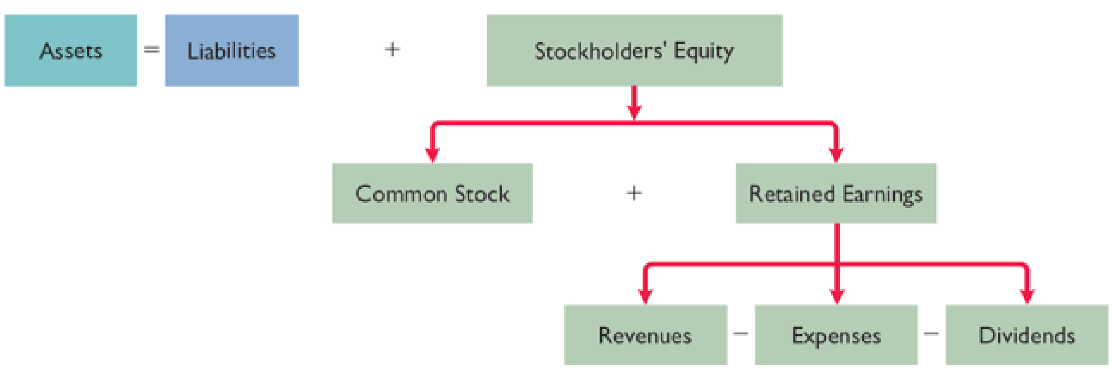
THE ACCOUNTING INFORMATION SYSTEM

LO 1: Analyze the effect of business transactions on the basic accounting equation.

- **Accounting Information System:** system of **collecting**, **processing** transaction data, and **communicating** financial information to decision makers.
  - Rely on the **accounting process.**
    1. Analyze business transactions
    2. Journalize
    3. Post
    4. Trial Balance
    5. Adjusting Entries
    6. Adjusted Trial Balance
    7. Financial Statements
    8. Closing Entries
    9. Post-Closing Trial Balance

- **Transactions:** economic events that require recording in the financial statements.
  - Assets, liabilities, or stockholders' equity items change as a result of some economic event.
  - **Dual effect** on the accounting equation **(Assets = Liabilities + Stockholders' Equity)**
  - Not all activities represent transactions.
  - Ex: The payment of rent, purchase of a building, and sale of goods all represented transactions that need to be recorded.

ANALYZING TRANSACTIONS



When analyzing transactions keep in mind……..

- **The accounting equation MUST ALWAYS BALANCE.**
- **The cause of each change in stockholders' equity must be indicated.**

Example Business Transactions (From Smith Inc.):
Keep A = L + SE in Balance

1. **Smith Inc. receives $30,000 cash from investors in exchange for common stock.**

Assets go UP **(Cash goes UP)**
Stockholders' Equity goes UP **(Common Stock goes UP)**

				Assets =	Liabilities +	Stockholders' Equity		
Transaction	**Cash**	**Supplies**	**Accounts Recievable**	**Equipment**	Accounts Payable +	Common Stock	Revenues -	Expenses
1	$30,000					$30,000		

2. **Smith Inc. pays $4,000 for supplies.**

Assets go UP **(Supplies goes UP)**
Assets go DOWN **(Cash goes DOWN)**

				Assets =	Liabilities +	Stockholders' Equity		
Transaction	**Cash**	**Supplies**	**Accounts Recievable**	**Equipment**	Accounts Payable +	Common Stock	Revenues -	Expenses
1	$30,000					$30,000		
2	($4,000)	$4,000						

3. **Smith Inc. provides consulting services and immediately collects $4,200 cash.**

Assets go UP **(Cash goes UP)**
Stockholders' Equity goes UP **(Revenue goes UP)**

				Assets =	Liabilities +	Stockholders' Equity		
Transaction	**Cash**	**Supplies**	**Accounts Recievable**	**Equipment**	Accounts Payable +	Common Stock	Revenues -	Expenses
1	$30,000					$30,000		
2	($4,000)	$4,000						
3	$4,200						$4,200	

4. **Smith Inc. pays $1,000 cash for employee salary.**

Stockholders' Equity goes DOWN **(Expenses go UP)**
Assets go DOWN **(Cash goes DOWN)**

				Assets =	Liabilities +	Stockholders' Equity		
Transaction	**Cash**	**Supplies**	**Accounts Recievable**	**Equipment**	Accounts Payable +	Common Stock	Revenues -	Expenses
1	$30,000					$30,000		
2	($4,000)	$4,000						
3	$4,200						$4,200	
4	($1,000)							$1,000

5. **Smith Inc. provides services of $2,000 and rents its test facilities for $500 to Joe's Raviolis. Joe is billed $2,500 for these services and has not paid yet.**

Assets go UP **(Accounts Receivable goes UP)**
Stockholders' Equity goes UP **(Revenue goes UP)**

				Assets =	Liabilities +	Stockholders' Equity		
Transaction	**Cash**	**Supplies**	**Accounts Recievable**	**Equipment**	Accounts Payable +	Common Stock	Revenues -	Expenses
1	$30,000					$30,000		
2	($4,000)	$4,000						
3	$4,200						$4,200	
4	($1,000)							$1,000
5			$2,500				$2,500	

6. **Smith Inc. bought $8,000 of equipment on credit from Big Al's Machine World.**

Assets go UP **(Equipment goes UP)**
Liabilities go UP **(Accounts Payable goes UP)**

				Assets =	Liabilities +	Stockholders' Equity		
Transaction	**Cash**	**Supplies**	**Accounts Recievable**	**Equipment**	Accounts Payable +	Common Stock	Revenues -	Expenses
1	$30,000					$30,000		
2	($4,000)	$4,000						
3	$4,200						$4,200	
4	($1,000)							$1,000
5			$2,500				$2,500	
6				$8,000	$8,000			

7. **Smith Inc. pays BIG Al's Machine World $3,000 cash towards the payable from transaction 6.**

Liabilities go DOWN **(Accounts Payable goes DOWN)**
Assets go DOWN **(Cash goes DOWN)**

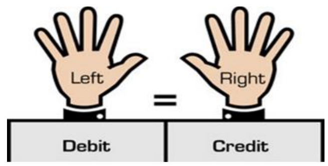
				Assets =	Liabilities +	Stockholders' Equity		
Transaction	**Cash**	**Supplies**	**Accounts Recievable**	**Equipment**	Accounts Payable +	Common Stock	Revenues -	Expenses
1	$30,000					$30,000		
2	($4,000)	$4,000						
3	$4,200						$4,200	
4	($1,000)							$1,000
5			$2,500				$2,500	
6				$8,000	$8,000			
7	($3,000)				($3,000)			
	$26,200	$4,000	$2,500	$8,000	$5,000	$30,000	$6,700	($1,000)

$40,700	**$40,700**

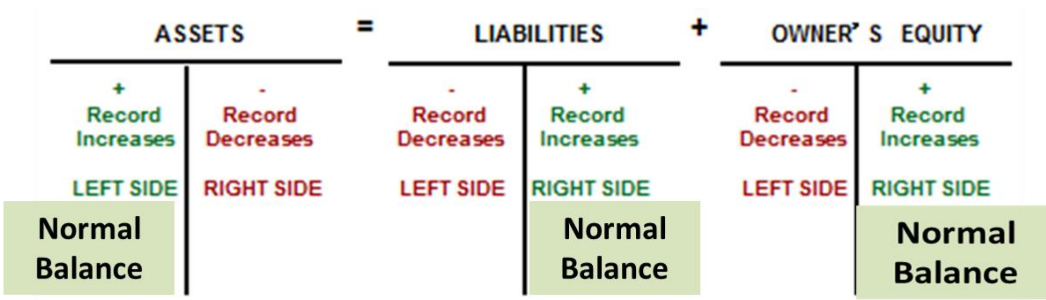
LO 2: Explain how accounts, debits, and credits are used to record business transactions.

- **Account:** an individual accounting record of increases and decreases in a specific asset, liability, stockholders' equity, revenue, or expense item.
  - **Has 3 Parts:** 1) Title of an account 2) A left or debit side 3) A right or credit side
- Accountants use **"T accounts"** to analyze transactions. A "T account" consists of a vertical line and a horizontal line that resembles the letter T. "T accounts" are helpful when analyzing transactions.
- Accounts used in recording transactions have a normal **DEBIT** or **CREDIT** balance.

Debit** means **Left** and ***Credit* means *Right

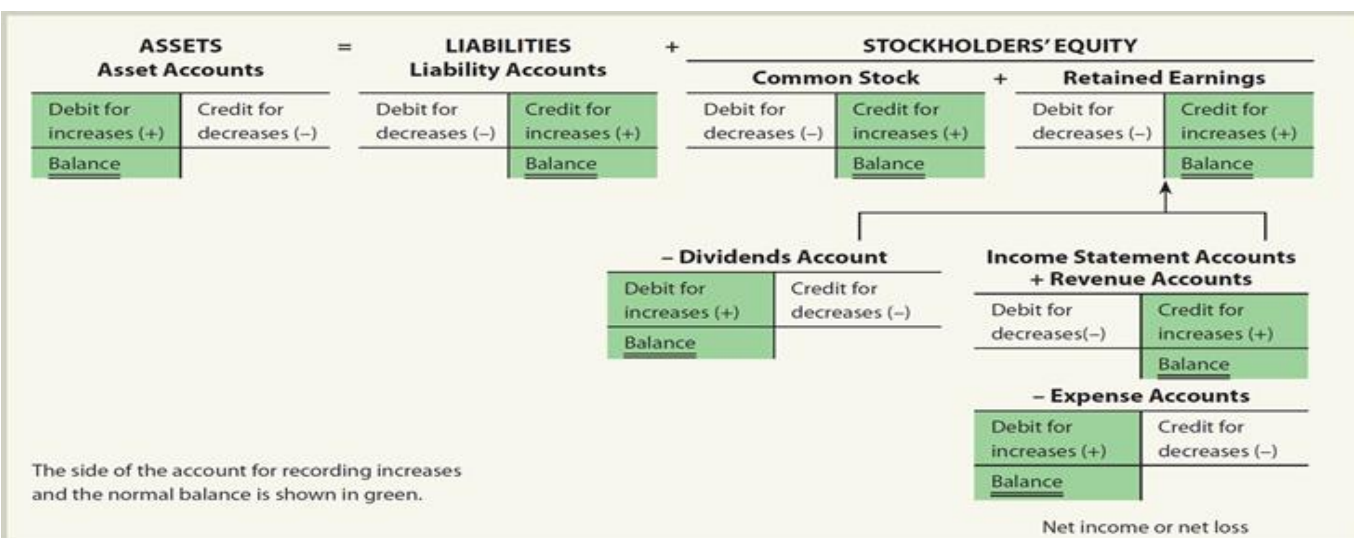


- **Normal Balance**: The increase side of the account.



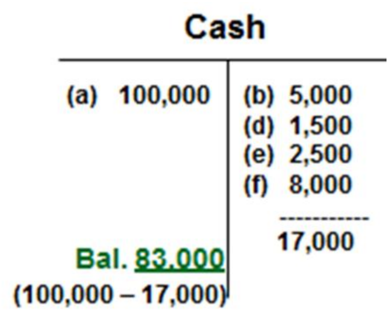
***** An account with a normal DEBIT balance means that we INCREASE that account with a DEBIT. (and decrease the account with the opposite…a credit.)

***** An account with a normal CREDIT balance means that we INCREASE that account with a CREDIT. (and decrease the account with the opposite…a debit)



- An **account balance** is the difference between the amounts recorded on the two sides of an account.

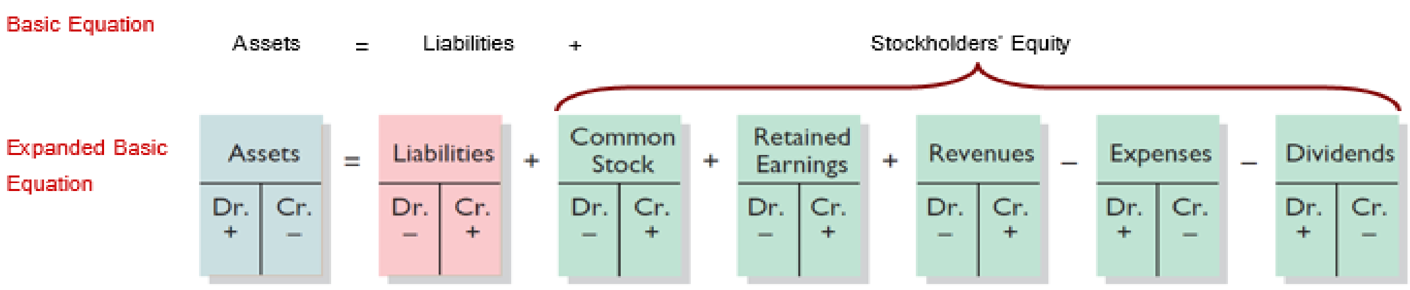
IF	THEN
The total on the right side is larger than the total on the left side,	The balance is recorded on the **RIGHT SIDE**.
The total on the left side is larger,	The balance is recorded on the **LEFT SIDE**.
An account shows only one amount,	That amount is the balance.
An account contains entries on only one side,	The total of those entries is the account balance.



- If Debits are **GREATER** than Credits, the account will have a **DEBIT BALANCE**.
- If Credits are **GREATER** than Debits, the account will have a **CREDIT BALANCE**.
- The Cash T-Account above has a **debit balance** of **$83,000**.

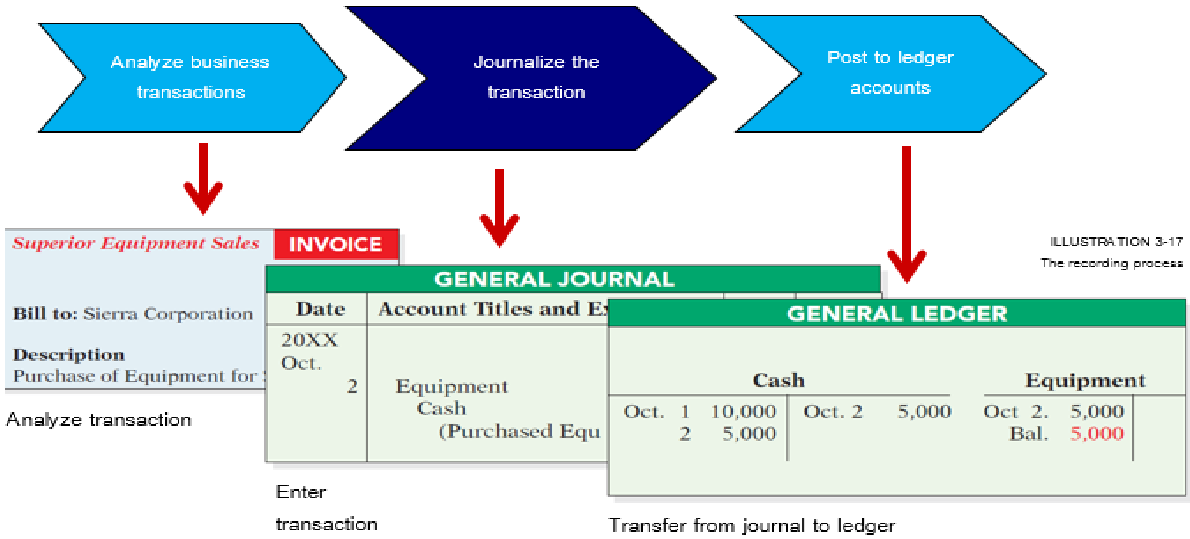
Double-Entry Accounting

- At least 2 accounts are involved, with at least one debit and one credit.
- DEBITS MUST EQUAL CREDITS.
- The accounting equation must NOT be violated. (Assets = Liabilities + Stockholders' Equity)



LO 3: Indicate how a journal is used in the recording process.

The Recording Process



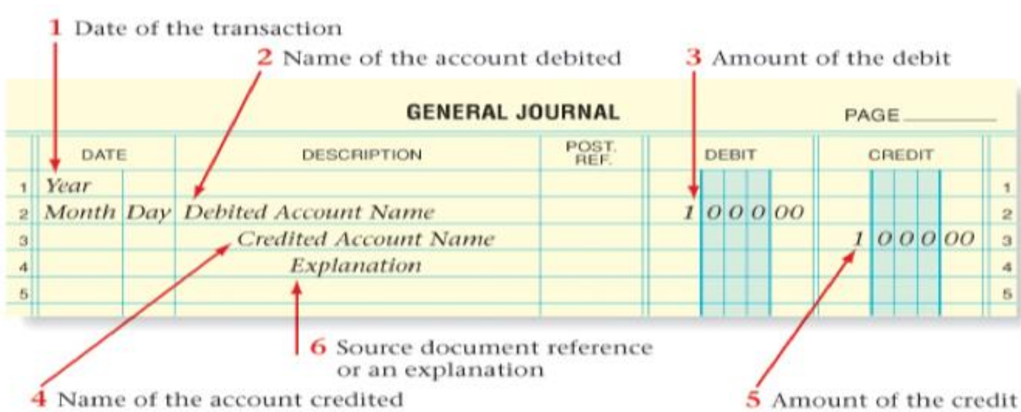
The Journal

- Transactions recorded in chronological order in a journal before they are transferred to the accounts.

  Contributions to the recording process:

  1. Discloses the complete effects of a transaction.
  2. Provides a chronological record of transactions.
  3. Helps to prevent or locate errors because the debit and credit amounts can be easily compared.

- A complete journal entry consists of
  1. The date of a transaction.
  2. The accounts and amounts to be debited and credited.
  3. A brief explanation of the transaction.



- **Example**: Entering transaction data into a journal. **(From Smith Inc. (cont.)):**

1. On Jan. 1, Smith Inc. receives $30,000 cash from investors in exchange for common stock.

General Journal				
Date	**Account Title**	**Ref.**	**Debit**	**Credit**
Jan. 1	Cash		30,000	
	Common Stock			30,000

2. On Jan. 10, Smith Inc. pays $4,000 for supplies.

General Journal				
Date	**Account Title**	**Ref.**	**Debit**	**Credit**
Jan. 10	Supplies		4,000	
	Cash			4,000

3. On Jan. 15, Smith Inc. provides consulting services and immediately collects $4,200 cash.

General Journal				
Date	**Account Title**	**Ref.**	**Debit**	**Credit**
Jan. 15	Cash		4,200	
	Service Revenue			4,200

4. On Jan. 20, Smith Inc. pays $1,000 cash for employee salary.

General Journal				
Date	**Account Title**	**Ref.**	**Debit**	**Credit**
Jan. 20	Salaries Expense		1,000	
	Cash			1,000

5. On Jan. 21, Smith Inc. provides services of $2,000 and rents its test facilities for $500 to Joe's Raviolis. Joe is billed $2,500 for these services and has not paid yet.

General Journal				
Date	**Account Title**	**Ref.**	**Debit**	**Credit**
Jan. 21	Accounts Recievable		2,500	
	Service Revenue			2,000
	Rent Revenue			500

6. On Jan. 22, Smith Inc. bought $8,000 of equipment on credit from Big Al's Machine World.

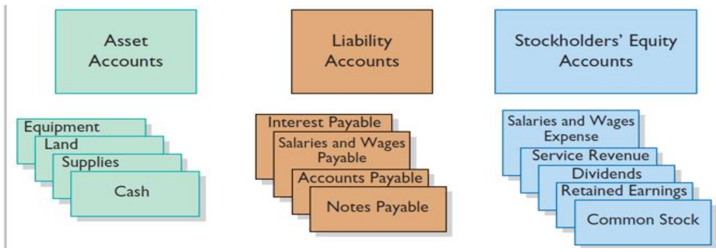
General Journal				
Date	**Account Title**	**Ref.**	**Debit**	**Credit**
Jan. 22	Equipment		8,000	
	Accounts Payable			8,000

7. On Jan. 29, Smith Inc. pays BIG Al's Machine World $3,000 cash towards the payable from transaction 6.

General Journal				
Date	**Account Title**	**Ref.**	**Debit**	**Credit**
Jan. 29	Accounts Payable		3,000	
	Cash			3,000

LO 4: Explain a ledger and posting help in the recording process.

- **Ledger:** comprised of the entire group of accounts maintained by a company.
- **General Ledger:** contains all the asset, liability, stockholders' equity, revenue, and expense accounts.

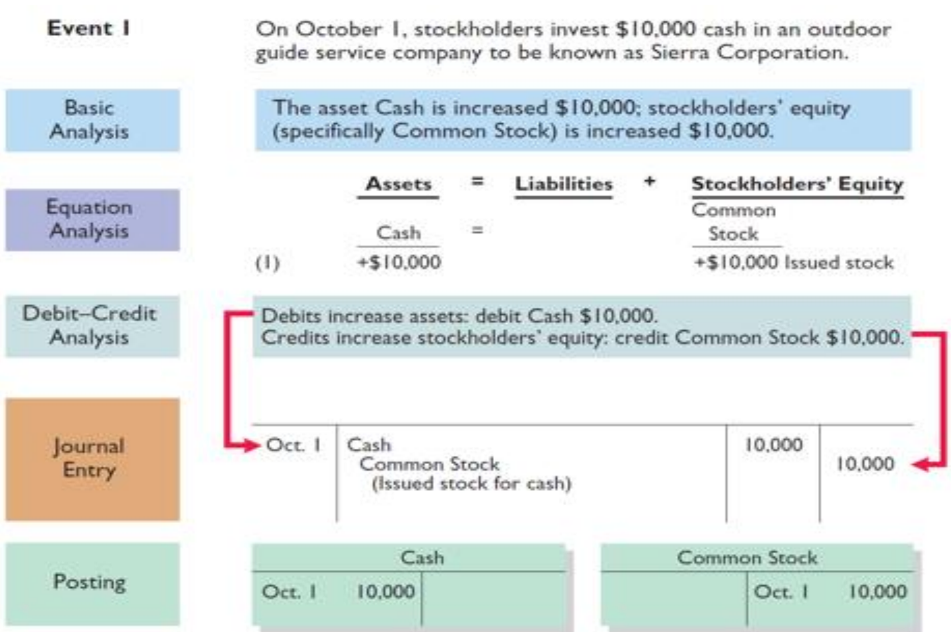


- **Chart of Accounts:** listing of accounts used by a company to record a transaction.

Assets	Liabilities	Stockholders' Equity	Revenues	Expenses
Cash	Notes Payable	Common Stock	Service Revenue	Salaries and Wages Expense
Accounts Receivable	Accounts Payable	Retained Earnings		
Supplies	Interest Payable	Dividends		Supplies Expense
Prepaid Insurance	Unearned Service Revenue	Income Summary		Rent Expense
Equipment	Salaries and Wages Payable			Insurance Expense
Accumulated Depreciation—Equipment				Interest Expense
				Depreciation Expense

- **Posting:** the process of transferring journal entry amounts to ledger accounts. Think about the ledger accounts as individual **"T-accounts"** that keep track of the current balance for each account listed in a company's chart of accounts.

- **Example of the recording process can be found below.**



- **Example**: **Smith Inc. (cont.).** The journal entries for these transactions were recording on **page 7 of the review**. The chart below shows each account and their ending balances after all of the transactions have taken place.

1. On Jan. 1, Smith Inc. receives $30,000 cash from investors in exchange for common stock.
2. On Jan. 10, Smith Inc. pays $4,000 for supplies.
3. On Jan. 15, Smith Inc. provides consulting services and immediately collects $4,200 cash.
4. On Jan. 20, Smith Inc. pays $1,000 cash for employee salary.
5. On Jan. 21, Smith Inc. provides services of $2,000 and rents its test facilities for $500 to Joe's Raviolis. Joe is billed $2,500 for these services and has not paid yet.
6. On Jan. 22, Smith Inc. bought $8,000 of equipment on credit from Big Al's Machine World.
7. On Jan. 29, Smith Inc. pays BIG Al's Machine World $3,000 cash towards the payable from ***TRANSACTION 6.***

Assets = Liabilities + Stockholders' Equity

Assets

	Cash	
	1) 30,000	2) 4,000
	3) 4,200	4) 1,000
		7) 3,000
End. Bal.	**$ 26,200**	

	Supplies	
	2) 4,000	
End. Bal.	**$ 4,000**	

	Accounts Recievable	
	5) 2,500	
End. Bal.	**$ 2,500**	

	Equipment	
	6) 8,000	
End. Bal.	**$ 8,000**	

Total Assets = $ 40,700

Liabilities

Accounts Payable		
7) 3,000	6) 8,000	
	$ 5,000	**End. Bal**

Stockholders' Equity

Common Stock		
	1) 30,000	
	$ 30,000	**End. Bal**

Service Revenue		
	3) 4,200	
	5) 2,000	
	$ 6,200	**End. Bal**

Rent Revenue		
	5) 500	
	$ 500	**End. Bal**

Salaries Expense		
4) 1,000		
$ 1,000		**End. Bal**

Total Liabilities and Stockholders' Equity = $ 40,700

LO 5: Prepare a trial balance.

- **Trial Balance:** list of accounts and their balances at a given time.
  1. Accounts are listed in the order in which they appear in the ledger.
     - **Assets**
     - **Liabilities**
     - **Stockholders' Equity**
     - **Revenues**
     - **Expenses**
  2. Purpose is to PROVE **DEBITS = CREDITS**.
  3. Can be used to uncover errors in journalizing and posting.
  4. Useful in preparation of financial statements.

SIERRA CORPORATION
Trial Balance
October 31, 2017

	Debit	Credit
Cash	$ 15,200	
Supplies	2,500	
Prepaid Insurance	600	
Equipment	5,000	
Notes Payable		$ 5,000
Accounts Payable		2,500
Unearned Service Revenue		1,200
Common Stock		10,000
Dividends	500	
Service Revenue		10,000
Salaries and Wages Expense	4,000	
Rent Expense	900	
	$28,700	$28,700

Limitations of a Trial Balance

The trial balance may balance even when

1. A transaction is not journalized,.
2. A correct journal entry is not posted.
3. A journal entry is posted twice.
4. Incorrect accounts are used in journalizing or posting.
5. Offsetting errors are made in recording the amount of a transaction.

<u>Example</u>: **From Smith Inc. (cont.).** The trial balance is formed by taking the **ENDING** balances of **ALL** the accounts in a company's ledger. The example below which is a continuance from **page 9** demonstrates how Smith Inc. prepared their trial balance by taking the ending balances from each account in the ledger.

Assets =	**Liabilities**	**+ Stockholders' Equity**

Cash

	Debit	Credit
	1) 30,000	2) 4,000
	3) 4,200	4) 1,000
		7) 3,000
End. Bal.	$ 26,200	

Supplies

	Debit	Credit
	2) 4,000	
End. Bal.	$ 4,000	

Accounts Recievable

	Debit	Credit
	5) 2,500	
End. Bal.	$ 2,500	

Equipment

	Debit	Credit
	6) 8,000	
End. Bal.	$ 8,000	

Accounts Payable

Debit	Credit	
7) 3,000	6) 8,000	
	$ 5,000	End. Bal

Common Stock

Debit	Credit	
	1) 30,000	
	$ 30,000	End. Bal

Service Revenue

Debit	Credit	
	3) 4,200	
	5) 2,000	
	$ 6,200	End. Bal

Rent Revenue

Debit	Credit	
	5) 500	
	$ 500	End. Bal

Salaries Expense

Debit	Credit	
4) 1,000		
$ 1,000		End. Bal

Total Assets = $ 40,700

Total Liabilities and Stockholders' Equity = $ 40,700

Smith Inc.
Trial Balance
January 31, 20XX

	Debit	**Credit**
Cash	$ 26,200	
Accounts Receivable	$ 2,500	
Supplies	$ 4,000	
Equipment	$ 8,000	
Accounts Payable		$ 5,000
Common Stock		$ 30,000
Service Revenue		$ 6,200
Rent Revenue		$ 500
Salaries Expense	$ 1,000	
	$ 41,700	**$ 41,700**