

Asset Valuation

Accounting Cycle Part 1

- Accounting is the language of business.
- Accounting seeks to communicate business information.
- Parties interested in business information:
 - Investors
 - Creditors
- General purpose financial statements provide information to investors and creditors.
- Two required general purpose financial statements are the
 - Balance Sheet
 - Income Statement
- Balance Sheet:

$$\mathbf{A} = \mathbf{L} + \mathbf{OE}$$

Asset Valuation

(Dollar Amount of the Assets on the Balance Sheet)

Objective vs. Subjective Approaches GAAP requires an objective approach.

Historical Cost Principle: Assets will be valued at the price paid upon acquisition.



A real estate developer purchases land for **\$500,000** cash in the year **20X1**, and unsuccessfully tries to rezone it for commercial development. A year later the city council agrees to the rezoning and an appraisal at **12/31/X2** values the land at **\$900,000**.

At what amount should this land be valued on the developer's **12/31/X2** balance sheet?

$$\text{Balance Sheet} = \frac{\text{Historical}}{\text{Assets}} = \frac{\text{Cost}}{\$500,000}$$

Historical cost of an asset in an arms-length purchase

=

Fair Market Value (FMV) at the time of purchase

Historical Cost Principle: Assets will be valued at the price paid upon acquisition or the fair market value of the asset at the time of its acquisition or receipt.

Exception to Historical Cost Principle: In the event that an asset purchase was not an arm's-length transaction, then the asset will be valued at its Fair Market Value (FMV), conservatively determined at the date of purchase.

Asset Valuation

Attitude of Conservatism.

Another exception to Historical Cost Principle: If there is credible evidence that an asset's fair market value is below its historical cost, that cost will usually be reduced to reflect the lower fair market value.

Additional principles/concepts to consider:

1. Monetary Measurement Principle
2. Entity Concept

Journal Entries

An Accounting System

A company's accounting system is the means whereby all of a company's transactions and their effect on the company's financial position ($A = L + OE$) are identified, recorded and summarized so as to periodically produce the general purpose financial statements required under GAAP.

The First Three Steps in an Accounting System designed to produce financial statements

1. Identify each business transaction.
2. Analyze each transaction to determine its effect on the financial position of the business ($A = L + OE$).
3. Record the transactions and their effect on the financial position in a journal (computerized or hard copy record).

For every transaction

$$A = L + OE$$

and

$$DR = CR$$

$$A = L + OE$$

Cash	=	Notes Payable	=	Capital Stock
DR	CR	DR	CR	DR
100			200	100
+	-	-	+	-

In understanding the process of recording transactions, we need to introduce some new language and terminology.

CASH

Left Side	Right Side
Increases	Decreases
300	200
Balance 100	

Debit (DR) Credit (CR)

True or False? **FALSE**

Debit means increase.

True or False? **TRUE**

Debit means increase in assets.

How do you remember the effect of Debits and Credits on the various kinds of accounts?

1. Memorize:

	DR	CR
Assets	+	-
Liabilities	-	+
Owners' Equity	-	+
Capital Stock	-	+
Retained Earnings	-	+
Revenues	-	+
Expenses	+	-
Dividends	+	-

2. Equation Approach:

$A = L + OE$	\downarrow	Capital Stock	\downarrow	Retained Earnings
+ Dividends		Net Income	\downarrow	Dividends
+ Expenses		Revenues	\downarrow	Dividends
Assets		- Expenses	\downarrow	
Expenses		+ Revenues	\downarrow	
Dividends			\times	
DR	CR	DR	CR	
+	-	-	+	

Journal Entries

The Standard Form of Manually Prepared Journal Entries

Account Name	DR XXX	CR XXX
Account Name		

Examples:

- A. 1. Identified transaction - \$100 of cash contributed by owners to the company for stock.

2. Analyze effect on:

$$\begin{array}{rcl} A & = & L + OE \\ \uparrow \text{Cash} & & \uparrow \text{Capital Stock} \end{array}$$

3. Record through journal entry:

Cash	100	
Capital Stock		100

- B. 1. Identified transaction: \$200 of cash borrowed from Dad.

2. Analyze effect on:

$$\begin{array}{rcl} A & = & L + OE \\ \uparrow \text{Cash} & & \uparrow \text{Note Payable} \\ & & \text{Payable} \end{array}$$

3. Record through journal entry:

DR	CR
Cash	200
Note Payable	200

- C. 1. Identified transaction: \$225 of inventory purchased for cash.

2. Analyze effect on:

$$\begin{array}{rcl} A & = & L + OE \\ \uparrow \text{Inventory (candy)} & & \\ \downarrow \text{Cash} & & \end{array}$$

3. Record through journal entry:

DR	CR
Inventory	225
Cash	225

- D. 1. Identified transaction: Inventory which cost \$225 is sold to a customer for \$275 of cash.

2. Analyze effect on:

$$\begin{array}{rcl} A & = & L + OE \\ \uparrow \text{Cash} & & \uparrow \text{Revenues} \\ (275) & & (275) \\ \uparrow \text{Inventory} & & \uparrow \text{Expenses} \\ (225) & & (225) \end{array}$$

3. Record through journal entry:

Cash	275	275
Sales Revenues		
Cost of Goods Sold (expense)	225	225
Inventory		

Common mistake for this transaction:

Cash	275	50
Profit or Net Income or Ret. Earnings or Revenue		
Inventory		225

- E. 1. Identified transaction- \$10 of cash dividend paid to owner.

2. Analyze effect on:

$$\begin{array}{rcl} A & = & L + OE \\ \downarrow \text{Cash} & & \downarrow \text{Dividends} \end{array}$$

3. Record through journal entry:

Dividends	10	
Cash		10

Cash	
+	-
Debit	Credit

Why does my bank statement show debits as decreases and credits as increases in my cash account? This is opposite from what I am learning and doing here.

If a student opens a checking account at the local bank by depositing \$1,000 at the bank, the bank will account for this transaction as follows:

Bank's perspective	
A	= L + OE
Cash	Payable to Depositor
1,000	1,000

Journal Entries

If the student writes a \$200 check on their account to Wal-mart, when the check is honored by the bank sending \$200 to Wal-mart, then the bank's accounting will be:

A	=	L	+	OE
Cash		Payable to Depositor		
1,000		200		1,000
800		200		800

If the student then wished to close their account, the bank would be obligated to pay them \$800.

The bank statement sent to depositors is in fact a representation of the bank's *liability account* to the depositor.

Some additional transactions:

F. 1. Identified transaction: Inventory costing \$250 is purchased on account.

2. Analyze effect on:

$$\begin{array}{rcl} \mathbf{A} & = & \mathbf{L} + \mathbf{OE} \\ \uparrow \text{Inventory} & & \uparrow \text{Accounts} \\ & & \text{Payable} \end{array}$$

3. Record through journal entry:

Inventory	250	
Accounts Payable		250

G. 1. Identified transaction: Inventory costing \$75 is sold on account to a customer for \$100.

2. Analyze effect on:

$$\begin{array}{rcl} \mathbf{A} & = & \mathbf{L} + \mathbf{OE} \\ \uparrow \text{Accounts} & & \uparrow \text{Revenues} \\ \text{Receivable} & & (100) \\ (100) & & \\ \downarrow \text{Inventory} & & \downarrow \text{Expenses} \\ (75) & & (75) \end{array}$$

3. Record through journal entry:

Accounts Receivable	100	
Sales Revenues		100
Cost of Goods Sold (expense)	75	
Inventory		75

H. 1. Identified transaction: \$100 cash collection of customer account receivable.

2. Analyze effect on:

$$\begin{array}{rcl} \mathbf{A} & = & \mathbf{L} + \mathbf{OE} \\ \uparrow \text{Cash} & & \\ \downarrow \text{Accounts} & & \\ \text{Receivable} & & \end{array}$$

3. Record through journal entry:

Cash	100	
Accounts Receivable		100

I. 1. Identified transaction: \$250 cash payment of accounts payable.

2. Analyze effect on:

$$\begin{array}{rcl} \mathbf{A} & = & \mathbf{L} + \mathbf{OE} \\ \downarrow \text{Cash} & & \downarrow \text{Accounts} \\ & & \text{Payable} \end{array}$$

3. Record through journal entry:

Accounts Payable	250	
Cash		250

J. 1. Identified transaction: \$20 dollars of cash is paid for last month's rent.

2. Analyze effect on:

$$\begin{array}{rcl} \mathbf{A} & = & \mathbf{L} + \mathbf{OE} \\ \downarrow \text{Cash} & & \downarrow \text{Rent} \\ & & \text{Payable} \\ & & \downarrow \text{Rent} \\ & & \text{Expense} \end{array}$$

Is the payment of a bill or an obligation for rent, utilities, salaries or other costs of doing business accounted for as payment of a liability or payment of an expense?

It Depends!

Journal Entries

Example: Stephen receives a bill from Dad for \$20 of rent for the month of June on **June 30th**. The bill is not payable until **July 10th**.

Conventional Approach:

Entry on June 30th:

A	=	L	+	OE
No Cash Involved		↑ Rent Payable		↓ Rent Expense
0		20		(20)

Entry on July 10th:

A	=	L	+	OE
↓ Cash		↓ Rent Payable		
(20)		(20)		

Net effect:	A	=	L	+	OE
	↓ Cash		0		↓ Rent Expense
	(20)				(20)

Lazy Man's Approach:

Entry on **June 30th**: None

Entry on **July 10th**:

A	=	L	+	OE
↓ Cash				↓ Rent Expense
(20)				(20)

Cash	Rent Expense
- 20	- 20

J. 1. Identified transaction: \$20 dollars of cash is paid on **June 30th for June's rent that had not been previously recorded.**

2. Analyze effect on:

A	=	L	+	OE
↓ Cash			↓ Rent Expense	

3. Record through journal entry

Rent Expense	20
Cash	

Problem: Preparing Journal Entries

Prepare general journal entries to record the following transactions for the month of **January, 20X1** for XYZ Corporation:

- Owners contributed \$10,000 cash to the company in exchange for 1,000 shares of stock in the company.
- Inventory costing \$25,000 was purchased on account from suppliers/vendors.
- A cash payment of \$1,250 was paid to Provo Power as payment of a utility bill for the month of **December, 20X0**. Assume this utility bill was previously recorded as a liability for last December.
- Equipment was purchased for \$70,000, paying \$15,000 in cash and executing a note requiring the payment of \$55,000 principal in two years plus interest.
- Sold inventory costing \$30,000 to customers on account for a price of \$55,000.
- Paid salaries and wages not previously recorded to employees for the month of January amounting to \$7,000.
- Collected \$37,000 of cash from customer accounts receivable.

Problem: Preparing Journal Entries

Prepare general journal entries to record the following transactions for the month of **January, 20X1** for XYZ Corporation:

- Paid accounts payable of \$22,000.
- Sold inventory costing \$7,000 to cash paying customers for \$12,000.
- Purchased \$1,000 of office supplies with cash.
- Paid previously unrecorded telephone bill of \$1,000 for January.
- Received January's rent of \$2,000 from a tenant leasing office space in the company's building.
- Received \$1,000 of interest for the month of January on a note receivable.
- Paid the previous year's income taxes amounting to \$5,000. Assume these taxes had been previously recorded as a liability in the prior year.
- Paid previously unrecorded January advertising costs amounting to \$3,000.
- Paid cash dividends to stockholders amounting to \$4,000.

Answer: Preparing Journal Entries

a.	Cash	10,000	
	Capital Stock		10,000
b.	Inventory	25,000	
	Accounts Payable		25,000
c.	Utilities Payable	1,250	
	Cash		1,250
d.	Equipment	70,000	
	Cash	15,000	
	Note Payable		55,000
e.	Accounts Receivable	55,000	
	Sales Revenue		55,000
	Cost of Goods Sold	30,000	
	Inventory		30,000

Answer: Preparing Journal Entries

f.	Salary & Wage Expense	7,000	
	Cash		7,000
g.	Cash	37,000	
	Accounts Receivable		37,000
h.	Accounts Payable	22,000	
	Cash		22,000
i.	Cash	12,000	
	Sales Revenue		12,000
	Cost of Goods Sold	7,000	
	Inventory		7,000
j.	Office Supplies	1,000	
	Cash		1,000

Answer: Preparing Journal Entries

k.	Telephone Expense	1,000	
	Cash		1,000
l.	Cash	2,000	
	Rent Revenue		2,000
m.	Cash	1,000	
	Interest Revenue		1,000
n.	Income Tax Payable	5,000	
	Cash		5,000
o.	Advertising Expense	3,000	
	Cash		3,000
p.	Dividends	4,000	
	Cash		4,000

Posting to General Ledger

The First Four Steps in an Accounting System Designed to Produce Financial Statements

1. Identify each business transaction.
 2. Analyze each transaction to determine its effect on the financial position of the business.
 3. Record the transactions and their effect on the financial position in the journal (computerized or hard copy record).
 4. Summarize the effect of all transactions on each account by **posting** the journal entries to the **general ledger**.

What is a general ledger?

A company's general ledger is a file in the memory of a computerized accounting system or a book of accounts in a manual system that has a separate record for each kind of asset, liability or owners' equity including each kind of revenue, expense and dividend. Each of these records is commonly referred to as an ***account***. Each account in the general ledger is intended to accumulate the increases and decreases recorded in the journal producing a periodic summarizing balance for the account.

General Journal		General Ledger:		
		Cash		Inventory
6/1	Cash Capital Stock	100✓	100	
6/1	Cash Note Payable	200✓	200	
6/1	Inventory Cash	225✓	225✓	
6/1	Cash Sales Revenues	275✓	275	
	Cost of Goods Sold	225		
	Inventory	225✓		
6/1	Dividends Cash	10	10✓	
6/2	Inventory Accounts Payable	250✓	250	
6/2	Accounts Receivable Sales Revenues	100	100	
	Cost of Goods Sold	75	75✓	
	Inventory	75✓		
6/2	Cash Accounts Receivable	100✓	100	
6/2	Accounts Payable Cash	250	250✓	
6/2	Rent Expense Cash	20	20✓	
		Beg. Balance 0		Beg. Balance 0
		100	225	225
		200	10	25
		275	250	250
		100	20	20
		End. Balance 170		End. Balance 175

Problem: Posting to a General Ledger		
Balances at 1/1/X1:	DR	CR
Cash	30,200	
Accounts Receivable	27,550	
Inventory	41,500	
Office Supplies	1,000	
Equipment	350,000	
Notes Receivable	120,000	
Accounts Payable		22,000
Utilities Payable		1,250
Income Taxes Payable		5,000
Notes Payable		332,000
Capital Stock (9,000 shares)		90,000
Retained Earnings		120,000
Dividends	0	
Sales Revenue		0
Rent Revenue		0
Interest Revenue		0
Cost of Goods Sold	0	
Utilities Expense	0	
Telephone Expense	0	
Salary and Wage Expense	0	
Advertising Expense	0	
Income Tax Expense	0	
Totals:	570,250	570,250

Given the following account balances for XYZ Corporation at the start of the year, January 1, 20X1:

Prepare a general ledger T-account for each account noting the beginning balance and post all transactions from the preceding problem to the proper accounts to determine the 1/31/X1 balance for each account.

Answer: Posting to a General Ledger

Answer: Posting to a General Ledger

Posting to General Ledger

Answer: Posting to a General Ledger

Utilities Payable		Income Taxes Payable	
c.	1,250	1,250	1/1/X1
		n.	5,000
		5,000 1/1/X1	
	0	0	1/31/X1
		0 1/31/X1	
Notes Payable		Capital Stock	
	332,000	332,000	1/1/X1
	55,000	d.	
		90,000 1/1/X1	
	387,000	387,000	1/31/X1
		10,000 a.	
		100,000 1/31/X1	

Answer: Posting to a General Ledger

Retained Earnings		Dividends	
p.	120,000	1/1/X1	0
		p.	4,000
		120,000 1/31/X1	
		1/31/X1 4,000	
Sales Revenue		Rent Revenue	
	0	0	1/1/X1
	55,000	e.	
		12,000 i.	
	67,000	67,000	1/31/X1
		2,000 l.	
		2,000 1/31/X1	

Answer: Posting to a General Ledger

Interest Revenue		Cost fo Goods Sold	
	0	1/1/X1	0
1,000	m.		
1,000	1,000	1/31/X1	
Utilities Expense		Telephone Expense	
1/1/X1	0	1/1/X1	0
1/31/X1	0	k.	1,000
		1/31/X1	1,000

Answer: Posting to a General Ledger

Salary & Wage Expense		Advertising Expense	
1/1/X1	0	1/1/X1	0
f.	7,000	o.	3,000
1/31/X1	7,000	1/31/X1	3,000
Income Tax Expense			
1/1/X1	0		
1/31/X1	0		

The Steps of the Accounting System Designed to Produce Financial Statements

- Identify each business transaction.
- Analyze each transaction to determine its effect on the financial position of the business (**A=L+OE**).
- Record the transactions and their effect on financial position in a journal (computerized or hard copy record).
- Summarize the effect of all transactions on each account by **posting** the journal entries to the **general ledger**.
- Prepare a trial balance.

What is a trial balance?
A listing of all assets, liabilities, owners' equity (capital stock, retained earnings, revenues, expenses and dividends) noting their ending general ledger balances.

Stephen's Sweet Shop - Trial Balance

	Debit	Credit
Cash	170	
Inventory	175	
Accounts Receivable	0	
Accounts Payable		0
Capital Stock		100
Note Payable		200
Retained Earnings		0
Dividends	10	
Sales Revenues		375
Cost of Goods Sold	300	
Rent Expense	20	
	675	675

Posting to General Ledger

For every transaction:

$$\text{DR} = \text{CR}$$

This is a self-checking device.

Inventory	200	
Accounts Payable		200

Preparing Financial Statements from the Trial Balance

The Steps of the Accounting System Designed to Produce Financial Statements

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5. Prepare a trial balance.

What is a trial balance?

A listing of all assets, liabilities, owners' equity (capital stock, retained earnings, revenues, expenses and dividends) noting their ending general ledger balances.

Stephen's Sweet Shop - Trial Balance

	<u>Debit</u>	<u>Credit</u>
Cash	170	
Inventory	175	
Accounts Receivable	0	
Accounts Payable		0
Capital Stock		100
Note Payable		200
Retained Earnings		0
Dividends	10	
Sales Revenues		375
Cost of Goods Sold	300	
Rent Expense	20	
	<u>675</u>	<u>675</u>

For every transaction:

$$\text{DR} \quad = \quad \text{CR}$$

This is a self-checking device.

Inventory	200	
Accounts Payable	200	

Computerized accounting systems are programmed to reject any transactions that do not have equal debit and credit amounts.

Problem: Preparing a Trial Balance

Prepare an income statement and statement of retained earnings for the month of ending 1/31/X1 along with a balance sheet of 1/31/X1 for XYZ Corporation. Use the data from the trial balance produced in the preceding problem, "Preparing a Trial Balance."

(Hint: the retained earnings amount for the balance sheet at 1/31/X1 will be the ending balance reflected on the statement of retained earnings.)

(See trial balance on the next slide)

Answer: Preparing a Trial Balance

Trial Balance at 1/31/X1	DR	CR
Cash	32,950	
Accounts Receivable	45,550	
Inventory	29,500	
Office Supplies	2,000	
Equipment	420,000	
Notes Receivable	120,000	
Accounts Payable		25,000
Utilities Payable		0
Income Taxes Payable		0
Notes Payable		387,000
Capital Stock		100,000
Retained Earnings		120,000
Dividends	4,000	
Sales Revenue		67,000
Rent Revenue		2,000
Interest Revenue		1,000
Cost of Goods Sold	37,000	
Utilities Expense	0	
Telephone Expense	1,000	
Salary & Wage Expense	7,000	
Advertising Expense	3,000	
Income Tax Expense	0	
Totals	702,000	702,000

Preparing Financial Statements from the Trial Balance

The Financial Statements can be prepared from the Trial Balance.

	Debit	Credit
Cash	170	
Inventory	175	
Accounts Receivable	0	
Accounts Payable	0	
Capital Stock	100	
Note Payable	200	
Retained Earnings	0	
Dividends	10	
Sales Revenues	375	
Cost of Goods Sold	300	
Rent Expense	20	
	<u>675</u>	<u>675</u>

**Stephen's Sweet Shop
Income Statement
for the month of June, 20X1**

Revenues:		
Sales Revenues		\$ 375
 Less: Expenses		
Cost of Goods Sold		300
Rent Expense		20
 Net Income		<u>\$ 55</u>

**Stephen's Sweet Shop
Statement of Retained Earnings
for the month of June, 20X1**

Retained Earnings, Beginning Balance	\$ 0
Add: Net Income	55
Less: Dividends	(10)
Retained Earnings, Ending Balance	<u>\$ 45</u>

**Stephen's Sweet Shop
Balance Sheet
As of June 30, 20X1**

Assets:		
Cash		\$ 170
Inventory		175
Total Assets		<u>\$ 345</u>
 Liabilities and Owner's Equity:		
Liabilities:		
Note Payable		\$ 200
Owner's Equity:		
Capital Stock		100
Retained Earnings		45
Total Liabilities and Owners Equity		<u>\$ 345</u>

Problem: Preparing Financial Statements

Prepare an income statement and statement of retained earnings for the month ending **1/31/X1** along with a balance sheet as of **1/31/X1** for XYZ Corporation. Use the data from the trial balance produced in the preceding problem #11. (Hint: The retained earnings amount for the balance sheet at **1/31/X1** will be the ending balance reflected on the statement of retained earnings.)

(See trial balance on the next page.)

Problem: Preparing Financial Statements

Trial Balance at 1/31/X1	DR	CR
Cash	32,950	
Accounts Receivable	45,550	
Inventory	29,500	
Office Supplies	2,000	
Equipment	420,000	
Notes Receivable	120,000	
Accounts Payable		25,000
Utilities Payable		0
Income Taxes Payable		0
Notes Payable		387,000
Capital Stock		100,000
Retained Earnings		120,000
Dividends	4,000	
Sales Revenue		67,000
Rent Revenue		2,000
Interest Revenue		1,000
Cost of Goods Sold	37,000	
Utilities Expense	0	
Telephone Expense	1,000	
Salary & Wage Expense	7,000	
Advertising Expense	3,000	
Income Tax Expense	0	
 Totals	<u>702,000</u>	<u>702,000</u>

Preparing Financial Statements from the Trial Balance

Answer: Preparing Financial Statements

**XYZ Corporation
Income Statement
for the month ending 1/31/X1**

Revenues:

Sales Revenue	\$67,000
Rent Revenue	2,000
Interest Revenue	1,000
	<u>70,000</u>
Less Expenses:	
Cost of Goods Sold	37,000
Telephone Expense	1,000
Salary & Wage Expense	7,000
Advertising Expense	3,000
	<u>48,000</u>
Net Income	<u>\$22,000</u>
Earnings per share	\$2.20
(\$22,000 ÷ 10,000 shares)	

Answer: Preparing Financial Statements

**XYZ Corporation
Statement of Retained Earnings
for the month ending 1/31/X1**

Retained Earnings, 1/1/X1	\$120,000
Add: Net Income	22,000
Less: Dividends	(4,000)
Retained Earnings, 1/31/X1	\$138,000

Answer: Preparing Financial Statements

**XYZ Corporation
Balance Sheet
as of 1/31/X1**

Assets:	Liabilities and Stockholders' Equity:		
Current Assets:			
Cash	\$32,950	Accounts Payable	\$25,000
Accounts Receivable	45,550	Long Term Liabilities:	
Inventory	29,500	Notes Payable	387,000
Office Supplies	2,000		<u>412,000</u>
	<u>110,000</u>	Stockholders' Equity:	
Long Term Assets:			
Equipment	420,000	Capital Stock	100,000
Notes Receivable	120,000	Retained Earnings	138,000
	<u>540,000</u>	Total Liabilities and Stockholders' Equity	\$650,000
Total Assets	\$650,000		