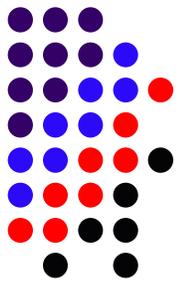


Accrual Accounting Process: Part I



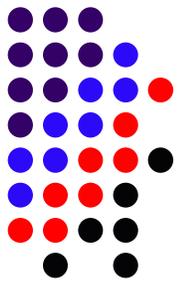
15.511 Corporate Accounting
Summer 2004

Professor SP Kothari

Sloan School of Management
Massachusetts Institute of Technology

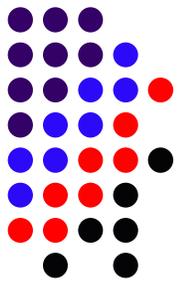
June 11, 2004





An accountant's functions include

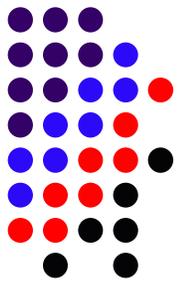
- Classifying and summarizing, made easier by the repetitive nature of business transactions
- All repetitive transactions of the same nature are recorded and summarized in one account
 - An account is a storage unit used to classify and summarize money measurements of business activity of a similar nature
 - Each account has a title



T-Account

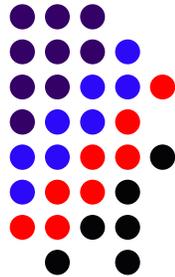
- Used for illustrative and pedagogical purposes
- Has two sides
 - **Debit means Left**
 - **Credit means Right**
- Created for each type of
 - Asset
 - Liability
 - Stockholders' equity

Recording changes in Assets and Liabilities

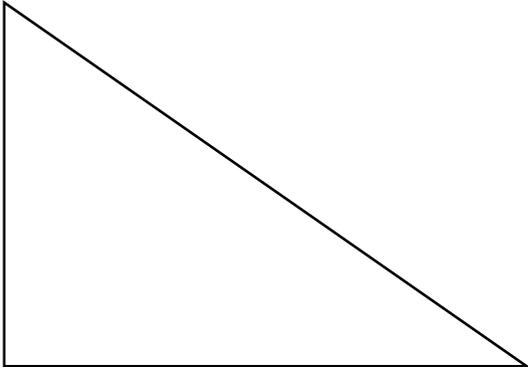
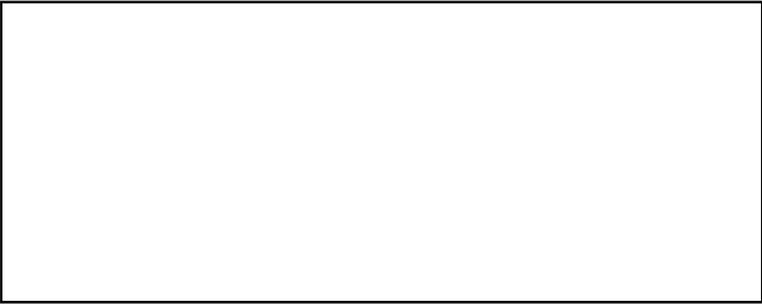
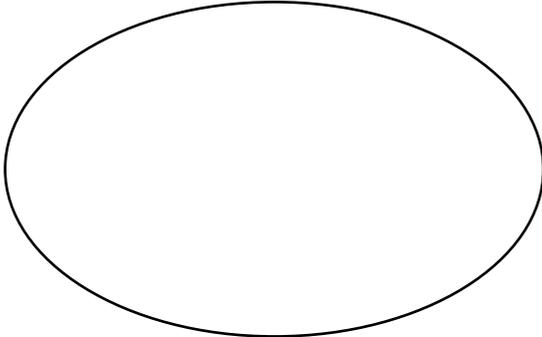
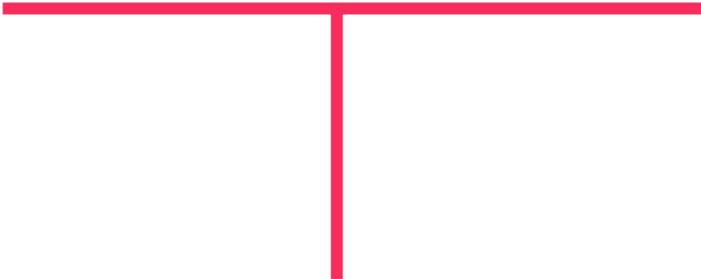


- **Increases in assets** are recorded on the **left side** of the T-account
- **Decreases** are recorded on the **right side** of the T-account
- Reverse for liabilities and stockholders' equity
- $\text{Assets} = \text{Liabilities} + \text{Stockholders' equity}$
- Assets are on the left side of the Balance Sheet Equation
- Liabilities and owners' equity are on the right side

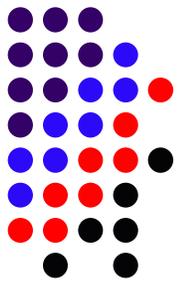
How does a T-account look like?



- Like a Capital “T”



Summary of T-account Rules



Assets (cash, receivables, equipment)

Increases

Decreases

Liabilities (loans payable)

Decreases

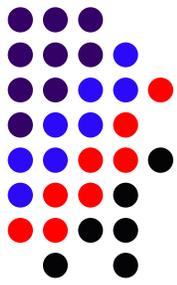
Increases

Owners' equity (contributed capital, retained earnings)

Decreases

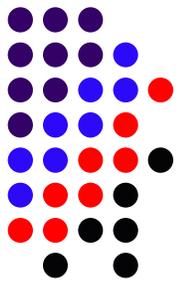
Increases

About T-Accounts



- What is one major objective of financial statements?
 - To provide information to “users” regarding the financial performance of a business
- Which T-account includes the accountant’s estimate of financial performance over a given accounting period?
 - Retained earnings (includes current period income)
- Which financial statement provides the details of the financial performance over a given accounting period?
 - Income statement
- How do we construct an income statement from the T-account for retained earnings?
 - **Not very easily! But we will try.**

Components of stockholders' equity



Common Stock

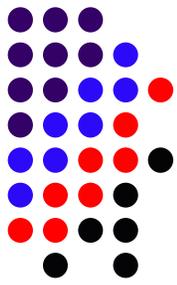
**Additional
Capital**

Retained Earnings

**Expenses
Dividends**

Revenue

Why record expenses and revenues separately in various T-accounts?

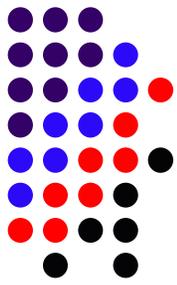


Retained Earnings

Rent exp.	800	1,000	Sales revenue
Salaries	650	1,100	Interest Income
Interest exp.	450	3,000	Sales Revenue
Salaries	1,000	200	Interest Income
Rent exp.	400	4,500	Sales Revenue
Dividends	2,000		
Interest exp.	350		

Sales Revenue (1,000 + 3,000 + 4,500)	8,500
Interest Income (1,100 + 200)	1,300
Rent expense (800 + 400)	(1,200)
Salaries expense (650 + 1,000)	(1,650)
Interest expense (450 + 350)	(800)
Net Income	6,150

Why record expenses and revenues separately in various T-accounts?



Retained Earnings

Rent exp.	800	1,000	Sales revenue
Salaries	650	1,100	Interest Income
Interest exp.	450	3,000	Sales Revenue
Salaries	1,000	200	Interest Income
Rent exp.	400	4,500	Sales Revenue
Dividends	2,000		
Interest exp.	350		

Sales Revenue

1,000
3,000
4,500

Interest Revenue

1,100
200

Rent Expense

800
400

Salaries Expense

650
1,000

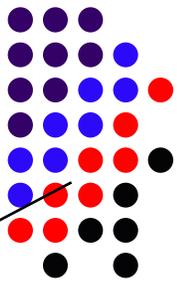
Interest Expense

450
350

Dividends

2,000

Why record expenses and revenues separately in various T-accounts?



Retained Earnings

Rent Exp.	1,200	8,500	Sales Revenue
Salaries Exp.	1,650	1,300	Interest Revenue
Interest Exp.	800		
Dividends	2,000		

Sales Revenue

1,000
3,000
4,500

Interest Revenue

1,100
200

Interest Expense

450
350

Dividends

2,000

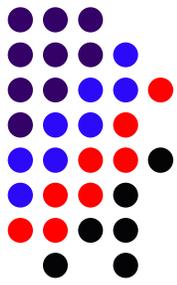
Rent Expense

800
400

Salaries Expense

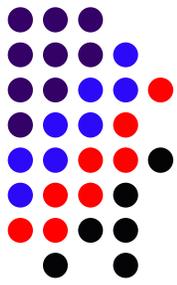
650
1,000

Why record expenses and revenues separately? A Summary

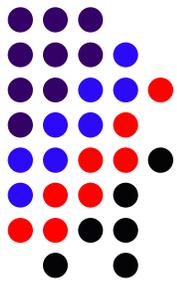


- Revenues, expenses and dividends are temporary T-accounts
- Information on **changes in retained earnings** - pertaining to a **single accounting period** - is collected in these temporary accounts
- At the end of the accounting period, balances in these T-accounts are transferred to Retained Earnings
- The temporary accounts are set to zero at the end of an accounting period in order to start collecting information for the next period
- Revenues, expenses and dividend accounts are **flow** accounts
- Retained earnings is a **stock** account
- In fact, all balance sheet accounts are **stock** accounts

Recording expenses: A Summary

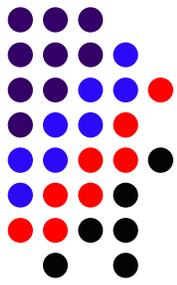


- Expenses decrease retained earnings.
- Decreases in retained earnings are recorded on the left side
- Expenses are recorded on the left side



Recording Revenues: A Summary

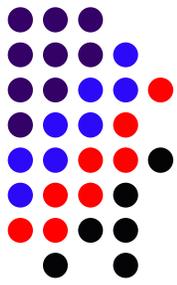
- Revenues increase retained earnings.
- Increases in retained earnings are recorded on the right side
- (Increase in) revenues are recorded on the right side
- Decrease in revenues are recorded on the left side



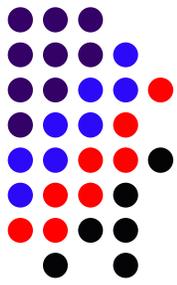
Recording Dividends: A Summary

- Dividends decrease retained earnings
- Therefore, treated similarly to expenses, but dividends is not an expense
- Dividends are recorded on the left side

Expenses and Revenues: Debits and Credits



- Retained earnings (in general) has a credit balance.
- Revenues have credit balance because
 - they increase retained earnings
- Expenses and dividends have debit balance because
 - they decrease retained earnings
- Can retained earnings have a debit balance?
 - Yes, when cumulative earnings are less than cumulative dividends

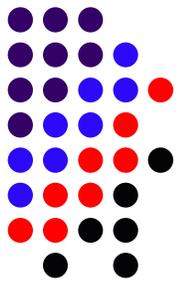


Recap: T-Account

Has two sides

- **Debit means Left**
- **Credit means Right**

Recap: Summary of T-account Rules



Assets (cash, receivables, equipment)

Increases

Decreases

Liabilities (loans payable)

Decreases

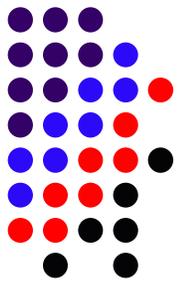
Increases

Owners' equity (contributed capital, retained earnings)

Decreases

Increases

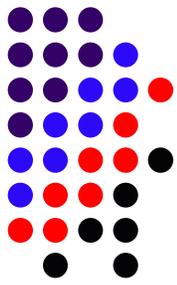
The Ledger



- Accounts are collectively referred to as the ledger

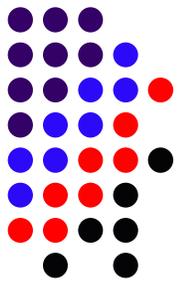
- Types of accounts
 - Balance Sheet accounts or real accounts or permanent accounts
 - Income statement accounts or nominal accounts or temporary accounts,
 - i.e., revenue, expenses, and dividends - all these are subdivisions of retained earnings

The Recording Process



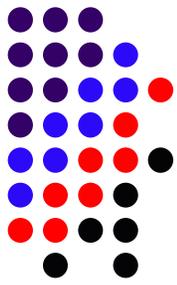
- Journal entries
- Posting to T-accounts
- Trial Balance
- Adjusting entries (Next class)
- Financial statement preparation

The Journal



- Journal contains a chronological record of the transactions of a business

The company borrows \$3,000 from the bank

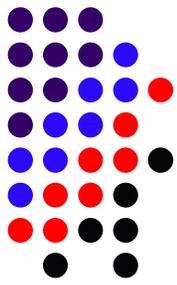


- Assets = Liabilities + Owners' Equity
- Cash Loans Payable
- +\$3,000 +\$3,000

Journal Entry

Dr Cash (+A)	3,000	
Cr Loans Payable (+L)		3,000

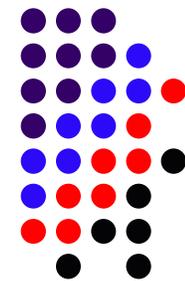
Company purchases equipment for \$5,000 cash



- Assets = L + OE
- Cash Equipment
- -\$5,000 +\$5,000

Journal Entry		
Dr Equipment (+A)	5,000	
Cr Cash (-A)		5,000

Company pays a dividend of \$1,000



■ Assets = Liabilities + Owners' Equity

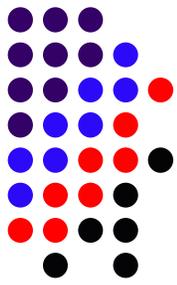
■ Cash Retained Earnings

■ -\$1,000 -\$1,000

Journal Entry

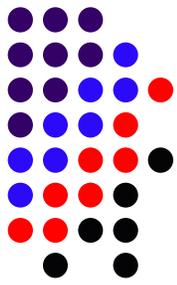
Dr Dividends (-RE)	1,000	
Cr Cash (-A)		1,000

Posting



- Transactions from the journal are posted to the ledger (we will ignore this step)

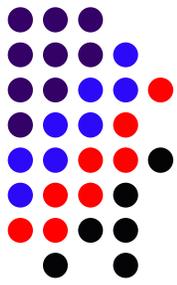
Trial Balance



- **Trial balance** is a listing of all the accounts and their balances in this order:
 - Assets
 - Liabilities
 - shareholders' equity
 - Revenues
 - Expenses
- Prepared prior to the preparation of financial statements
- Duality is an important check of **arithmetic** accuracy
 - However, equality of debits and credits in a trial balance does not mean that accounting is error free
 - Complete omission of a transaction
 - Recording an entry in the wrong account
 - Compensating errors

Emily's Bakery

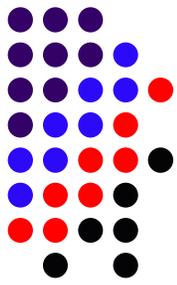
Trial Balance



	<u>Debit</u>	<u>Credit</u>
Cash	6,000	
Accounts Receivable	4,000	
Equipment	5,000	
Loans Payable		3,000
Contributed Capital		10,000
Retained Earnings		0
<i>Service Revenue</i>		<i>12,000</i>
<i>Expenses</i>	<i>9,000</i>	
<i>Dividend</i>	<i>1,000</i>	
Total	<u>25,000</u>	<u>25,000</u>

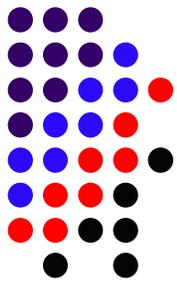
Prepare Income Statement

For the year ended December 31, 1997

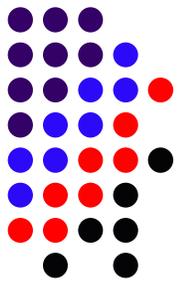


Revenues: Fees earned for service	\$12,000
Expenses: Wages, interest, maintenance	<u>\$ 9,000</u>
Net income	<u>\$ 3,000</u>

Statement of Retained Earnings For the year ended December 31, 1997



Beginning retained earnings balance	0
Plus: Net income	3,000
Less: Dividend to stockholder	1,000
	<hr/>
Ending retained earnings balance	<u>\$ 2,000</u>



Summary

- T-accounts
 - Debit is Left
 - Credit is Right
 - Increases in Assets – Debits
 - Increases in liabilities – Credits
 - Increases in shareholders' equity – Credits
 - Expenses are Debits
 - Revenues are Credits
- Use balances from T-accounts to prepare financial statements at the end of a fiscal period