Accounting Principles

Lectures 1, 2 & 3

Objectives

To develop an understanding of financial statements to serve as a basis for all analysis of business situations.

Outline

- Financial Information
- Financial Statements
- Accounting Principles
- Ratio Analyses

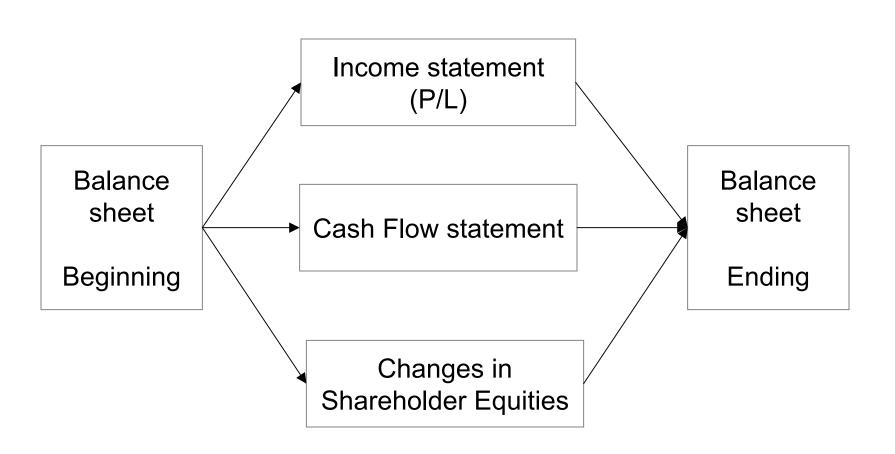
Need for Financial Information

- Control
- Coordination
- Planning

Financial Information

- Financial Perspective
- Customer Perspective
- Internal Business Process Perspective
- Learning and Growth Perspective

Financial statements



Accounting

Luca Pacioli, 15th century monk

- Typical Accounting Period: 1 yr
- Double Entry Bookkeeping

Bookkeeping

- The chart of accounts
- T-account

The Chart of Accounts (multi-layered)

1000

1100

1110

1111

5000

5100

5110

Current Assets

Cash

Cash, Bank 1

Cash, Bank 1, Account 1

Property

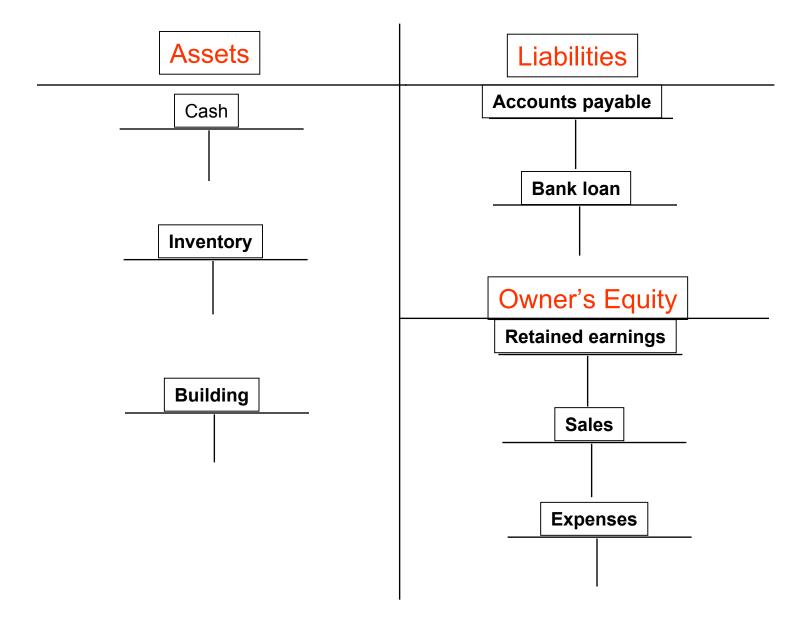
Land

Land, Singapore

T Account

Account debit credit -/+

Business Account



Accounting Principles

- Measurement unit: \$
- Double entry
- Cost (not value)
- Conservative
- Going concern

- Period
- Realization
- Matching (Accrual)
- Consistency
- Materiality

Accounting Record Example

2.96 - Management of Engineering

Starting Balance

King's Shoe Store, Inc.

Starting Balance 1-Jan-00

	Accounts with	Accounts with
	Debit Balances	Credit Balances
Cash (A)	30,000	
Account Receivable (A)	63,000	
Merchandise Inventory (A)	175,000	
Land (A)	100,000	
Building and Equipment (A)	525,000	
Accumulated Depreciation (XA)		85,000
Accounts Payable (L)		135,000
Bonds Payable (L)		100,000
Common Stock (SE)		250,000
Additional Paid-in Capital (SE)		200,000
Retained Earnings (SE)		123,000
Total	893,000	893,000

⁽A) Asset (XA) Contra Account

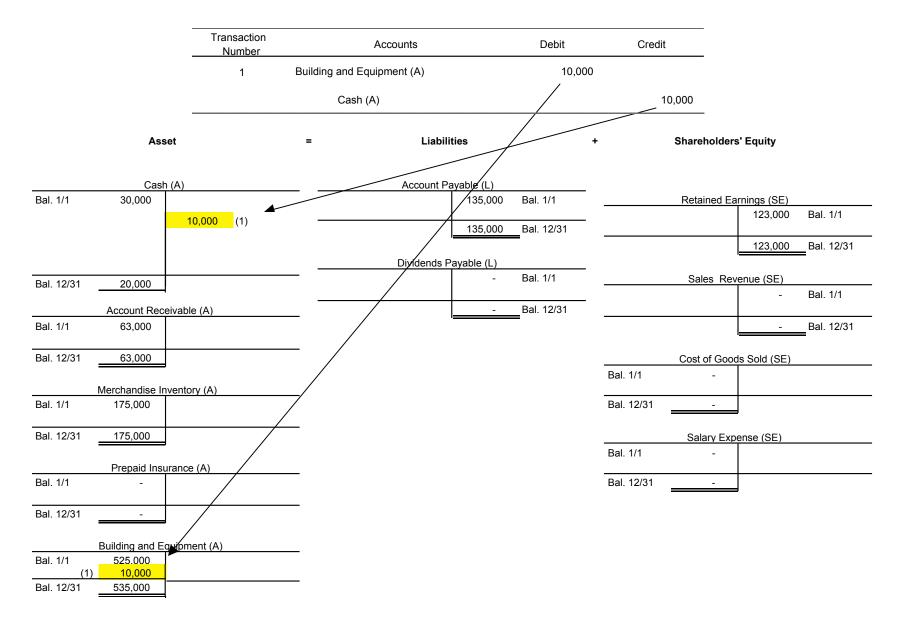
(SE) Shareholders' Equity

⁽L) Liability

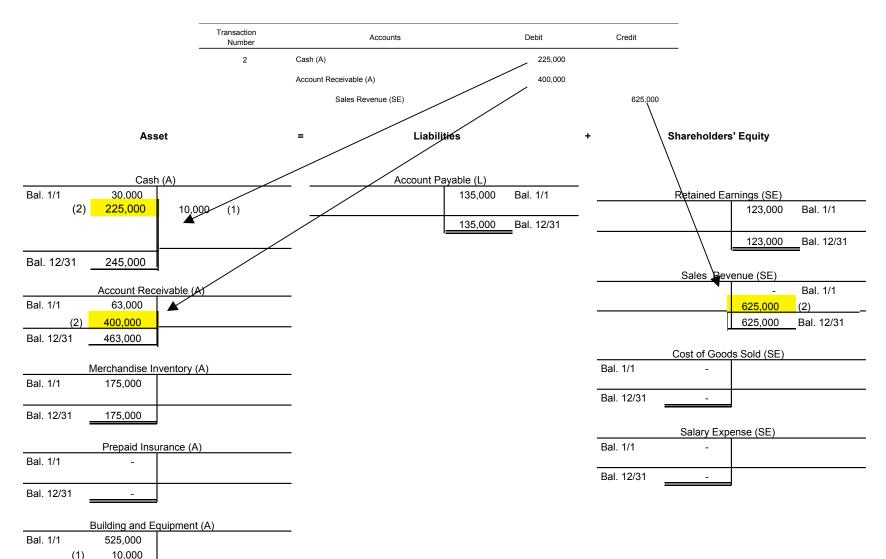
Transactions

- (1) The firm purchases shoe-making equipment in cash costing \$10,000
- (2) The firm sells merchandise during the year 2000 at a total selling price of \$625,000. It receives \$225,000 immediately, with the remainder sold on account
- (3) The cost of merchandise sold during the year 2000 is \$90,000
- (4) The firm pays salaries in cash of \$110,000 for employee services received during the year 2000
- (5) The firm collects cash of \$325,000 from customers who had purchased on account
- (6) The firm makes payments of \$70,000 to merchandise supplies for purchases on account
- (7) The firm pays a premium of \$1,500 on January 1, 2000 for a three-year property and liability insurance policy
- (8) The firm issues common stock of \$50,000 for cash on January 28, 2000.

(1) The firm purchases shoe-making equipment in cash costing \$10,000



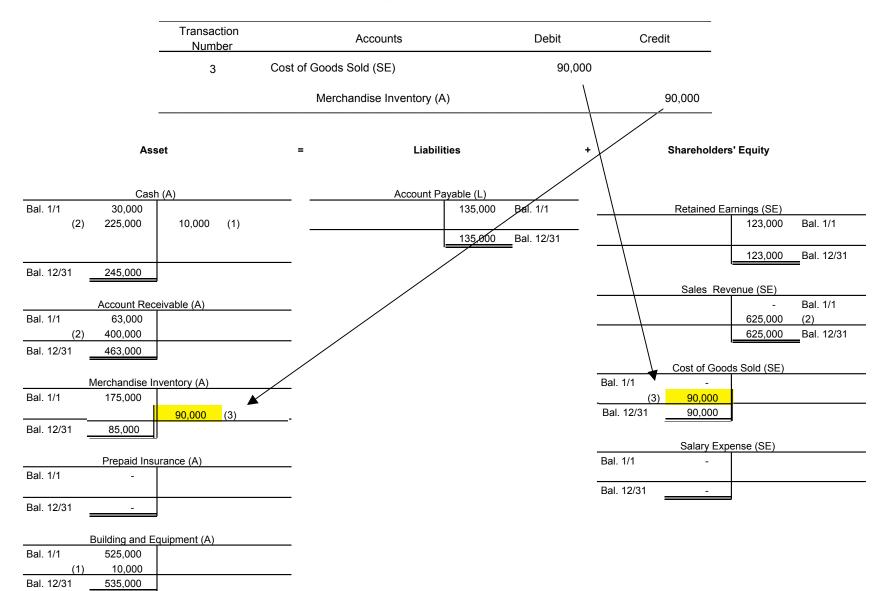
(2) The firm sells merchandise during the year 2000 at a total selling price of \$625,000. It receives \$225,000 immediately, with the remainder sold on account



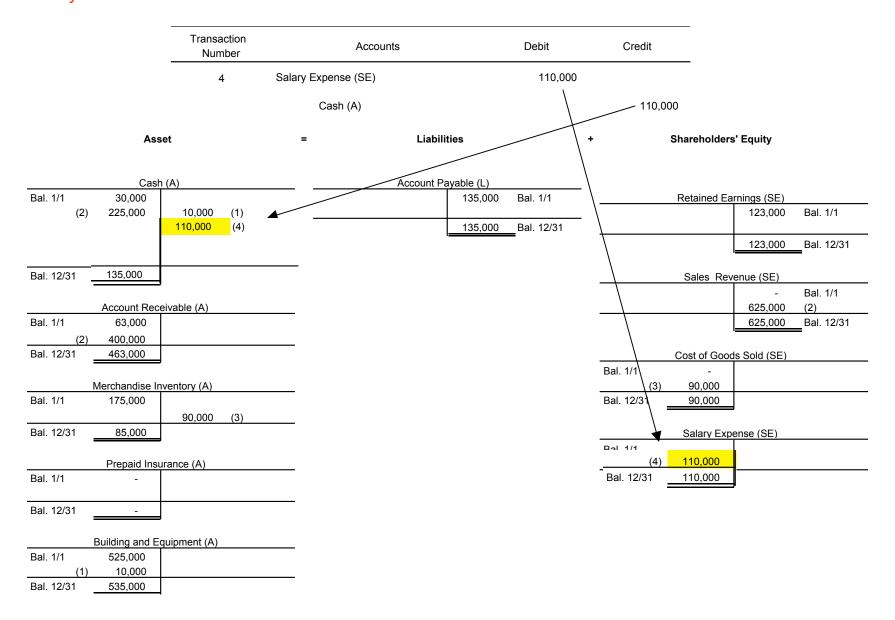
Bal. 12/31

535,000

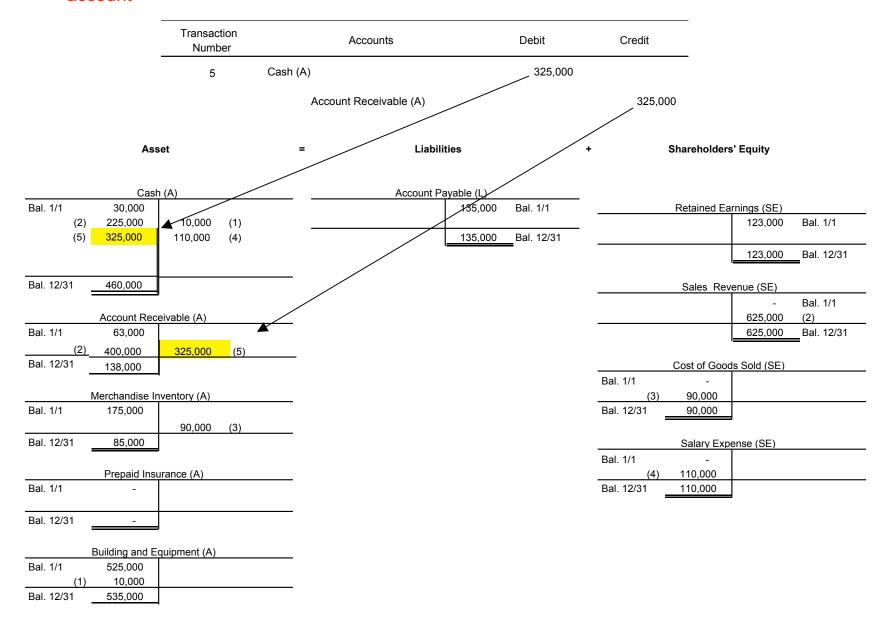
(3) The cost of merchandise sold during the year 2000 is \$90,000



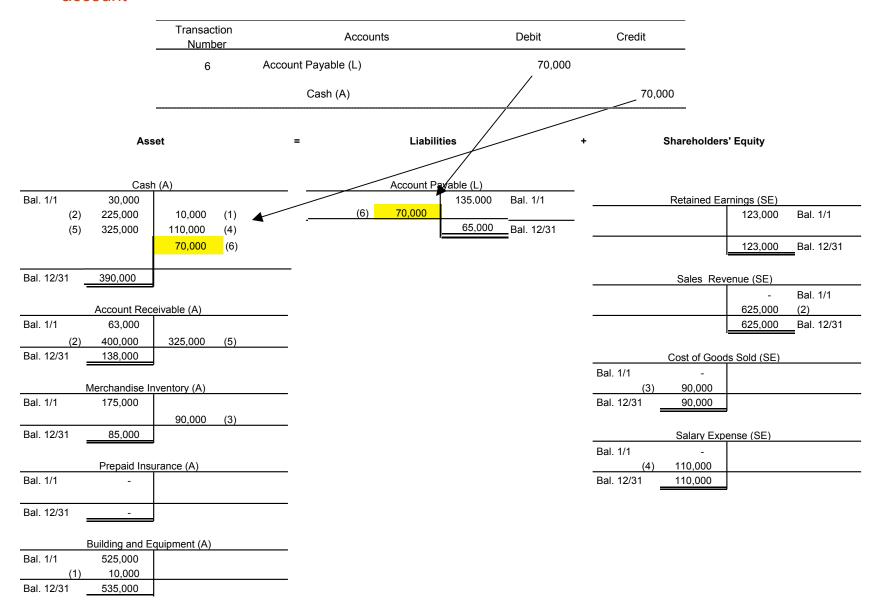
(4) The firm pays salaries in cash of \$110,000 for employee services received during the year 2000



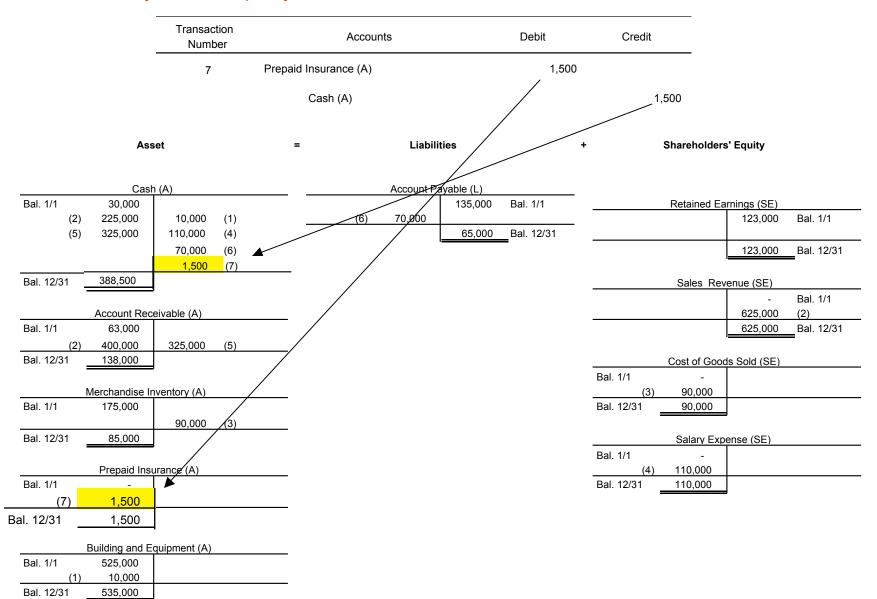
(5) The firm collects cash of \$325,000 from customers who had purchased on account



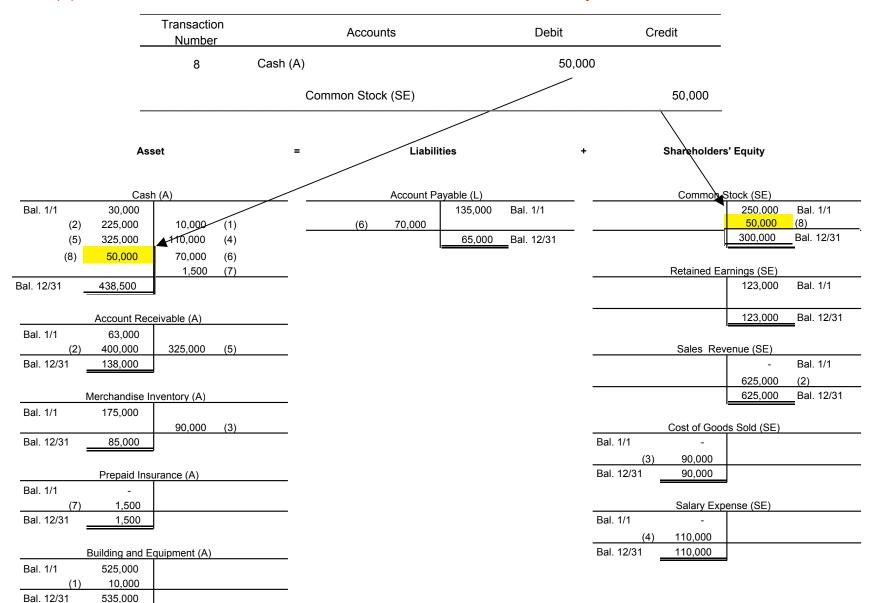
(6) The firm makes payments of \$70,000 to merchandise supplies for purchases on account



(7) The firm pays a premium of \$1,500 on January 1, 2000 for a three-year property and liability insurance policy



(8) The firm issues common stock of \$50,000 for cash on January 28, 2000.



Summary

Accumulated Depreciation (XA)

85,000 Balance 1/1 85,000 Balance 12/31

As	sset	=	= Liabilities		+	Sharehold	ers' Equity
C	ash (A)		Account Pa	yable (L)		Common Sto	ck (SE)
Bal. 1/1 30,000		_		135,000 Bal. 1/1			250,000 Bal. 1/1
(2) 225,000	10,000 (1)		(6) 70,000				50,000 (8)
(5) 325,000	110,000 (4)			65,000 Bal. 12/31			300,000 Bal. 12/31
(8) 50,000	70,000 (6)		'			· =	
	1,500 (7)		Bonds Pag	yable (L)		Additional Paid-in (Capital (SE)
Bal. 12/31 438,500		_		100,000 Bal. 1/1			200,000 Bal. 1/1
		_		100,000 Bal. 12/31			200,000 Bal. 12/31
Account R	Receivable (A)		'			!=	<u> </u>
Bal. 1/1 63,000						Retained Earn	ings (SE)
(2) 400,000	325,000 (5)						123,000 Bal. 1/1
Bal. 12/31 138,000							
·							123,000 Bal. 12/31
Merchandise	e Inventory (A)					\ <u>-</u>	
Bal. 1/1 175,000						Sales Rever	ue (SE)
•	90,000 (3)						- Bal. 1/1
Bal. 12/31 85,000							625,000 (2)
	-						625,000 Bal. 12/31
Prepaid I	nsurance (A)					\ <u>-</u>	
Bal. 1/1 -						Cost of Goods	Sold (SE)
(7) 1,500						Bal. 1/1 -	
Bal. 12/31 1,500	1					(3) 90,000	
	=					Bal. 12/31 90,000	
l:	and (A)					<u> </u>	
Bal. 1/1 100,000						Salary Expen	se (SF)
Bal. 12/31 100,000						Bal. 1/1 -	00 (OL)
	=					(4) 110,000	
Ruilding and	d Equipment (A)					Bal. 12/31 110,000	
Bal. 1/1 525,000						24 12/01	
(1) 10,000							
Bal. 12/31 535,000							
300,000	_						

Unadjusted Balance

King's Shoe Store, Inc.

Unadjusted Balance 31-Dec-00

	Accounts with	Accounts with Credit Balances
	Debit Balances	Credit Dalances
Cash (A)	438,500	
Account Receivable (A)	138,000	
Merchandise Inventory (A)	85,000	
Prepaid Insurance (A)	1,500	
Land (A)	100,000	
Building and Equipment (A)	535,000	
Accumulated Depreciation (XA)		85,000
Accounts Payable (L)		65,000
Bonds Payable (L)		100,000
Common Stock (SE)		300,000
Additional Paid-in Capital (SE)		200,000
Retained Earnings (SE)		123,000
Sales Revenue (SE)		625,000
Cost of Goods Sold (SE)	90,000	
Salary Expense (SE)	110,000	
Total	1,498,000	1,498,000

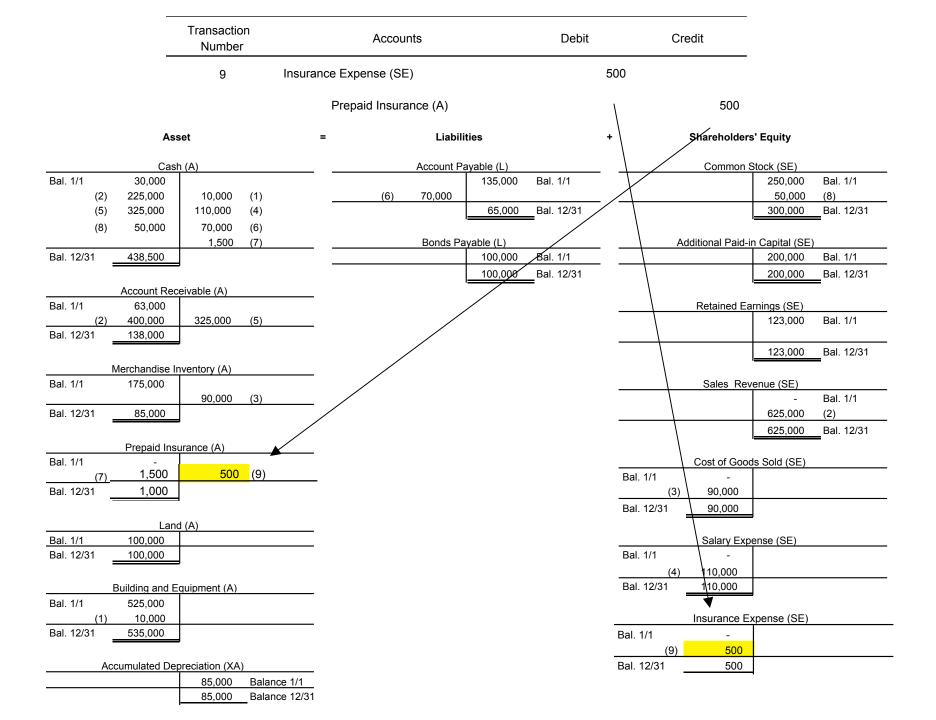
Adjusting Entries

- Adjusting the events that continually occur for which no specific transaction signals the requirement for a journal entry but that still affect the net income for the period and the financial position at the end of the period
- Adjusting entries prepared at the end of the accounting period change the balances in the general ledger accounts so that all revenues and expenses are recognized
- For example,
 - Recognition of accrued revenues and receivables
 - Recognition of accrued expenses and payables
 - Allocation of prepaid operating costs, e.g. prepaid insurance cost
 - Recognition of Depreciation
 - Correction of errors, etc.

(1) Allocation of prepaid insurance cost

- King's Shoe Store paid \$1,500 on January 1, 2000, for a three-year insurance policy Transaction #7
- During the year 2000, one-third of the coverage expired, so \$500 of the premium should leave the asset account on the balance sheet and become an insurance expense, reducing income and retained earnings.
- In other words, the balance sheet on December 31, 2000, should show only \$1,000 of prepaid insurance as an asset.

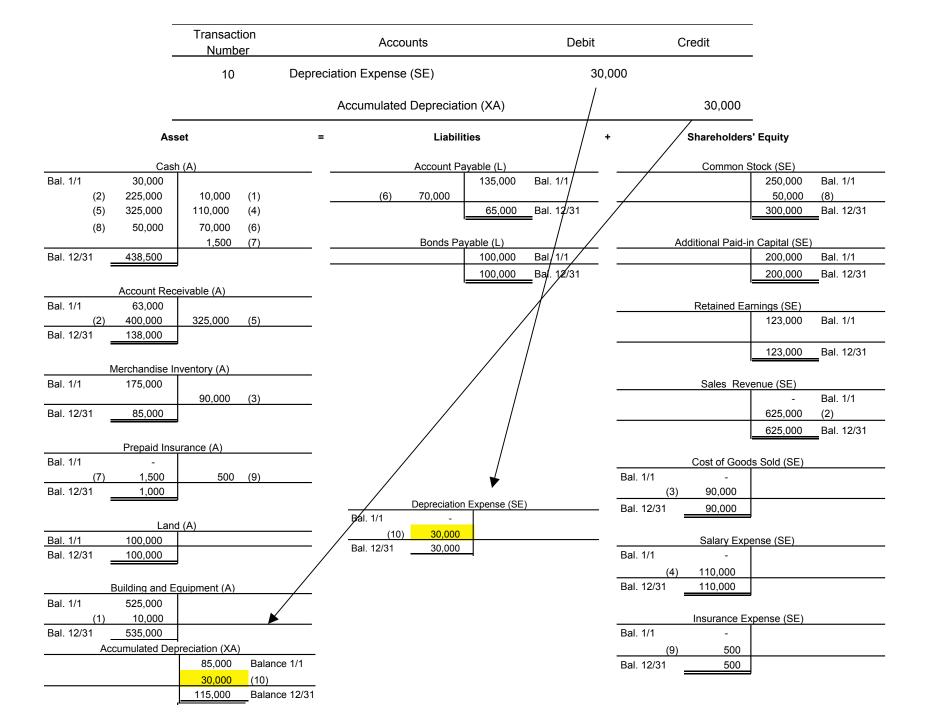
Transaction Number	Accounts	Debit	Credit
9	Insurance Expense (SE)	500	
	Prepaid Insurance (A)		500



(2) Recognition of Depreciation

- Although the assets of buildings and equipment provide services for a number of years, their future benefits expire as time passes. Therefore, accounting spreads an asset's cost over the periods of the assets' estimated useful life.
- The term *depreciation* refers to the charge made to the current operations for the portion of the cost of such assets consumed during the current period. The *straight-line method* is widely used for depreciation calculations
- King's Shoe Store's internal records show that annual depreciation is \$30,000 per year.

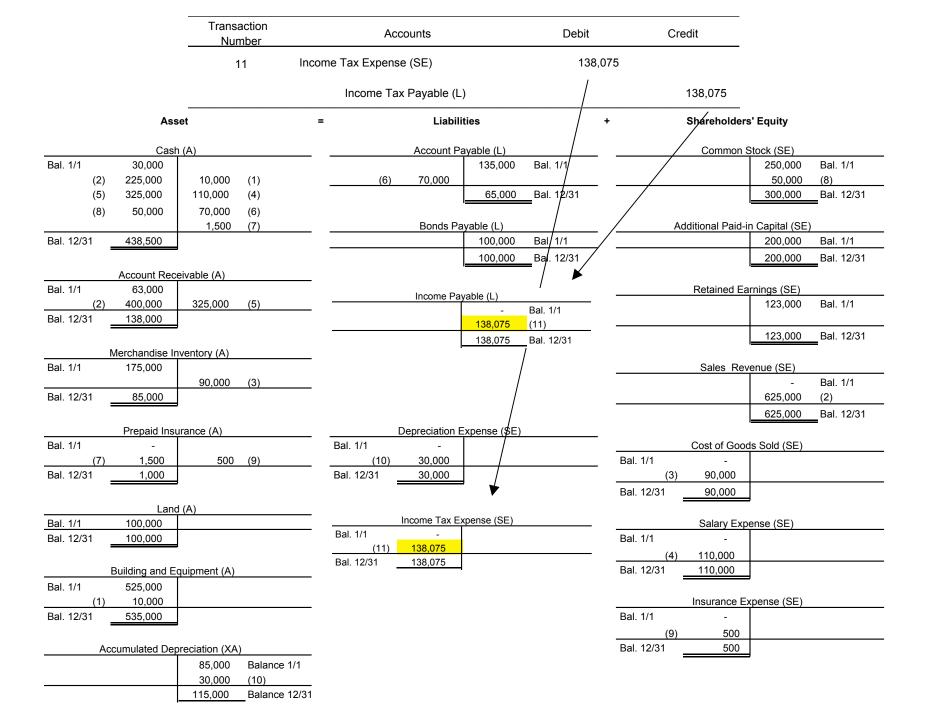
Transaction Number	Accounts	Debit	Credit
10	Depreciation Expense (SE)	30,000	
	Accumulated Depreciation (XA)		30,000



(3) Recognition of Income Tax Expense

- Let us assume that King's Shoe Store should pay income tax at 35% of operating income
- The operating income can be calculated by subtracting total operating expenses from total revenue, i.e.,

Transaction Number	Accounts	Debit	Credit
11	Income Tax Expense (SE)	138,075	
	Income Tax Payable (L)		138,075



Adjusted Balance

King's Shoe Store, Inc.

Adjusted Balance 31-Dec-00

	Unadjusted	Unadjusted Balance		Adjusting Entries			Adjusted Balance	
	Debit	Credit	Debit	Credit	Transaction Number	Debit	Credit	
Cash (A)	438,500					438,500		
Account Receivable (A)	138,000					138,000		
Merchandise Inventory (A)	85,000					85,000		
Prepaid Insurance (A)	1,500			500	(9)	1,000		
₋and (A)	100,000					100,000		
Building and Equipment (A)	535,000					535,000		
Accumulated Depreciation (XA)		85,000		30,000	(10)		115,000	
Accounts Payable (L)		65,000					65,000	
ncome Tax Payable (L)				138,075	(11)		138,075	
Bonds Payable (L)		100,000					100,000	
Common Stock (SE)		300,000					300,000	
Additional Paid-in Capital (SE)		200,000					200,000	
Retained Earnings (SE)		123,000					123,000	
Sales Revenue (SE)		625,000					625,000	
Cost of Goods Sold (SE)	90,000					90,000		
Salary Expense (SE)	110,000					110,000		
nsurance Expense (SE)			500		(9)	500		
Depreciation Expense (SE)			30,000		(10)	30,000		
ncome Tax Expense (SE)			138,075		(11)	138,075		
Total	1,498,000	1,498,000	168,575	168,575		1,666,075	1,666,075	

Closing Entries

King's Shoe Store, Inc.

Adjusted Balance 31-Dec-00

	Unadjusted Balance		Ad	Adjusting Entries		Adjusted Balance		Closing Entries (Income Statement)		Post-Closing Balance (Balance Sheet)	
	Debit	Credit	Debit	Credit	Transaction Number	Debit	Credit	Debit	Credit	Debit	Credit
Cash (A)	438,500					438,500				438,500	
Account Receivable (A)	138,000					138,000				138,000	
Merchandise Inventory (A)	85,000					85,000				85,000	
Prepaid Insurance (A)	1,500			500	(9)	1,000				1,000	
Land (A)	100,000					100,000				100,000	
Building and Equipment (A)	535,000					535,000				535,000	
Accumulated Depreciation (XA)		85,000		30,000	(10)		115,000				115,000
Accounts Payable (L)		65,000					65,000				65,000
Income Tax Payable (L)				138,075	(11)		138,075				138,075
Bonds Payable (L)		100,000					100,000				100,000
Common Stock (SE)		300,000					300,000				300,000
Additional Paid-in Capital (SE)		200,000					200,000				200,000
Retained Earnings (SE)		123,000					123,000		256,425		379,425
Sales Revenue (SE)		625,000					625,000	625,000		-	
Cost of Goods Sold (SE)	90,000					90,000			90,000		-
Salary Expense (SE)	110,000					110,000			110,000		-
Insurance Expense (SE)			500		(9)	500			500		-
Depreciation Expense (SE)			30,000		(10)	30,000			30,000		-
Income Tax Expense (SE)			138,075		(11)	138,075			138,075		_
Total	1,498,000	1,498,000	168,575	168,575		1,666,075	1,666,075	625,000	625,000	1,297,500	1,297,500

Balance Sheet

King's Shoe Store, Inc. Comparative Balance Sheet As of December 31, 1999 and 2000

Assets			Liabilities and Shareholders' Equity			
	December 31, 2000	December 31, 1999		December 31, 2000	December 31, 1999	
Current Assets:			Current Liabilities			
Cash	438,500	30,000	Account Payable	65,000	135,000	
Account Receivable	138,000	63,000	Income Tax Payable	138,075	-	
Merchandise Inventory	85,000	175,000	Total Current Liabilities	203,075	135,000	
Prepaid Insurance	1,000		Long-Term Debt			
Total Current Assets	662,500	268,000	Bonds Payable	100,000	100,000	
Property, Plant, and Equipment			Total Liabilities	303,075	235,000	
Land Building and Equipment (at	100,000	100,000	Shareholders' Equity			
acquisition cost)	535,000	525,000	Common Stock (at par value)	300,000	250,000	
Less: Accumulated Depreciation	(115,000)	(85,000)	Additional Paid-in Capital	200,000	200,000	
Building and Equipment (net) Total Property, Plant, and	420,000	440,000	Retained Earnings	379,425	123,000	
Equipment	520,000	540,000	Total Shareholders' Equity	879,425	573,000	
Total Assets	1,182,500	808,000	Total Liabilities and	1,182,500	808,000	

Income Statement

King's Shoe Store, Inc.

Income Statement for the Year Ending December 31, 2000

Revenue: Sales Revenue Other Revenue Total Revenue	625,000 	625,000
Expenses:		
Cost of Goods Sold	90,000	
Salary Expense	110,000	
Insurance Expense	500	
Depreciation Expense	30,000	
Total Expense		230,500
Operating Income		394,500
Less Income taxes (35%)	_	(138,075)
Net Income		256,425

Statement of Cash Flows

Cash Flow from Operating Activities:	
Net Income	256,425
Noncash Adjustments	
Depreciation	30,000
Decrease in accounts payable	(70,000)
Increase in tax payable	138,075
Increase in accounts receivable	(75,000)
Decrease in inventory	90,000
Increase in prepaid expenses	(1,000)
Net cash increase from operating activities	368,500
Cash Flow from Investing Activities:	
Purchase of Building and Equipment	(10,000)
Net cash increase from Investing activities	(10,000)
Cash Flow from Financing Activities:	
Issuance of Common Stocks	50,000
Net cash increase from Financing activities	50,000
Increase in Cash during 2000	408,500
Beginning Cash Balance	30,000
Ending Cash Balance	438,500

