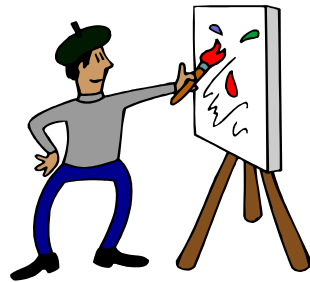


## 6 Double-Entry Accounting

Financial statements are summaries of the individual transactions that take place throughout the course of doing business. *Double-Entry* accounting is a system for recording transactions based on recording increases and decreases in accounts so that debits always equal credits.

### 6.1 The Accounting Equation

A Franciscan monk, Luca Pacioli, invented the basic double-entry system of accounting that we use today. Pacioli, a mathematician, was a close friend of Leonardo da Vinci. The two worked together to develop a mathematics book--Pacioli wrote the text and da Vinci drew the pictures!



The double-entry system of accounting used today, was developed by a Franciscan monk back in the late 1400's!

The double-entry system is unique because it records financial activities in such a way that maintains an equilibrium within the records. Because businesses can be involved in thousands of complex transactions on a daily basis, this balancing effect is a valuable control, increasing the accuracy of the financial records.



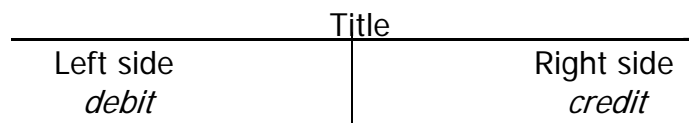
The basic rule underlying the double-entry system of accounting is as follows:

**Rule: DEBITS = CREDITS**

Each business transaction can be expressed as a series of debit and credit entries to the accounts in the chart of accounts list. The end result of recording a single transaction in an accounting system is that the total of all the debit entries equals the total of all of the credits.

## 6.2 Defining Debits & Credits

What exactly are debits and credits? Each account in the ledger has essentially three parts. An account is made up of a title, and a left and right side, which are used to document the increases and decreases associated with recording business transactions. The following is an account in its simplest form, commonly called a *T-account* due to the resemblance to the letter 'T'.



Regardless of the account title, the location of debits and credits remains constant:

- ◆ **Debit:** The left side of an account.
- ◆ **Credit:** The right side of an account.

The *balance* in a ledger account is the difference between the left side (debit) total and the right side (credit) total. Abbreviations for debits and credits are, *Dr.* and *Cr.*

## 6.3 Normal Account Balances

While the number of individual accounts will vary from business to business, all enterprises will have the same *five* categories of accounts. All accounts in a ledger will fall into one of the following categories:

	ASSET	LIABILITY	EQUITY	INCOME	EXPENSE
Examples of Accounts:	Truck Building Equipment Receivables Cash in Bank	Payables Bank overdraft Mortgage	Common Stock Current Earnings Capital	Sales Fees Received Commissions	Payroll Rent Advertising Insurance Purchases
Normal Account Balance: (Method of <u>Increasing</u> )	<b>Debit</b>	<b>Credit</b>	<b>Credit</b>	<b>Credit</b>	<b>Debit</b>

In order to advance any further into the principles of accounting, it is imperative that the *normal balance*, expressed as either a debit or credit, of each account category be memorized!



The one thing every accounting student **MUST** know is the normal balance (debit or credit) for each of the five major account categories.



Test yourself until you've got the normal balances for each of the five categories memorized! Or, just remember which ones are debits, then you will *know* that the rest must be credits!

## 6.4 Increase vs. Decrease

As transactions are recorded, account balances are increased or decreased. Based on an account's category (asset, liability, equity, income, or expense), a debit or credit will have the following effect:

Type of Account	Increase	Decrease
Asset	Dr.	Cr.
Liability	Cr.	Dr.
Equity	Cr.	Dr.
Income	Cr.	Dr.
Expense	Dr.	Cr.



The notion that credits are "good" and debits are "bad" is only in the eyes of the beholder, and is NOT based on fact!

**Caution:** Do **not** be fooled by the notion that credits are "good" and debits are "bad". This notion relies on one's perspective, not the rules of accounting!

## 6.5 Recording Business Transactions

An enterprise is not static; financial transactions occur continuously throughout the life of the business. Merchandise is sold, services are rendered, items are manufactured for resale, expenses are incurred, assets are bought and sold, and debt is paid off.

Whenever a transaction is recorded, a minimum of two accounts is **always** affected. The effects are expressed using debits and credits. The following are examples of how a bookkeeper would record various transactions.

	Debit	Credit
◆ Money is received for goods sold.	Bank	Sales
◆ A utility bill is paid.	Utilities	Bank
◆ A new truck is purchased on credit.	Vehicles	Loan Payable
◆ The owner puts in money.	Bank	Owners Equity
◆ Payroll taxes are paid.	Payroll Liability	Bank
◆ Owner pays a personal bill through the business bank account.	Drawings	Bank

## 6.6 Using T-Accounts

T-accounts are frequently used to simplify the thought process behind recording complex transactions. Using T-accounts, the accountant or bookkeeper can analyze the effects to individual accounts and the impact the transactions have on account balances. Taking the simple examples from the previous section, let's record each using real dollars and T-accounts. What is the end result of our cash balance?

**Transaction 1:** \$280 is received for merchandise sold.

**Transaction 2:** A \$65 utility bill is paid.

**Transaction 3:** A truck costing \$10,000 is purchased on credit.

**Transaction 4:** The owner deposits a \$1000 personal check into the business bank account.

**Transaction 5:** A \$500 payroll tax liability is paid.

**Transaction 6:** The owner buys \$35 in groceries with a business check.



### Quick Quiz:

Post these transactions using T-accounts:

- You receive a telephone bill.
- You pay the telephone bill.
- You decide to write off a customer's account balance.

<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td colspan="2" style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">Cash</td></tr> <tr><td style="width: 50%; text-align: right;">280 (1)</td><td style="width: 50%; text-align: left;">(2) 65</td></tr> <tr><td style="text-align: right;">1000 (4)</td><td style="text-align: left;">(5) 500</td></tr> <tr><td></td><td style="text-align: left;">(6) 35</td></tr> </table>	Cash		280 (1)	(2) 65	1000 (4)	(5) 500		(6) 35	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td colspan="2" style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">Sales</td></tr> <tr><td></td><td style="text-align: right;">(1) 280</td></tr> </table> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td colspan="2" style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">Utility Expense</td></tr> <tr><td style="width: 50%; text-align: right;">65 (2)</td><td style="width: 50%;"></td></tr> </table> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td colspan="2" style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">Loan Payable</td></tr> <tr><td></td><td style="text-align: right;">(3) 10,000</td></tr> </table> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td colspan="2" style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">Owner Capital</td></tr> <tr><td></td><td style="text-align: right;">(4) 1000</td></tr> </table> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td colspan="2" style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">Owner Draw</td></tr> <tr><td style="width: 50%; text-align: right;">35 (6)</td><td style="width: 50%;"></td></tr> </table>	Sales			(1) 280	Utility Expense		65 (2)		Loan Payable			(3) 10,000	Owner Capital			(4) 1000	Owner Draw		35 (6)	
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As each transaction is posted, with the exception of entry (3), the cash account balance goes up and down accordingly. The end result in this example is a debit (positive) cash balance of \$680.