITY		
			J. Ott, Capital		9,900*
Total assets	$	9,900	Total liabilities & owner's equity	$	9,900

Beginning owner's equity	$	0
+ Owner's investment	+	10,000
+ Net income	+	0
Subtotal		10,000
- J. Ott, Drawing	-	100
Ending owner's equity, Dec. 2	$	9,900*

Withdrawals of company assets by the owner for the owner's personal use are known as "draws." Since draws are not expenses, the transaction is not reported on the company's income statement.

Accounting Equation for a Sole Proprietorship: Transactions 3 - 4

Sole Proprietorship Transaction #3.

On December 3, 2023, Accounting Software Co. spends $5,000 of cash to purchase computer equipment for use in the business. The effect of this transaction on the accounting equation is:

	Assets	=	Liabilities	+	Owner's Equity
	+$5,000 -$5,000	=	No Effect	+	No Effect

The accounting equation reflects that one asset increases and another asset decreases. Since the amount of the increase is the same as the amount of the decrease, the accounting equation remains in balance.

This transaction is recorded in the asset accounts Equipment and Cash. The Equipment account increases by $5,000, and the Cash account decreases by $5,000.

The journal entry for this transaction is:

Date	Account Name	Debit	Credit
Dec. 3, 2023	Equipment	5,000	
	Cash		5,000

The combined effect of the first three transactions is shown here:

Transaction	Assets	=	Liabilities	+	Owner's Equity
1	+$10,000	=	No Effect	+	+$10,000
2	-$100	=	No Effect	+	-$100
3	+$5,000 -$5,000	=	No Effect	+	No Effect
Totals	$9,900	=	$0	+	$9,900

The totals tell us that the company has assets of $9,900 and the source of those assets is the owner of the company. It also tells us that the company has assets of $9,900 and the only claim against those assets is the owner's claim.

The balance sheet dated December 3, 2023, will reflect the financial position as of midnight on December 3:

Accounting Software Co.
Balance Sheet
December 3, 2023

ASSETS			LIABILITIES		
Cash	$	4,900	Liabilities	$	0
Equipment		5,000			
			OWNER'S EQUITY		
			J. Ott, Capital		9,900*
Total assets	$	9,900	Total liabilities & owner's equity	$	9,900

Beginning owner's equity	$	0
+ Owner's investment	+	10,000
+ Net income	+	0
Subtotal		10,000
- J. Ott, Drawing	-	100
Ending owner's equity, Dec. 3	$	9,900*

The purchase of equipment is not an immediate expense. It will become part of depreciation expense only after it is placed into service. We will assume that as of December 3 the equipment has not been placed into service, therefore, no expense will appear on an income statement for the period of December 1 through December 3.

Sole Proprietorship Transaction #4.

On December 4, 2023, ASC obtains $7,000 by borrowing money from its bank. The effect of this transaction on the accounting equation is:

Assets	=	Liabilities	+	Owner's Equity
+$7,000	=	+$7,000	+	No Effect

As you can see, ASC's assets increase and ASC's liabilities increase by $7,000.

This transaction is recorded in the asset account Cash and the liability account Notes Payable as shown in this accounting entry:

Date	Account Name	Debit	Credit
Dec. 4, 2023	Cash	7,000	
	Notes Payable		7,000

The combined effect on the accounting equation from the first four transactions is available here:

Transaction	Assets	=	Liabilities	+	Owner's Equity
1	+$10,000	=	No Effect	+	+$10,000
2	-$100	=	No Effect	+	-$100
3	+$5,000 -$5,000	=	No Effect	+	No Effect
4	+$7,000	=	+$7,000	+	No Effect
Totals	$16,900	=	$7,000	+	$9,900

The totals indicate that the transactions through December 4 result in assets of $16,900. There are two sources for those assets—the creditors provided $7,000 of assets, and the owner of the company provided $9,900. You can also interpret the accounting equation to say that the company has assets of $16,900 and the lenders have a claim of $7,000 and the owner has a claim for the remainder.

The balance sheet dated December 4 will report ASC's financial position as of that date:

Accounting Software Co.
Balance Sheet
December 4, 2023

ASSETS			LIABILITIES		
Cash	$	11,900	Notes Payable	$	7,000
Equipment		5,000			
			OWNER'S EQUITY		
			J. Ott, Capital		9,900*
Total assets	$	16,900	Total liabilities & owner's equity	$	16,900

Beginning owner's equity	$	0
+ Owner's investment	+	10,000
+ Net income	+	0
Subtotal		10,000
- J. Ott, Drawing	-	100
Ending owner's equity, Dec. 4	$	9,900*

The proceeds of the bank loan are not considered to be revenue since ASC did not earn the money by providing services, investing, etc. As a result, there is no income statement effect from this transaction.

Accounting Equation for a Sole Proprietorship: Transactions 5 - 6

Sole Proprietorship Transaction #5.

On December 5, 2023, Accounting Software Co. pays $600 for ads that were run in recent days. The effect of this advertising transaction on the accounting equation is:

Assets	=	Liabilities	+	Owner's Equity
-$600	=	No Effect	+	-$600

Since ASC is paying $600, its assets decrease. The second effect is a $600 decrease in owner's equity, because the transaction involves an expense. (An expense is a cost that is used up or its future economic value cannot be measured.)

Although owner's equity is decreased by an expense, the transaction is not recorded directly into the owner's capital account at this time. Instead, the amount is initially recorded in the expense account Advertising Expense and in the asset account Cash.

The general journal entry to record the transaction is:

Date	Account Name	Debit	Credit
Dec. 5, 2023	Advertising Expense	600	
	Cash		600

The combined effect of the first five transactions is available here:

Transaction	Assets	=	Liabilities	+	Owner's Equity
1	+$10,000	=	No Effect	+	+$10,000
2	-$100	=	No Effect	+	-$100
3	+$5,000 -$5,000	=	No Effect	+	No Effect
4	+$7,000	=	+$7,000	+	No Effect
5	-$600	=	No Effect	+	-$600
Totals	$16,300	=	$7,000	+	$9,300

The totals now indicate that Accounting Software Co. has assets of $16,300. The creditors provided $7,000 and the owner of the company provided $9,300. Viewed another way, the company has assets of $16,300 with the creditors having a claim of $7,000 and the owner having a residual claim of $9,300.

The balance sheet as of midnight on December 5 is:

Accounting Software Co.
Balance Sheet
December 5, 2023

ASSETS			LIABILITIES		
Cash	$	11,300	Notes Payable	$	7,000
Equipment		5,000			
			OWNER'S EQUITY		
			J. Ott, Capital		9,300*
Total assets	$	16,300	Total liabilities & owner's equity	$	16,300

Beginning owner's equity	$	0
+ Owner's investment	+	10,000
+ Net income**	+	(600)
Subtotal		9,400
- J. Ott, Drawing	-	100
Ending owner's equity, Dec. 5	$	9,300*

***The income statement (which reports the company's revenues, expenses, gains, and losses during a specified time interval) is a link between balance sheets. It provides the results of operations — an important part of the change in owner's equity.*

Since this transaction involves an expense, it will involve ASC's income statement. The company's income statement for the first five days of December is:

Accounting Software Co.
Income Statement
For the Five Days Ended December 5, 2023

Revenues		
Service revenues	$	0
Expenses		
Advertising expense		600
Net income	$	(600)

Sole Proprietorship Transaction #6.

On December 6, 2023, ASC performed consulting services for its clients. The clients were billed for the agreed upon amount of $900. The amounts are to be paid within 30 days. The effect on ASC's accounting equation is:

Assets	=	Liabilities	+	Owner's Equity
+$900	=	No Effect	+	+$900

Since ASC has performed the services, it has earned revenues and it has the right to receive $900 from the clients. This right (known as an account receivable) causes assets to increase. The earning of revenues causes owner's equity to increase.

Although revenues cause owner's equity to increase, the revenue transaction is not recorded into the owner's capital account at this time. Rather, the amount earned is recorded in the revenue account Service Revenues. This will allow the company to report the revenues on its income statement at any time. (After the year ends, the amount in the revenue accounts will be transferred to the owner's capital account.)

The general journal entry to record the transaction is:

Date	Account Name	Debit	Credit
Dec. 6, 2023	Accounts Receivable	900	
	Service Revenues		900

The combined effect of the first six transactions can be viewed here:

Transaction	Assets	=	Liabilities	+	Owner's Equity
1	+$10,000	=	No Effect	+	+$10,000
2	-$100	=	No Effect	+	-$100
3	+$5,000 -$5,000	=	No Effect	+	No Effect
4	+$7,000	=	+$7,000	+	No Effect
5	-$600	=	No Effect	+	-$600
6	+$900	=	No Effect	+	+$900
Totals	$17,200	=	$7,000	+	$10,200

The totals tell us that as of midnight on December 6, the company had assets of $17,200. It also shows the sources of the assets: creditors provided $7,000 and the owner of the company provided $10,200. The totals also reveal that the company had assets of $17,200 and the creditors had a claim of $7,000 and the owner had a claim for the remaining $10,200.

Below is the balance sheet as of midnight on December 6:

Accounting Software Co.
Balance Sheet
December 6, 2023

ASSETS			**LIABILITIES**		
Cash	$	11,300	Notes Payable	$	7,000
Accounts receivable		900			
Equipment		5,000	**OWNER'S EQUITY**		
			J. Ott, Capital		10,200*
Total assets	$	17,200	Total liabilities & owner's equity	$	17,200

Beginning owner's equity	$	0
+ Owner's investment	+	10,000
+ Net income**	+	300
Subtotal		10,300
- J. Ott, Drawing	-	100
Ending owner's equity, Dec. 6	$	10,200*

***The income statement (which reports the company's revenues, expenses, gains, and losses during a specified time interval) is a link between balance sheets. It provides the results of operations — an important part of the change in owner's equity.*

The Income Statement for Accounting Software Co. for the period of December 1 through December 6 is:

Accounting Software Co.
Income Statement
For the Six Days Ended December 6, 2023

Revenues		
Service revenues	$	900
Expenses		
Advertising expense		600
Net income	$	300

Accounting Equation for a Sole Proprietorship: Transactions 7 - 8

Sole Proprietorship Transaction #7.

On December 7, 2023, ASC uses a temporary help service for 6 hours at a cost of $20 per hour. ASC will pay the invoice when it is due in 10 days. The effect on its accounting equation is:

Assets	=	Liabilities	+	Owner's Equity
No Effect	=	+$120	+	-$120

ASC's liabilities increase by $120 and the expense causes owner's equity to decrease by $120.

The liability will be recorded in Accounts Payable and the expense will be reported in Temp Service Expense. The journal entry for recording the use of the temp service is:

Date	Account Name	Debit	Credit
Dec. 7, 2023	Temp Service Expense	120	
	Accounts Payable		120

The effect of the first seven transactions on the accounting equation can be viewed here:

Transaction	Assets	=	Liabilities	+	Owner's Equity
1	+$10,000	=	No Effect	+	+$10,000
2	-$100	=	No Effect	+	-$100
3	+$5,000 -$5,000	=	No Effect	+	No Effect
4	+$7,000	=	+$7,000	+	No Effect
5	-$600	=	No Effect	+	-$600
6	+$900	=	No Effect	+	+$900
7	No Effect	=	+$120	+	-$120
Totals	$17,200	=	$7,120	+	$10,080

The totals indicate that as of midnight on December 7, the company had assets of $17,200 and the sources were $7,120 from creditors and $10,080 from the owner of the company. The accounting equation totals also tell us that the company had assets of $17,200 with the creditors having a claim of $7,120. This means that the owner's residual claim was $10,080.

The statement of financial position for ASC as of midnight on December 7, 2023 is:

Accounting Software Co.
Balance Sheet
December 7, 2023

ASSETS			LIABILITIES		
Cash	$	11,300	Notes Payable	$	7,000
Accounts receivable		900	Accounts Payable		120
Equipment		5,000	Total liabilities		7,120
			OWNER'S EQUITY		
			J. Ott, Capital		10,080*
Total assets	$	17,200	Total liabilities & owner's equity	$	17,200

Beginning owner's equity	$	0
+ Owner's investment	+	10,000
+ Net income**	+	180
Subtotal		10,180
- J. Ott, Drawing	-	100
Ending owner's equity, Dec. 7	$	10,080*

***The income statement (which reports the company's revenues, expenses, gains, and losses for a specified time interval) is a link between balance sheets. It provides the results of operations — an important part of the change in owner's equity.*

Accounting Software Co.'s income statement for the first seven days of December is:

Accounting Software Co.
Income Statement
For the Seven Days Ended December 7, 2023

Revenues	
Service revenues	$ 900
Expenses	
Advertising expense	600
Temp service expense	120
Total expenses	720
Net income	$ 180

Sole Proprietorship Transaction #8.

On December 8, 2023, ASC received $500 from the clients it had billed on December 6, 2023. The collection of accounts receivables has this effect on the accounting equation:

Assets	=	Liabilities	+	Owner's Equity
+$500 -$500	=	No Effect	+	No Effect

The company's asset (cash) increases and another asset (accounts receivable) decreases. Liabilities and owner's equity are unaffected. (There are no revenues on this date. The revenues were recorded when they were earned on December 6.)

The general journal entry to record the increase in Cash, and the decrease in Accounts Receivable is:

Date	Account Name	Debit	Credit
Dec. 8, 2023	Cash	500	
	Accounts Receivable		500

The combined effect of the first eight transactions is shown here:

Transaction	Assets	=	Liabilities	+	Owner's Equity
1	+$10,000	=	No Effect	+	+$10,000
2	-$100	=	No Effect	+	-$100
3	+$5,000 -$5,000	=	No Effect	+	No Effect
4	+$7,000	=	+$7,000	+	No Effect
5	-$600	=	No Effect	+	-$600
6	+$900	=	No Effect	+	+$900
7	No Effect	=	+$120	+	-$120
8	+$500 -$500	=	No Effect	+	No Effect
Totals	$17,200	=	$7,120	+	$10,080

The totals for the first eight transactions indicate that the company had assets of $17,200. The creditors provided $7,120 and the owner provided $10,080. The accounting equation also indicates that the company's creditors had a claim of $7,120 and the owner had a residual claim of $10,080.

ASC's balance sheet as of midnight December 8, 2023 is:

Accounting Software Co.
Balance Sheet
December 8, 2023

ASSETS			LIABILITIES		
Cash	$	11,800	Notes Payable	$	7,000
Accounts receivable		400	Accounts Payable		120
Equipment		5,000	Total liabilities		7,120
			OWNER'S EQUITY		
			J. Ott, Capital		10,080*
Total assets	$	17,200	Total liabilities & owner's equity	$	17,200

Beginning owner's equity	$	0
+ Owner's investment	+	10,000
+ Net income**	+	180
Subtotal		10,180
- J. Ott, Drawing	-	100
Ending owner's equity, Dec. 8	$	10,080*

***The income statement (which reports the company's revenues, expenses, gains, and losses during a specified period of time) is a link between balance sheets. It provides the results of operations — an important part of the change in owner's equity.*

The income statement for ASC for the eight days ending on December 8 is shown here:

Accounting Software Co.
Income Statement
For the Eight Days Ended December 8, 2023

Revenues	
Service revenues	$ 900
Expenses	
Advertising expense	600
Temp service expense	120
Total expenses	720
Net income	$ 180

Calculating a Missing Amount within Owner's Equity

The income statement for the calendar year 2023 will explain a portion of the change in the owner's equity between the balance sheets of December 31, 2022 and December 31, 2023. The other items that account for the change in owner's equity are the owner's investments into the sole proprietorship and the owner's draws (or withdrawals). A recap of these changes is the *statement of changes in owner's equity*. Here is a statement of changes in owner's equity for the year 2023 assuming that the Accounting Software Co. had only the eight transactions that we covered earlier.

Accounting Software Co.
State of Changes in Owner's Equity
For the Year Ended December 31, 2023

Owner's equity at December 31, 2022	$ 0
Add: Owner's investment	10,000
Net income	180
Subtotal	10,180
Deduct: Owner's draws	100
Owner's equity at December 31, 2023	$ 10,080

Example of Calculating a Missing Amount

The format of the statement of changes in owner's equity can be used to determine an unkown component. For example, if the net income for the year 2023 is unknown, but you know the amount of the draws and the beginning and ending balances of owner's equity, you can calculate the net income. (This might be necessary if a company does not have complete records of its revenues and expenses.) Let's demonstrate this by using some new hypothetical amounts:

Assets as of December 31, 2022	$ 100,000
Liabilities as of December 31, 2022	40,000
Assets as of December 31, 2023	128,000
Liabilities as of December 31, 2023	34,000
Owner's investment in business in 2023	10,000
Owner's draws in 2023	40,000

Step 1.
The owner's equity at December 31, 2022 can be computed using the accounting equation:

Assets	=	Liabilities + Owner's Equity
$100,000	=	$40,000 + Owner's Equity
$100,000 - $40,000	=	Owner's Equity
$60,000	=	Owner's Equity at Dec. 31, 2022

Step 2.
The owner's equity at December 31, 2023 can be computed as well:

Assets	=	Liabilities + Owner's Equity
$128,000	=	$34,000 + Owner's Equity
$128,000 - $34,000	=	Owner's Equity
$94,000	=	Owner's Equity at Dec. 31, 2023

Step 3.
Insert into the statement of changes in owner's equity the information that was given and the amounts calculated in Step 1 and Step 2:

Owner's equity at December 31, 2022	**$ 60,000**	**(Step 1)**
Add: Owner's investment	+ 10,000	(given)
Net income	+ ?	
Subtotal	?	
Deduct: Owner's draws	- 40,000	(given)
Owner's equity at December 31, 2023	**$ 94,000**	**(Step 2)**

Step 4.
The "Subtotal" can be calculated by adding the last two numbers on the statement: $94,000 + $40,000 = $134,000. After this calculation we have:

Owner's equity at December 31, 2022	$ 60,000	(Step 1)
Add: Owner's investment	+ 10,000	(given)
Net income	+ ?	
Subtotal	**134,000**	**(Step 4)**
Deduct: Owner's draws	- 40,000	(given)
Owner's equity at December 31, 2023	$ 94,000	(Step 2)

Step 5.
Starting at the top of the statement we know that the owner's equity before the start of 2023 was $60,000 and in 2023 the owner invested an additional $10,000. As a result we have $70,000 before considering the amount of Net Income. We also know that after the amount of Net Income is added, the Subtotal has to be $134,000 (the Subtotal calculated in Step 4). The Net Income is the difference between $70,000 and $134,000. **Net income must have been $64,000.**

Step 6.
Insert the previously missing amount (in this case it is the $64,000 of net income) into the statement of changes in owner's equity and recheck the math:

Owner's equity at December 31, 2022	$ 60,000	(Step 1)
Add: Owner's investment	+ 10,000	(given)
Net income	**+ 64,000**	**(Step 5)**
Subtotal	134,000	(Step 4)
Deduct: Owner's draws	- 40,000	(given)
Owner's equity at December 31, 2023	$ 94,000	(Step 2)

Since the statement is mathematically correct, we are confident that the net income was $64,000.

You can reinforce what you have learned by using our Quiz on the Accounting Equation and our Crossword Puzzle on the Accounting Equation.

The remaining parts of this topic will illustrate similar transactions and their effect on the accounting equation when the company is a corporation instead of a sole proprietorship.

Accounting Equation for a Corporation: Transactions C1 – C2

The accounting equation (or basic accounting equation) for a corporation is:

Assets = Liabilities + Stockholders' Equity

Examples
In our examples below, we show how a given transaction affects the accounting equation for a corporation. We also show how the same transaction will be recorded in the company's general ledger accounts.

In addition, we show the effect of each transaction on the balance sheet and income statement. (Our examples assume that the accrual basis of accounting is being followed.)

In the examples that follow, we will use the following accounts:

- Cash
- Accounts Receivable
- Equipment
- Notes Payable
- Accounts Payable
- Common Stock
- Retained Earnings
- Treasury Stock
- Service Revenues
- Advertising Expense
- Temp Service Expense

(To view a more complete listing of accounts for recording transactions, visit our Explanation of Chart of Accounts.)

We also assume that the corporation is a Subchapter S corporation in order to avoid the income tax accounting that would occur with a "C" corporation. (In a Subchapter S corporation the owners are responsible for the income taxes instead of the corporation.)

Corporation Transaction C1.

Let's assume that members of the Ott family form a corporation called Accounting Software, Inc. (ASI). On December 1, 2023, several members of the Ott family invest a total of $10,000 to start ASI. In exchange, the corporation issues a total of 1,000 shares of common stock. (The stock has no par value and no stated value.) The effect on the corporation's accounting equation is:

Assets	=	Liabilities	+	Stockholders' Equity
+$10,000	=	No Effect	+	+$10,000

Since ASI's assets increase by $10,000 and stockholders' equity increases by the same amount the accounting equation is in balance.

The accounting equation tells us that ASI has assets of $10,000 and the source of those assets was the stockholders. Alternatively, the accounting equation tells us that the corporation has assets of $10,000 and the only claim to the assets is from the stockholders (owners).

This transaction is recorded in the asset account Cash and in the stockholders' equity account Common Stock. The general journal entry to record the transaction is:

Date	Account Name	Debit	Credit
Dec. 1, 2023	Cash	10,000	
	Common Stock		10,000

After the journal entry is recorded in the accounts, a balance sheet can be prepared to show ASI's financial position at the end of December 1, 2023:

Accounting Software, Inc.
Balance Sheet
December 1, 2023

ASSETS		LIABILITIES	
Cash	$ 10,000	Liabilities	$ 0
		STOCKHOLDERS' EQUITY	
		Common stock	10,000
Total assets	$ 10,000	Total liabilities & stockholders' equity	$ 10,000

The purpose of an income statement is to report revenues and expenses. Since ASI has not yet earned any revenues nor incurred any expenses, there are no amounts to be reported on an income statement.

Corporation Transaction C2.

On December 2, 2023, ASI purchases $100 of its stock from one of its stockholders. The stock will be held by the corporation as Treasury Stock. The effect of the accounting equation is:

Assets	=	Liabilities	+	Stockholders' Equity
-$100	=	No Effect	+	-$100

The purchase of its own stock for cash causes ASI's assets to decrease by $100 and its stockholders' equity to decrease by $100.

This transaction is recorded in the asset account Cash and in the stockholders' equity account Treasury Stock. The accounting entry in general journal form is:

Date	Account Name	Debit	Credit
Dec. 2, 2023	Treasury Stock	100	
	Cash		100

Since the transactions of December 1 and December 2 were in balance, the sum of both transactions should also be in balance:

Transaction	Assets	=	Liabilities	+	Stockholders' Equity
C1	+$10,000	=	No Effect	+	+$10,000
C2	-$100	=	No Effect	+	-$100
Totals	$9,900	=	$0	+	$9,900

The totals indicate that ASI has assets of $9,900 and the source of those assets is the stockholders. The accounting equation also shows that the corporation has assets of $9,900 and the only claim against the assets is the stockholders' claim.

The December 2 balance sheet will communicate the corporation's financial position as of midnight on December 2:

Accounting Software, Inc.
Balance Sheet
December 2, 2023

ASSETS			LIABILITIES		
Cash	$	9,900	Liabilities	$	0
			STOCKHOLDERS' EQUITY		
			Common stock		10,000
			Retained earnings		0*
			Less: Treasury stock		(100)
			Total stockholders' equity		9,900
Total assets	$	9,900	Total liabilities & stockholders' equity	$	9,900

Beginning retained earnings	$	0
+ Net income	+	0
Subtotal		0
- Dividends	-	0
Ending retained earnings, Dec. 2	$	0*

The purchase of a corporation's own stock will never result in an amount to be reported on the income statement.

Accounting Equation for a Corporation: Transactions C3 – C4

Corporation Transaction C3.

On December 3, 2023, ASI spends $5,000 of cash to purchase computer equipment for use in the business. The effect of this transaction on ASI's accounting equation is:

Assets	=	Liabilities	+	Stockholders' Equity
+$5,000 -$5,000	=	No Effect	+	No Effect

The accounting equation shows that one asset increases and one asset decreases. Since the amount of the increase is the same as the amount of the decrease, the accounting equation remains in balance.

This transaction is recorded in the asset accounts Equipment and Cash. The Equipment account increases by $5,000 and the Cash account decreases by $5,000.

The journal entry for this transaction is:

Date	Account Name	Debit	Credit
Dec. 3, 2023	Equipment	5,000	
	Cash		5,000

The effect on the accounting equation from the first three transactions is:

Transaction	Assets	=	Liabilities	+	Stockholders' Equity
C1	+$10,000	=	No Effect	+	+$10,000
C2	-$100	=	No Effect	+	-$100
C3	+$5,000 -$5,000	=	No Effect	+	No Effect
Totals	$9,900	=	$0	+	$9,900

The totals tell us that the corporation has assets of $9,900 and the source of those assets is the stockholders. The totals tell us that the company has assets of $9,900 and that the only claim against those assets is the stockholders' claim.

The balance sheet dated December 3, 2023, reflects the financial position of the corporation as of midnight on December 3:

Accounting Software, Inc.
Balance Sheet
December 3, 2023

ASSETS			LIABILITIES		
Cash	$	4,900	Liabilities	$	0
Equipment		5,000			
			STOCKHOLDERS' EQUITY		
			Common stock		10,000
			Retained earnings		0*
			Less: Treasury stock		(100)
			Total stockholders' equity		9,900
Total assets	$	9,900	Total liabilities & stockholders' equity	$	9,900

Beginning retained earnings	$	0
+ Net income	+	0
Subtotal		0
- Dividends	-	0
Ending retained earnings, Dec. 3	$	0*

The purchase of equipment is not an immediate expense. It will become part of depreciation expense only after the equipment is placed in service. We will assume that as of December 3 the equipment has not been placed into service. Therefore, there is no expense to be reported on the income statement for the period of December 1-3.

Corporation Transaction C4.

On December 4, 2023, ASI obtains $7,000 by borrowing money from its bank. The effect of this transaction on the accounting equation is:

Assets	=	Liabilities	+	Stockholders' Equity
+$7,000	=	+$7,000	+	No Effect

As you see, ACI's assets increase and its liabilities increase by $7,000.

This transaction is recorded in the asset account Cash and the liability account Notes Payable with the following journal entry:

Date	Account Name	Debit	Credit
Dec. 4, 2023	Cash	7,000	
	Notes Payable		7,000

The following shows the effects on the accounting equation from the first four transactions:

Transaction	Assets	=	Liabilities	+	Stockholders' Equity
C1	+$10,000	=	No Effect	+	+$10,000
C2	-$100	=	No Effect	+	-$100
C3	+$5,000 -$5,000	=	No Effect	+	No Effect
C4	+$7,000	=	+$7,000	+	No Effect
Totals	$16,900	=	$7,000	+	$9,900

These totals indicate that the transactions through December 4 result in assets of $16,900. There are two sources for those assets: the creditors provided $7,000 of assets, and the stockholders provided $9,900. You can also interpret the accounting equation to say that the corporation has assets of $16,900 and the creditors have a claim of $7,000. The residual or remainder of $9,900 is the stockholders' claim.

The balance sheet dated December 4 reports the corporation's financial position as of that date:

Accounting Software, Inc.
Balance Sheet
December 4, 2023

ASSETS			LIABILITIES		
Cash	$	11,900	Notes Payable	$	7,000
Equipment		5,000			
			STOCKHOLDERS' EQUITY		
			Common stock		10,000
			Retained earnings		0*
			Less: Treasury stock		(100)
			Total stockholders' equity		9,900
Total assets	$	16,900	Total liabilities & stockholders' equity	$	16,900

Beginning retained earnings	$	0
+ Net income	+	0
Subtotal		0
- Dividends	-	0
Ending retained earnings, Dec. 4	$	0*

The receipt of money from the bank loan is not revenue since ASI did not earn the money by providing services, investing, etc. As a result, there is no income statement effect from this or earlier transactions.

Accounting Equation for a Corporation: Transactions C5 – C6

Corporation Transaction C5.

On December 5, 2023, Accounting Software, Inc. pays $600 for ads that were run in recent days. The effect of the advertising transaction on the corporation's accounting equation is:

Assets	=	Liabilities	+	Stockholders' Equity
-$600	=	No Effect	+	-$600

Since ASI is paying $600, its assets decrease. The second effect is a $600 decrease in stockholders' equity, because the transaction involves an expense. (An expense is a cost that is used up or its future economic value cannot be measured.)

Although stockholders' equity decreases because of an expense, the transaction is not recorded directly into the retained earnings account. Instead, the amount is initially recorded in the expense account Advertising Expense and in the asset account Cash.

The journal entry for this transaction is:

Date	Account Name	Debit	Credit
Dec. 5, 2023	Advertising Expense	600	
	Cash		600

The combined effect of the first five transactions is:

Transaction	Assets	=	Liabilities	+	Stockholders' Equity
C1	+$10,000	=	No Effect	+	+$10,000
C2	-$100	=	No Effect	+	-$100
C3	+$5,000 -$5,000	=	No Effect	+	No Effect
C4	+$7,000	=	+$7,000	+	No Effect
C5	-$600	=	No Effect	+	-$600
Totals	$16,300	=	$7,000	+	$9,300

The totals now indicate that Accounting Software, Inc. has assets of $16,300. The creditors provided $7,000 and the stockholders provided $9,300. Viewed another way, the corporation has assets of $16,300 with the creditors having a claim of $7,000 and the stockholders having a residual claim of $9,300.

The balance sheet as of the end of December 5 is:

Accounting Software, Inc.
Balance Sheet
December 5, 2023

ASSETS		LIABILITIES	
Cash	$ 11,300	Notes Payable	$ 7,000
Equipment	5,000		
		STOCKHOLDERS' EQUITY	
		Common stock	10,000
		Retained earnings	(600)*
		Less: Treasury stock	(100)
		Total stockholders' equity	9,300
Total assets	$ 16,300	Total liabilities & stockholders' equity	$ 16,300

Beginning retained earnings	$ 0
+ Net income**	+ (600)
Subtotal	0
- Dividends	- 0
Ending retained earnings, Dec. 5	$ (600)*

***The income statement (which reports the company's revenues, expenses, gains, and losses for a specified time period) is a link between balance sheets. It provides the results of operations — an important part of the change in retained earnings and stockholders' equity.*

Since this transaction involves an expense, it will affect ASI's income statement. The corporation's income statement for the first five days of December is presented here:

Accounting Software, Inc.
Income Statement
For the Five Days Ended December 5, 2023

Revenues		$ 0
Expenses		
Advertising expense		600
Net income		$ (600)

Because we assumed that Accounting Services, Inc. is a Subchapter S corporation, income tax expense is not reported on the corporation's income statement.

Corporation Transaction C6.

On December 6, 2023, ASI performed consulting services for its clients. The clients were billed for the agreed upon amount of $900. The amounts are to be paid within 30 days. The effect on ASI's accounting equation is:

Assets	=	Liabilities	+	Stockholders' Equity
+$900	=	No Effect	+	+$900

Since ASI has performed the services, it has earned revenues and it has the right to receive $900 from its clients. This right means that assets increased. The earning of revenues also causes stockholders' equity to increase.

Although revenues cause stockholders' equity to increase, the revenue transaction is not recorded directly into a stockholders' equity account at this time. Rather, the amount earned is recorded in the revenue account Service Revenues. This will allow the corporation to report the amount in the revenue account on its income statement at any time. (After the year ends, the amount in the revenue accounts will be transferred to the retained earnings account.) The general journal entry for this transaction is:

Date	Account Name	Debit	Credit
Dec. 6, 2023	Accounts Receivable	900	
	Service Revenues		900

The effect on the accounting equation from the first six transactions can be viewed here:

Transaction	Assets	=	Liabilities	+	Stockholders' Equity
C1	+$10,000	=	No Effect	+	+$10,000
C2	-$100	=	No Effect	+	-$100
C3	+$5,000 -$5,000	=	No Effect	+	No Effect
C4	+$7,000	=	+$7,000	+	No Effect
C5	-$600	=	No Effect	+	-$600
C6	+$900	=	No Effect	+	+$900
Totals	$17,200	=	$7,000	+	$10,200

The totals tell us that at the end of December 6, the corporation had assets of $17,200. It also shows that $7,000 of the assets came from creditors and that $10,200 came from stockholders. The totals can also be viewed another way: ASI had assets of $17,200 with its creditors having a claim of $7,000 and the stockholders having a claim for the remainder or residual of $10,200.

The balance sheet as of midnight on December 6 is presented here:

Accounting Software, Inc.
Balance Sheet
December 6, 2023

ASSETS			LIABILITIES		
Cash	$	11,300	Notes Payable	$	7,000
Accounts receivable		900			
Equipment		5,000	**STOCKHOLDERS' EQUITY**		
			Common stock		10,000
			Retained earnings		300*
			Less: Treasury stock		(100)
			Total stockholders' equity		10,200
Total assets	$	17,200	Total liabilities & stockholders' equity	$	17,200

Beginning retained earnings	$	0
+ Net income**	+	300
Subtotal		300
- Dividends	-	0
Ending retained earnings, Dec. 6	$	300*

***The income statement (which reports the company's revenues, expenses, gains, and losses for a specified time period) is a link between balance sheets. It provides the results of operations — an important part of the change in retained earnings and stockholders' equity.*

The income statement for Accounting Software, Inc. for the period of December 1 through December 6 is shown here:

Accounting Software, Inc.
Income Statement
For the Six Days Ended December 6, 2023

Revenues		
Service revenues	$	900
Expenses		
Advertising expense		600
Net income	$	300

Accounting Equation for a Corporation: Transactions C7 – C8

Corporation Transaction C7.

On December 7, 2023, ASI uses a temporary help service for 6 hours at a cost of $20 per hour. ASI records the invoice immediately, but it will pay the $120 when it is due in 10 days. This transaction has the following effect on the accounting equation:

Assets	=	Liabilities	+	Stockholders' Equity
No Effect	=	+$120	+	-$120

The accounting equation shows that ASI's liabilities increase by $120 and the expense causes stockholders' equity to decrease by $120.

The liability will be recorded in Accounts Payable and the expense will be recorded in Temp Service Expense. The general journal entry for utilizing the temp service is:

Date	Account Name	Debit	Credit
Dec. 7, 2023	Temp Service Expense	120	
	Accounts Payable		120

The effect of the first seven transactions on the accounting equation can be viewed here:

Transaction	Assets	=	Liabilities	+	Stockholders' Equity
C1	+$10,000	=	No Effect	+	+$10,000
C2	-$100	=	No Effect	+	-$100
C3	+$5,000 -$5,000	=	No Effect	+	No Effect
C4	+$7,000	=	+$7,000	+	No Effect
C5	-$600	=	No Effect	+	-$600
C6	+$900	=	No Effect	+	+$900
C7	No Effect	=	+$120	+	-$120
Totals	$17,200	=	$7,120	+	$10,080

The totals show us that the corporation had assets of $17,200 and the sources were the creditors with $7,120 and the stockholders with $10,080. The accounting equation totals also reveal that the corporation's creditors had a claim of $7,120 and the stockholders had a claim for the remaining $10,080.

The financial position of ASI as of midnight of December 7 is presented in the following balance sheet:

Accounting Software, Inc.
Balance Sheet
December 7, 2023

ASSETS			LIABILITIES		
Cash	$	11,300	Notes Payable	$	7,000
Accounts receivable		900	Accounts payable		120
Equipment		5,000	Total liabilities		7,120
			STOCKHOLDERS' EQUITY		
			Common stock		10,000
			Retained earnings		180*
			Less: Treasury stock		(100)
			Total stockholders' equity		10,080
Total assets	$	17,200	Total liabilities & stockholders' equity	$	17,200

Beginning retained earnings	$	0
+ Net income**	+	180
Subtotal		180
- Dividends	-	0
Ending retained earnings, Dec. 7	$	180*

***The income statement (which reports the corporations' revenues, expenses, gains, and losses for a specified time period) is a link between balance sheets. It provides the results of operations — an important part of the change in stockholders' equity.*

The income statement for the first seven days of December is shown here:

Accounting Software, Inc.
Income Statement
For the Seven Days Ended December 7, 2023

Revenues	
Service revenues	$ 900
Expenses	
Advertising expense	600
Temp service expense	120
Total expenses	720
Net income	$ 180

Corporation Transaction C8.

On December 8, 2023, ASI received $500 from the clients it had billed on December 6. The effect on the accounting equation is:

Assets	=	Liabilities	+	Stockholders' Equity
+$500 -$500	=	No Effect	+	No Effect

The corporation's cash increases and one of its other assets (accounts receivable) decreases. Liabilities and stockholders' equity are unaffected. (There are no revenues on this date. The revenues were recorded when they were earned on December 6.)

The general journal entry to record the increase in Cash and the decrease in Accounts Receivable is:

Date	Account Name	Debit	Credit
Dec. 8, 2023	Cash	500	
	Accounts Receivable		500

The effect on the accounting equation from the transactions through December 8 is shown here:

Transaction	**Assets**	**=**	**Liabilities**	**+**	**Stockholders' Equity**
C1	+$10,000	=	No Effect	+	+$10,000
C2	-$100	=	No Effect	+	-$100
C3	+$5,000 -$5,000	=	No Effect	+	No Effect
C4	+$7,000	=	+$7,000	+	No Effect
C5	-$600	=	No Effect	+	-$600
C6	+$900	=	No Effect	+	+$900
C7	No Effect	=	+$120	+	-$120
C8	+$500 -$500	=	No Effect	+	No Effect
Totals	$17,200	=	$7,120	+	$10,080

The totals after the first eight transactions indicate that the corporation had assets of $17,200. The creditors had provided $7,120 and the company's stockholders provided $10,080. The accounting equation also indicates that the company's creditors had a claim of $7,120 and the stockholders had a residual claim of $10,080.

ASI's balance sheet as of midnight of December 8 is shown here:

Accounting Software, Inc.
Balance Sheet
December 8, 2023

ASSETS			LIABILITIES		
Cash	$	11,800	Notes Payable	$	7,000
Accounts receivable		400	Accounts payable		120
Equipment		5,000	Total liabilities		7,120
			STOCKHOLDERS' EQUITY		
			Common stock		10,000
			Retained earnings		180*
			Less: Treasury stock		(100)
			Total stockholders' equity		10,080
Total assets	$	17,200	Total liabilities & stockholders' equity	$	17,200

Beginning retained earnings	$	0
+ Net income**	+	180
Subtotal		180
- Dividends	-	0
Ending retained earnings, Dec. 8	$	180*

***The income statement (which reports the corporation's revenues, expenses, gains, and losses for a specified time period) is a link between balance sheets. It provides the results of operations — an important part of the change in stockholders' equity.*

The income statement for ASI's first eight days of operations is shown here:

Accounting Software, Inc.
Income Statement
For the Eight Days Ended December 8, 2023

Revenues	
Service revenues	$ 900
Expenses	
Advertising expense	600
Temp service expense	120
Total expenses	720
Net income	$ 180

Expanded Accounting Equation for a Sole Proprietorship

The owner's equity in the basic accounting equation is sometimes expanded to show the accounts that make up owner's equity: Owner's Capital, Revenues, Expenses, and Owner's Draws.

Instead of the accounting equation, Assets = Liabilities + Owner's Equity, the *expanded accounting equation* is:

Assets = Liabilities + Owner's Capital + Revenues - Expenses - Owner's Draws

The eight transactions that we had listed under the basic accounting equation for a sole proprietorship **Transaction 8 (page 21)** are shown in the following expanded accounting equation:

	Assets	=	Liabilities	+	Owner's Capital	+	Revenues	-	Expenses	-	Owner's Draws
1	+ 10,000	=		+	+ 10,000						
2	- 100	=								-	+ 100
3	+ 5,000 - 5,000	=									
4	+ 7,000	=	+ 7,000								
5	- 600	=						-	+ 600		
6	+ 900	=				+	+ 900				
7		=	+ 120					-	+ 120		
8	+ 500 - 500	=									
T	17,200	=	7,120	+	10,000	+	900	-	720	-	100

With the expanded accounting equation, you can easily see the company's net income:

Revenues	$ 900
- Expenses	720
Net income	$ 180

Expanded Accounting Equation for a Corporation

The stockholders' equity part of the basic accounting equation can also be expanded to show the accounts that make up stockholders' equity: Paid-in Capital, Revenues, Expenses, Dividends, and Treasury Stock.

Instead of the accounting equation, Assets = Liabilities + Stockholders' Equity, the expanded accounting equation is:

Assets = Liabilities + Paid-in Capital + Revenues - Expenses - Dividends - Treasury Stock

The eight transactions that we had listed under the basic accounting equation for a corporation **Transaction C8 (page 44)** are shown in the following expanded accounting equation:

	Assets	=	Liabilities	+	Paid-in Capital	+	Revenues	-	Expenses	-	Dividends & Treasury Stock
1	+ 10,000	=		+	+ 10,000						
2	- 100	=								-	+ 100
3	+ 5,000 - 5,000	=									
4	+ 7,000	=	+ 7,000								
5	- 600	=						-	+ 600		
6	+ 900	=				+	+ 900				
7		=	+ 120					-	+ 120		
8	+ 500 - 500	=									
T	17,200	=	7,120	+	10,000	+	900	-	720	-	100

With the expanded accounting equation, you can easily see the corporation's net income:

Revenues	$	900
- Expenses		720
Net income	$	180

Conclusion

You should consider our materials to be an *introduction* to selected accounting and bookkeeping topics, and realize that some complexities (including differences between financial statement reporting and income tax reporting) are not presented. Therefore, always consult with accounting and tax professionals for assistance with your specific circumstances.