

# Chapter 2

## Analyzing and Recording Transactions

### QUESTIONS

1.
  - a. Common asset accounts: cash, accounts receivable, notes receivable, prepaid expenses (rent, insurance, etc.), office supplies, store supplies, equipment, building, and land.
  - b. Common liability accounts: accounts payable, notes payable, and unearned revenue, wages payable, and taxes payable.
  - c. Common equity accounts: owner, capital and owner, withdrawals.
2. A note payable is formal promise, usually denoted by signing a promissory note to pay a future amount. A note payable can be short-term or long-term, depending on when it is due. An account payable also references an amount owed to an entity. An account payable can be oral or implied, and often arises from the purchase of inventory, supplies, or services. An account payable is usually short-term.
3. There are several steps in processing transactions: (1) Identify and analyze the transaction or event, including the source document(s), (2) apply double-entry accounting, (3) record the transaction or event in a journal, and (4) post the journal entry to the ledger. These steps would be followed by preparation of a trial balance and then with the reporting of financial statements.
4. A general journal can be used to record any business transaction or event.
5. Debited accounts are commonly recorded first. The credited accounts are commonly indented.
6. A transaction is first recorded in a journal to create a complete record of the transaction in one place. (The journal is often referred to as the book of original entry.) This process reduces the likelihood of errors in ledger accounts.
7. Expense accounts have debit balances because they are decreases to equity (and equity has a credit balance).
8. The recordkeeper prepares a trial balance to summarize the contents of the ledger and to verify the equality of total debits and total credits. The trial balance also serves as a helpful internal document for preparing financial statements and other reports.
9. The error should be corrected with a separate (subsequent) correcting entry. The entry's explanation should describe why the correction is necessary.

10. The four financial statements are: income statement, balance sheet, statement of owner's equity, and statement of cash flows.
11. The balance sheet provides information that helps users understand a company's financial position at a point in time. Accordingly, it is often called the statement of financial position. The balance sheet lists the types and dollar amounts of assets, liabilities, and equity of the business.
12. The income statement lists the types and amounts of revenues and expenses, and reports whether the business earned a net income (also called profit or earnings) or a net loss.
13. An income statement user must know what time period is covered to judge whether the company's performance is satisfactory. For example, a statement user would not be able to assess whether the amounts of revenue and net income are satisfactory without knowing whether they were earned over a week, a month, a quarter, or a year.
14. (a) Assets are probable future economic benefits obtained or controlled by a specific entity as a result of past transactions or events. (b) Liabilities are probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events. (c) Equity is the residual interest in the assets of an entity that remains after deducting its liabilities. (d) Net assets refer to equity.
15. The balance sheet is sometimes referred to as the statement of financial position.
16. Debit balance accounts on the Apple balance sheet include: Cash and cash equivalents; Short-term marketable securities; Accounts receivable; Inventories; Deferred tax assets; Vendor non-trade receivables; Other current assets; Long-term marketable securities; Property, plant and equipment, net; Goodwill; Acquired intangible assets, net; Other assets.  
  
Credit balance accounts on the Apple balance sheet include: Accounts Payable; Accrued expenses; Deferred revenue; Commercial paper; Current portion of long-term debt; Deferred revenue, non-current; Long-term debt; Other non-current liabilities; Common stock; Retained earnings; Accumulated other comprehensive income (current year abnormal debit balance).
17. The asset accounts with *receivable* in its account title are: Accounts receivable, net; Receivable under reverse repurchase agreements; Income taxes receivable, net. The liabilities with *payable* in the account title are: Accounts payable; Securities lending payable; Income taxes payable, net; Income taxes payable, non-current.
18. Samsung's balance sheet lists the following current liabilities: Trade and other payables; Short-term borrowings; Other payables; Advances received; Withholdings; Accrued expenses; Income tax payable; Current portion of long-term liabilities; Provisions; Other current liabilities; Liabilities held-for-sale.  
  
Samsung's balance sheet lists the following noncurrent liabilities: Debentures; Long-term borrowings; Long-term other payables; Net defined benefit liabilities; Deferred income tax liabilities; Provisions; Other non-current liabilities.

## QUICK STUDIES

### Quick Study 2-1 (10 minutes)

The likely source documents include:

- a. Sales ticket
- d. Telephone bill
- e. Invoice from supplier
- h. Bank statement

### Quick Study 2-2 (5 minutes)

- a. A Asset
- b. A Asset
- c. A Asset
- d. A Asset
- e. A Asset
- f. EQ Equity
- g. L Liability
- h. L Liability
- i. EQ Equity

### Quick Study 2-3 (5 minutes)

- |    |    |           |     |
|----|----|-----------|-----|
| a. | E  | Expense   | 655 |
| b. | R  | Revenue   | 406 |
| c. | A  | Asset     | 110 |
| d. | A  | Asset     | 191 |
| e. | L  | Liability | 208 |
| f. | A  | Asset     | 161 |
| g. | L  | Liability | 245 |
| h. | EQ | Equity    | 301 |
| i. | E  | Expense   | 690 |

**Quick Study 2-4 (10 minutes)**

- |    |        |    |       |    |        |
|----|--------|----|-------|----|--------|
| a. | Credit | d. | Debit | g. | Credit |
| b. | Debit  | e. | Debit | h. | Debit  |
| c. | Debit  | f. | Debit | i. | Credit |

**Quick Study 2-5 (10 minutes)**

- |    |        |    |        |    |        |
|----|--------|----|--------|----|--------|
| a. | Debit  | e. | Debit  | i. | Credit |
| b. | Debit  | f. | Credit | j. | Debit  |
| c. | Credit | g. | Credit | k. | Debit  |
| d. | Credit | h. | Debit  | l. | Credit |

**Quick Study 2-6 (15 minutes)**

- a.  
1) Analyze:

Assets		=	Liabilities	+	Equity
Cash	Equipment				D. Tyler, Capital
7,000	+ 3,000	=	0	+	10,000

- 2) Record:

Date	Account Titles and Explanation	PR	Debit	Credit
May 15	Cash	101	7,000	
	Equipment	167	3,000	
	D. Tyler, Capital	301		10,000
	<i>Owner invests cash &amp; equipment.</i>			

- 3) Post

Cash 101	Equipment 167	D. Tyler, Capital 301
7,000	3,000	10,000

**Quick Study 2-6 (Continued)**

b.

1) Analyze:

Assets	=	Liabilities	+	Equity
Office Supplies		Accounts Payable		
500	=	500	+	0

2) Record:

Date	Account Titles and Explanation	PR	Debit	Credit
May 21	Office Supplies	124	500	
	Accounts Payable	201		500
	<i>Purchased office supplies on credit.</i>			

3) Post

Office Supplies	124	Accounts Payable	201
500		500	

c.

1) Analyze:

Assets	=	Liabilities	+	Equity
Cash				Landscaping Revenue
4,000	=	0	+	4,000

2) Record:

Date	Account Titles and Explanation	PR	Debit	Credit
May 25	Cash	101	4,000	
	Landscaping Revenue	403		4,000
	<i>Received cash for landscaping services.</i>			

3) Post

Cash	101	Landscaping Revenue	403
4,000		4,000	

**Quick Study 2-6 (Continued)**

d.

1) Analyze:

Assets	=	Liabilities	+	Equity
Cash		Unearned Landscaping Revenue		
1,000	=	1,000	+	0

2) Record:

Date	Account Titles and Explanation	PR	Debit	Credit
May 30	Cash	101	1,000	
	Unearned Landscaping Revenue	236		1,000
	<i>Received cash in advance for landscaping services.</i>			

3) Post

Cash	101	Unearned Landscaping Revenue	236
1,000			1,000

**Quick Study 2-7 (10 minutes)**

- |    |        |    |        |    |        |
|----|--------|----|--------|----|--------|
| a. | Debit  | e. | Debit  | i. | Credit |
| b. | Credit | f. | Credit | j. | Debit  |
| c. | Credit | g. | Credit |    |        |
| d. | Debit  | h. | Credit |    |        |

**Quick Study 2-8 (10 minutes)**

The correct answer is a.

**Explanation:** If a \$2,250 debit to Utilities Expense is incorrectly posted as a credit, the effect is to understate the Utilities Expense debit balance by \$4,500. This causes the Debit column total on the trial balance to be \$4,500 less than the Credit column total.

**Quick Study 2-9 (10 minutes)**

- |    |   |    |   |    |   |
|----|---|----|---|----|---|
| a. | I | e. | B | i. | E |
| b. | B | f. | B | j. | B |
| c. | B | g. | B | k. | I |
| d. | I | h. | I | l. | I |

**Quick Study 2-10 (10 minutes)**

a.

Cash	
100	50
300	60
20	
<b>Bal. 310</b>	

b.

Accounts Payable	
2,000	8,000
2,700	
	<b>Bal. 3,300</b>

c.

Supplies	
10,000	3,800
1,100	
<b>Bal. 7,300</b>	

d.

Accounts Receivable	
600	150
	150
	150
	100
<b>Bal. 50</b>	

e.

Wages Payable	
700	700
	<b>Bal. 0</b>

f.

Cash	
11,000	4,500
800	6,000
100	1,300
<b>Bal. 100</b>	

### Quick Study 2-11 (15 minutes)

- a. Accounting under IFRS follows the same debit and credit system as under US GAAP.
- b. The same four basic financial statements are prepared under IFRS and US GAAP: income statement, balance sheet, statement of changes in equity, and statement of cash flows. Although some variations from these titles exist within both systems, the four basic statements are present.
- c. Accounting reports under both IFRS and US GAAP are likely different depending on the extent of accounting controls and enforcement. For example, the absence of controls and enforcement increase the possibility of fraudulent transactions and misleading financial statements. Without controls and enforcement, all accounting systems run the risk of abuse and manipulation.

### Quick Study 2-12 (10 minutes)

Debt ratio = Total liabilities / Total assets = \$30,624 mil / \$39,946 mil = 76.7%

*Interpretation:* Its debt ratio of 76.7% exceeds the 60% of its competitors. Home Depot's financial leverage, and accordingly its riskiness, can be judged as above average based on the debt ratio.

## EXERCISES

### Exercise 2-1 (10 minutes)

- 4 a. Prepare and analyze the trial balance.
- 1 b. Analyze each transaction from source documents.
- 2 c. Record relevant transactions in a journal.
- 3 d. Post journal information to ledger accounts.

### Exercise 2-2 (10 minutes)

- a. 5 “Three”
- b. 2 “Equity”
- c. 4 “Liability”
- d. 1 “Asset”
- e. 3 “Account”

### Exercise 2-3 (5 minutes)

- a. 1 “Chart”
- b. 2 “General Ledger”

**Exercise 2-4 (15 minutes)**

	<b>Account</b>	<b>Type of Account</b>	<b>Normal Balance</b>	<b>Increase (Dr. or Cr.)</b>
a.	Land .....	asset	debit	debit
b.	Cash .....	asset	debit	debit
c.	Legal Expense.....	expense	debit	debit
d.	Prepaid Insurance.....	asset	debit	debit
e.	Accounts Receivable.....	asset	debit	debit
f.	Owner Withdrawals.....	equity	debit	debit
g.	License Fee Revenue .....	revenue	credit	credit
h.	Unearned Revenue .....	liability	credit	credit
i.	Fees Earned.....	revenue	credit	credit
j.	Equipment .....	asset	debit	debit
k.	Notes Payable .....	liability	credit	credit
l.	Owner, Capital.....	equity	credit	credit

**Exercise 2-5 (15 minutes)**

Of the items listed, the following effects should be included:

- a. \$28,000 increase in a liability account.
- b. \$10,000 increase in the Cash account.
- e. \$62,000 increase in a revenue account.

**Explanation:** This transaction created \$62,000 in revenue, which is the value of the service provided. Payment is received in the form of a \$10,000 increase in cash, an \$80,000 increase in computer equipment, and a \$28,000 increase in its liabilities. The net value received by the company is \$62,000.

**Exercise 2-6 (15 minutes)**

a.	Beginning accounts payable (credit).....	\$152,000	
	Purchases on account in October (credits) .....	281,000	
	Payments on accounts in October (debits).....	(_____?)	
	Ending accounts payable (credit) .....	\$132,500	
	Payments on accounts in October (debits).....	<u>\$300,500</u>	
b.	Beginning accounts receivable (debit).....	\$102,500	
	Sales on account in October (debits) .....	?	
	Collections on account in October (credits) .....	<u>(102,890)</u>	
	Ending accounts receivable (debit) .....	\$ 89,000	
	Sales on account in October (debits) .....	<u>\$ 89,390</u>	
c.	Beginning cash balance (debit).....	\$ ?	
	Cash received in October (debits) .....	102,500	
	Cash disbursed in October (credits).....	<u>(103,150)</u>	
	Ending cash balance (debit).....	\$ 18,600	
	Beginning cash balance (debit).....	<u>\$ 19,250</u>	

**Exercise 2-7 (25 minutes)**

Aug. 1	Cash .....	6,500	
	Photography Equipment .....	33,500	
	M. Harris, Capital .....		40,000
	<i>Owner investment in business.</i>		
2	Prepaid Insurance.....	2,100	
	Cash .....		2,100
	<i>Acquired 2 years of insurance coverage.</i>		
5	Office Supplies.....	880	
	Cash .....		880
	<i>Purchased office supplies.</i>		
20	Cash .....	3,331	
	Photography Fees Earned .....		3,331
	<i>Collected photography fees.</i>		
31	Utilities Expense .....	675	
	Cash .....		675
	<i>Paid for August utilities.</i>		

**Exercise 2-8 (30 minutes)**

**Part 1**

Cash			
Aug. 1	6,500	Aug. 2	2,100
20	3,331	5	880
		31	675
Balance	6,176		

Photography Equipment			
Aug. 1	33,500		

  

M. Harris, Capital			
		Aug. 1	40,000

Office Supplies			
Aug. 5	880		

Photography Fees Earned			
		Aug. 20	3,331

Prepaid Insurance			
Aug. 2	2,100		

Utilities Expense			
Aug. 31	675		

**Part 2**

POSE-FOR-PICS Trial Balance August 31		
	<i>Debit</i>	<i>Credit</i>
Cash .....	\$ 6,176	
Office supplies .....	880	
Prepaid insurance .....	2,100	
Photography equipment .....	33,500	
M. Harris, Capital.....		\$40,000
Photography fees earned.....		3,331
Utilities expense.....	<u>675</u>	
Totals .....	<u>\$43,331</u>	<u>\$43,331</u>

## Exercise 2-9 (30 minutes)

a.	Cash .....	100,750	
	K. Spade, Capital .....		100,750
	<i>Owner invested in the business.</i>		
b.	Office Supplies.....	1,250	
	Cash.....		1,250
	<i>Purchased supplies with cash.</i>		
c.	Office Equipment .....	10,050	
	Accounts Payable .....		10,050
	<i>Purchased office equipment on credit.</i>		
d.	Cash .....	15,500	
	Fees Earned .....		15,500
	<i>Received cash from customer for services.</i>		
e.	Accounts Payable .....	10,050	
	Cash.....		10,050
	<i>Made payment toward account payable.</i>		
f.	Accounts Receivable.....	2,700	
	Fees Earned .....		2,700
	<i>Billed customer for services provided.</i>		
g.	Rent Expense .....	1,225	
	Cash.....		1,225
	<i>Paid for this period's rental charge.</i>		
h.	Cash .....	1,125	
	Accounts Receivable .....		1,125
	<i>Received cash toward an account receivable.</i>		
i.	K. Spade, Withdrawals .....	10,000	
	Cash.....		10,000
	<i>Owner withdrew cash for personal use.</i>		

**Exercise 2-9 (concluded)**

Cash	
(a) 100,750	(b) 1,250
(d) 15,500	(e) 10,050
(h) 1,125	(g) 1,225
	(i) 10,000
<b>Balance</b> 94,850	

Accounts Payable	
(e) 10,050	(c) 10,050
	<b>Balance</b> 0

K. Spade, Capital	
	(a) 100,750
	<b>Balance</b> 100,750

Accounts Receivable	
(f) 2,700	(h) 1,125
<b>Balance</b> 1,575	

K. Spade, Withdrawals	
(i) 10,000	
<b>Balance</b> 10,000	

Office Supplies	
(b) 1,250	
<b>Balance</b> 1,250	

Fees Earned	
	(d) 15,500
	(f) 2,700
	<b>Balance</b> 18,200

Office Equipment	
(c) 10,050	
<b>Balance</b> 10,050	

Rent Expense	
(g) 1,225	
<b>Balance</b> 1,225	

**Exercise 2-10 (15 minutes)**

SPADE COMPANY Trial Balance May 31, 2017		
	<i>Debit</i>	<i>Credit</i>
Cash .....	\$ 94,850	
Accounts receivable .....	1,575	
Office supplies.....	1,250	
Office equipment.....	10,050	
Accounts payable.....		\$ 0
K. Spade, Capital.....		100,750
K. Spade, Withdrawals.....	10,000	
Fees earned .....		18,200
Rent expense .....	1,225	
<b>Totals.....</b>	<b><u>\$118,950</u></b>	<b><u>\$118,950</u></b>

**Exercise 2-11 (20 minutes)**

1.

a.	Account Payable .....	2,000	
	Cash .....		2,000
	<i>Paid amount owed.</i>		
b.	Salaries Expense.....	1,200	
	Cash .....		1,200
	<i>Paid salary of receptionist.</i>		
c.	Equipment.....	39,000	
	Cash .....		39,000
	<i>Paid for equipment purchase.</i>		
d.	Utilities Expense .....	800	
	Cash .....		800
	<i>Paid utilities for the office.</i>		
e.	B. Valdez, Withdrawals .....	4,500	
	Cash .....		4,500
	<i>Paid for owner withdrawal.</i>		

2. Transactions a, c, and e did not yield an expense for the following reasons:

- e This transaction is a distribution of cash to the owner. Even though equity decreased, that decrease did not occur in the process of providing goods or services to customers.
- a This transaction decreased assets in settlement of a previously existing liability (equity did not change). Cash payment does not mean the same as using up of assets (expense is recorded when assets are used).
- c This transaction involves the purchase of an asset. The form of the company's assets changed, but total assets did not (and equity did not change).

**Exercise 2-12 (20 minutes)**

1.			
a.	Cash .....	20,000	
	B. Valdez, Capital .....		20,000
	<i>Cash received from owner investment.</i>		
b.	Cash .....	900	
	Services Revenue .....		900
	<i>Provided services for cash.</i>		
c.	Cash .....	10,000	
	Unearned Services Revenue .....		10,000
	<i>Cash received for future services.</i>		
d.	Cash .....	3,500	
	Accounts Receivable.....		3,500
	<i>Cash received toward accounts receivable.</i>		
e.	Cash .....	5,000	
	Note Payable .....		5,000
	<i>Cash received for note payable to bank.</i>		

2. Transactions a, c, d, and e did not yield revenue for the following reasons:

- d This transaction changed the form of an asset from receivable to cash. Total assets were not increased (revenue was recognized when the services were originally provided).
- e This transaction brought in cash (increased assets), but it also increased a liability by the same amount (no goods or services were provided to generate revenue).
- a This transaction brought in cash, but this is an owner investment.
- c This transaction brought in cash, but it created a liability because the services have not yet been provided to the client.

**Exercise 2-13 (25 minutes)**

- b 1. The company paid \$4,800 cash in advance for prepaid insurance coverage.
- a 2. D. Belle created a new business and invested \$6,000 cash, \$7,600 of equipment, and \$12,000 in web servers.
- c 3. The company purchased \$900 of supplies on account.
- e 4. The company received \$4,500 cash for services provided.
- f 5. The company paid \$900 cash towards accounts payable.
- g 6. The company paid \$3,400 cash for equipment.
- d 7. The company paid \$800 cash for selling expenses.

**Exercise 2-14 (30 minutes)**

a.	Cash .....	6,000	
	Equipment .....	7,600	
	Web Servers .....	12,000	
	D. Belle, Capital .....		25,600
	<i>Owner investment in company.</i>		
b.	Prepaid Insurance .....	4,800	
	Cash .....		4,800
	<i>Purchased insurance coverage.</i>		
c.	Supplies .....	900	
	Accounts Payable .....		900
	<i>Purchased supplies on credit.</i>		
d.	Selling Expenses .....	800	
	Cash .....		800
	<i>Paid cash for selling expenses.</i>		
e.	Cash .....	4,500	
	Services Revenue .....		4,500
	<i>Received cash for services provided.</i>		
f.	Accounts Payable .....	900	
	Cash .....		900
	<i>Made payment on accounts payable.</i>		
g.	Equipment .....	3,400	
	Cash .....		3,400
	<i>Paid cash for equipment.</i>		

## Exercise 2-15 (20 minutes)

Calculation of change in equity for part a through part d

	Assets	-	Liabilities	=	Equity
Beginning of the year .....	\$ 60,000	-	\$20,000	=	\$40,000
End of the year .....	105,000	-	36,000	=	<u>69,000</u>
Net increase in equity .....					<u>\$29,000</u>

a.	Net income .....	\$	?
	Plus owner investments .....		0
	Less owner withdrawals .....		<u>(0)</u>
	Change in equity .....		<u>\$29,000</u>

**Net Income = \$29,000**

Since there were no additional investments or withdrawals, the net income for the year equals the net increase in owner's equity.

b.	Net income .....	\$	?
	Plus owner investments .....		0
	Less owner withdrawals (\$1,250/mo. x 12 mo.)		<u>(15,000)</u>
	Change in equity .....		<u>\$29,000</u>

**Net Income = \$44,000**

The withdrawals were added back because they reduced equity without reducing net income.

c.	Net income .....	\$	?
	Plus owner investment .....		55,000
	Less withdrawals by owner .....		<u>(0)</u>
	Change in equity .....		<u>\$29,000</u>

**Net Loss = \$26,000**

The investment was deducted because it increased equity without creating net income.

d.	Net income .....	\$	?
	Plus owner investment .....		35,000
	Less owner withdrawals (\$1,250/mo. X 12 mo.)		<u>(15,000)</u>
	Change in equity .....		<u>\$29,000</u>

**Net Income = \$9,000**

The withdrawals were added back because they reduced equity without reducing net income and the investments were deducted because they increased equity without creating net income.

## Exercise 2-16 (15 minutes)

<b>HELP TODAY</b> <b>Income Statement</b> <b>For Month Ended August 31</b>		
<b>Revenues</b>		
Consulting fees earned.....		<b>\$ 27,000</b>
<b>Expenses</b>		
Rent expense .....	<b>\$ 9,550</b>	
Salaries expense .....	<b>5,600</b>	
Telephone expense .....	<b>860</b>	
Miscellaneous expenses .....	<b><u>520</u></b>	
Total expenses .....		<b><u>16,530</u></b>
Net income .....		<b><u>\$ 10,470</u></b>

## Exercise 2-17 (15 minutes)

<b>HELP TODAY</b> <b>Statement of Owner's Equity</b> <b>For Month Ended August 31</b>	
C. Camry, Capital, July 31 .....	<b>\$ 0</b>
Add: Investment by owner .....	<b>102,000</b>
Net income (from Exercise 2-16).....	<b><u>10,470</u></b>
	<b>112,470</b>
Less: Withdrawals by owner .....	<b><u>6,000</u></b>
C. Camry, Capital, August 31 .....	<b><u>\$106,470</u></b>

## Exercise 2-18 (15 minutes)

HELP TODAY Balance Sheet August 31			
Assets		Liabilities	
Cash.....	\$ 25,360	Accounts payable.....	\$ 10,500
Accounts receivable ....	22,360		
Office supplies.....	5,250	Equity	
Office equipment .....	20,000	C. Camry, Capital* .....	106,470
Land .....	<u>44,000</u>		
Total assets.....	<u>\$116,970</u>	Total liabilities & equity .....	<u>\$116,970</u>

\* Amount from Exercise 2-17.

## Exercise 2-19 (15 minutes)

	(a)	(b)	(c)	(d)
<b>Answers</b>	\$(28,000)	\$42,000	\$73,000	\$(45,000)
<b>Computations:</b>				
Equity, Dec. 31, 2016.....	\$ 0	\$ 0	\$ 0	\$ 0
Owner's investments .....	110,000	42,000	87,000	210,000
Owner's withdrawals.....	(28,000)	(47,000)	(10,000)	(55,000)
Net income (loss) .....	<u>22,000</u>	<u>90,000</u>	<u>(4,000)</u>	<u>(45,000)</u>
Equity, Dec. 31, 2017.....	<u>\$104,000</u>	<u>\$85,000</u>	<u>\$73,000</u>	<u>\$110,000</u>

## Exercise 2-20 (20 minutes)

Description	(1) Difference between Debit and Credit Columns	(2) Column with the Larger Total	(3) Identify account(s) incorrectly stated	(4) Amount that account(s) is overstated or understated
a. \$3,600 debit to Rent Expense is posted as a \$1,340 debit.	\$2,260	Credit	Rent Expense	Rent Expense is understated by \$2,260
b. \$6,500 credit to Cash is posted twice as two credits to Cash.	\$6,500	Credit	Cash	Cash is understated by \$6,500
c. \$10,900 debit to the Withdrawals account is debited to Owner's Capital.	\$0	—	Owner, Capital  Owner, Withdrawals	Owner, Capital is understated by \$10,900 Owner, Withdrawals is understated by \$10,900
d. \$2,050 debit to Prepaid Insurance is posted as a debit to Insurance Expense.	\$0	—	Prepaid Insurance  Insurance Expense	Prepaid Insurance is understated by \$2,050 Insurance Expense is overstated by \$2,050
e. \$38,000 debit to Machinery is posted as a debit to Accounts Payable.	\$0	—	Machinery  Accounts Payable	Machinery is understated by \$38,000 Accounts Payable is understated by \$38,000
f. \$5,850 credit to Services Revenue is posted as a \$585 credit.	\$5,265	Debit	Services Revenue	Services Revenue is understated by \$5,265
g. \$1,390 debit to Store Supplies is not posted.	\$1,390	Credit	Store Supplies	Store Supplies is understated by \$1,390

## Exercise 2-21 (15 minutes)

	Overstated, Understated, or Correctly-Stated	Amount
a.	<b><u>Correctly-stated.</u></b> The debit column is correctly stated because the erroneous debit (to Accounts Payable) is deducted from an account with a (larger assumed) credit balance.	<b>\$0</b>
b.	<b><u>Understated.</u></b> The credit column is understated by \$37,900 because Accounts Payable was debited — it should have been credited.	<b>\$37,900</b>
c.	<b><u>Correctly-stated.</u></b> The Automobiles account balance is correctly stated.	<b>\$0</b>
d.	<b><u>Understated.</u></b> The Accounts Payable account balance is understated by \$37,900. It should have been increased (credited) by \$18,950 but the posting error decreased (debited) it by \$18,950.	<b>\$37,900</b>
e.	The credit column is \$37,900 less than the debit column, or \$162,100 in total (\$200,000 - \$37,900).	

## Exercise 2-22 (15 minutes)

a.	Co.	Liabilities /	Assets	= Debt Ratio	Net Income /	Average Assets	= ROA
	1	\$11,765	\$ 90,500	0.13	\$20,000	\$100,000	0.200
	2	46,720	64,000	0.73	3,800	40,000	0.095
	3	26,650	32,500	0.82	650	50,000	0.013
	4	55,860	147,000	0.38	21,000	200,000	0.105
	5	31,280	92,000	0.34	7,520	40,000	0.188
	6	52,250	104,500	0.50	12,000	80,000	0.150

- b. Company 3 relies most heavily on creditor (non-owner) financing with 82% of its assets financed by liabilities.
- c. Company 1 relies least on creditor (non-owner) financing at only 13%. This implies that 87% of the assets are financed by equity (owners).
- d. The companies with the highest debt ratios indicate the greatest risk. The two companies with the highest debt ratios are 2 and 3.
- e. Company 1 yields the highest return on assets at 20%; followed by Company 5 at 18.8%.
- f. As an investor, one prefers high returns at low risk. Company 1 is the preferred investment since it yields the lowest risk (debt ratio is 13%) and highest return on assets (20%).

## Exercise 2-23 (15 minutes)

HEINEKEN N.V. Balance Sheet (in Euro millions) December 31, 2015	
<b>Assets</b>	<b>Equity and liabilities</b>
Noncurrent assets..... € 31,800	Total equity ..... € 15,070
Current assets ..... 5,914	Noncurrent liabilities..... 14,128
	Current liabilities ..... <u>8,516</u>
Total assets..... <u>€ 37,714</u>	Total equity and liabilities .. <u>€ 37,714</u>

## PROBLEM SET A

### Problem 2-1A (90 minutes)

#### Part 1

April 1	Cash.....101	80,000	
	Office Equipment.....163	26,000	
	K. Tanner, Capital .....301		106,000
	<i>Owner invested cash and equipment.</i>		
2	Prepaid Rent .....131	9,000	
	Cash.....101		9,000
	<i>Prepaid twelve months' rent.</i>		
3	Office Equipment.....163	8,000	
	Office Supplies .....124	3,600	
	Accounts Payable.....201		11,600
	<i>Purchased equip. &amp; supplies on credit.</i>		
6	Cash.....101	4,000	
	Services Revenue.....403		4,000
	<i>Received cash for services.</i>		
9	Accounts Receivable .....106	6,000	
	Services Revenue.....403		6,000
	<i>Billed client for completed work.</i>		
13	Accounts Payable .....201	11,600	
	Cash.....101		11,600
	<i>Paid balance due on account.</i>		
19	Prepaid Insurance .....128	2,400	
	Cash.....101		2,400
	<i>Paid premium for insurance.</i>		
22	Cash.....101	4,400	
	Accounts Receivable .....106		4,400
	<i>Collected part of amount owed by client.</i>		
25	Accounts Receivable .....106	2,890	
	Services Revenue.....403		2,890
	<i>Billed client for completed work.</i>		
28	K. Tanner, Withdrawals.....302	5,500	
	Cash.....101		5,500
	<i>Owner withdrew cash for personal use.</i>		
29	Office Supplies .....124	600	
	Accounts Payable.....201		600
	<i>Purchased supplies on account.</i>		
30	Utilities Expense.....690	435	
	Cash.....101		435
	<i>Paid monthly utility bill.</i>		

**Problem 2-1A (Continued)**  
**Part 2**

		Cash		Acct. No. 101	
Date	Explanation	PR	Debit	Credit	Balance
April 1		G1	80,000		80,000
2		G1		9,000	71,000
6		G1	4,000		75,000
13		G1		11,600	63,400
19		G1		2,400	61,000
22		G1	4,400		65,400
28		G1		5,500	59,900
30		G1		435	59,465

		Accounts Receivable		Acct. No. 106	
Date	Explanation	PR	Debit	Credit	Balance
April 9		G1	6,000		6,000
22		G1		4,400	1,600
25		G1	2,890		4,490

		Office Supplies		Acct. No. 124	
Date	Explanation	PR	Debit	Credit	Balance
April 3		G1	3,600		3,600
29		G1	600		4,200

		Prepaid Insurance		Acct. No. 128	
Date	Explanation	PR	Debit	Credit	Balance
April 19		G1	2,400		2,400

		Prepaid Rent		Acct. No. 131	
Date	Explanation	PR	Debit	Credit	Balance
April 2		G1	9,000		9,000

		Office Equipment		Acct. No. 163	
Date	Explanation	PR	Debit	Credit	Balance
April 1		G1	26,000		26,000
3		G1	8,000		34,000

## Problem 2-1A (Continued)

Accounts Payable				Acct. No. 201	
Date	Explanation	PR	Debit	Credit	Balance
April 3		G1		11,600	11,600
13		G1	11,600		0
29		G1		600	600

K. Tanner, Capital				Acct. No. 301	
Date	Explanation	PR	Debit	Credit	Balance
April 1		G1		106,000	106,000

K. Tanner, Withdrawals				Acct. No. 302	
Date	Explanation	PR	Debit	Credit	Balance
April 28		G1	5,500		5,500

Services Revenue				Acct. No. 403	
Date	Explanation	PR	Debit	Credit	Balance
April 6		G1		4,000	4,000
9		G1		6,000	10,000
25		G1		2,890	12,890

Utilities Expense				Acct. No. 690	
Date	Explanation	PR	Debit	Credit	Balance
April 30		G1	435		435

**Problem 2-1A (Continued)**  
**Part 3**

<b>LINKWORKS</b>		
<b>Trial Balance</b>		
<b>April 30</b>		
	<b>Debit</b>	<b>Credit</b>
Cash.....	\$ 59,465	
Accounts receivable .....	4,490	
Office supplies.....	4,200	
Prepaid insurance .....	2,400	
Prepaid rent .....	9,000	
Office equipment .....	34,000	
Accounts payable.....		\$ 600
K. Tanner, Capital.....		106,000
K. Tanner, Withdrawals.....	5,500	
Services revenue.....		12,890
Utilities expense .....	<u>435</u>	
<b>Total.....</b>	<b><u>\$119,490</u></b>	<b><u>\$119,490</u></b>

**Problem 2-2A (90 minutes)****Part 1**

a.	Cash.....	101	100,000	
	Office Equipment.....	163	5,000	
	Drafting Equipment.....	164	60,000	
	J. Aracel, Capital.....	301		165,000
	<i>Owner invested cash and equipment.</i>			
b.	Land.....	172	49,000	
	Cash.....	101		6,300
	Notes Payable.....	250		42,700
	<i>Purchased land with cash and note payable.</i>			
c.	Building.....	170	55,000	
	Cash.....	101		55,000
	<i>Purchased building.</i>			
d.	Prepaid Insurance.....	108	3,000	
	Cash.....	101		3,000
	<i>Purchased 18-month insurance policy.</i>			
e.	Cash.....	101	6,200	
	Engineering Fees Earned.....	402		6,200
	<i>Collected cash for completed work.</i>			
f.	Drafting Equipment.....	164	20,000	
	Cash.....	101		9,500
	Notes Payable.....	250		10,500
	<i>Purchased equipment with cash and note payable.</i>			
g.	Accounts Receivable.....	106	14,000	
	Engineering Fees Earned.....	402		14,000
	<i>Completed services for client.</i>			
h.	Office Equipment.....	163	1,150	
	Accounts Payable.....	201		1,150
	<i>Purchased equipment on credit.</i>			

## Problem 2-2A (Part 1 Continued)

i.	Accounts Receivable .....	106	22,000	
	Engineering Fees Earned .....	402		22,000
	<i>Billed client for completed work.</i>			
j.	Equipment Rental Expense .....	602	1,333	
	Accounts Payable.....	201		1,333
	<i>Incurred equipment rental expense.</i>			
k.	Cash.....	101	7,000	
	Accounts Receivable .....	106		7,000
	<i>Collected cash on account.</i>			
l.	Wages Expense .....	601	1,200	
	Cash.....	101		1,200
	<i>Paid assistant's wages.</i>			
m.	Accounts Payable .....	201	1,150	
	Cash .....	101		1,150
	<i>Paid amount due on account.</i>			
n.	Repairs Expense .....	604	925	
	Cash .....	101		925
	<i>Paid for repair of equipment.</i>			
o.	J. Aracel, Withdrawals .....	302	9,480	
	Cash.....	101		9,480
	<i>Owner withdrew cash for personal use.</i>			
p.	Wages Expense .....	601	1,200	
	Cash.....	101		1,200
	<i>Paid assistant's wages.</i>			
q.	Advertising Expense.....	603	2,500	
	Cash.....	101		2,500
	<i>Paid for advertising expense.</i>			

**Problem 2-2A (Continued)**  
**Part 2**

Cash				No. 101
Date	PR	Debit	Credit	Balance
(a)		100,000		100,000
(b)			6,300	93,700
(c)			55,000	38,700
(d)			3,000	35,700
(e)		6,200		41,900
(f)			9,500	32,400
(k)		7,000		39,400
(l)			1,200	38,200
(m)			1,150	37,050
(n)			925	36,125
(o)			9,480	26,645
(p)			1,200	25,445
(q)			2,500	22,945

Accounts Receivable				No. 106
Date	PR	Debit	Credit	Balance
(g)		14,000		14,000
(i)		22,000		36,000
(k)			7,000	29,000

Prepaid Insurance				No. 108
Date	PR	Debit	Credit	Balance
(d)		3,000		3,000

Office Equipment				No. 163
Date	PR	Debit	Credit	Balance
(a)		5,000		5,000
(h)		1,150		6,150

Drafting Equipment				No. 164
Date	PR	Debit	Credit	Balance
(a)		60,000		60,000
(f)		20,000		80,000

Building				No. 170
Date	PR	Debit	Credit	Balance
(c)		55,000		55,000

Land				No. 172
Date	PR	Debit	Credit	Balance
(b)		49,000		49,000

Accounts Payable				No. 201
Date	PR	Debit	Credit	Balance
(h)			1,150	1,150
(j)			1,333	2,483
(m)		1,150		1,333

Notes Payable				No. 250
Date	PR	Debit	Credit	Balance
(b)			42,700	42,700
(f)			10,500	53,200

J. Aracel, Capital				No. 301
Date	PR	Debit	Credit	Balance
(a)			165,000	165,000

J. Aracel, Withdrawals				No. 302
Date	PR	Debit	Credit	Balance
(o)		9,480		9,480

Engineering Fees Earned				No. 402
Date	PR	Debit	Credit	Balance
(e)			6,200	6,200
(g)			14,000	20,200
(i)			22,000	42,200

Wages Expense				No. 601
Date	PR	Debit	Credit	Balance
(l)		1,200		1,200
(p)		1,200		2,400

Equipment Rental Expense				No. 602
Date	PR	Debit	Credit	Balance
(j)		1,333		1,333

Advertising Expense				No. 603
Date	PR	Debit	Credit	Balance
(q)		2,500		2,500

Repairs Expense				No. 604
Date	PR	Debit	Credit	Balance
(n)		925		925

**Problem 2-2A (Concluded)**  
**Part 3**

<b>ARACEL ENGINEERING</b>		
<b>Trial Balance</b>		
<b>June 30</b>		
	<i>Debit</i>	<i>Credit</i>
Cash.....	\$ 22,945	
Accounts receivable .....	29,000	
Prepaid insurance .....	3,000	
Office equipment .....	6,150	
Drafting equipment .....	80,000	
Building .....	55,000	
Land .....	49,000	
Accounts payable.....		\$ 1,333
Notes payable .....		53,200
J. Aracel, Capital .....		165,000
J. Aracel, Withdrawals .....	9,480	
Engineering fees earned.....		42,200
Wages expense .....	2,400	
Equipment rental expense.....	1,333	
Advertising expense .....	2,500	
Repairs expense.....	<u>925</u>	
Totals .....	<u>\$261,733</u>	<u>\$261,733</u>

**Problem 2-3A (90 minutes)****Part 1**

Mar. 1	Cash.....	101	150,000	
	Office Equipment.....	163	22,000	
	D. Brooks, Capital.....	301		172,000
	<i>Owner invested cash and equipment.</i>			
2	Prepaid Rent .....	131	6,000	
	Cash.....	101		6,000
	<i>Prepaid six months' rent.</i>			
3	Office Equipment.....	163	3,000	
	Office Supplies .....	124	1,200	
	Accounts Payable.....	201		4,200
	<i>Purchased equipment and supplies on credit.</i>			
6	Cash.....	101	4,000	
	Services Revenue.....	403		4,000
	<i>Received cash for services.</i>			
9	Accounts Receivable .....	106	7,500	
	Services Revenue.....	403		7,500
	<i>Billed client for completed work.</i>			
12	Accounts Payable .....	201	4,200	
	Cash.....	101		4,200
	<i>Paid balance due on account.</i>			
19	Prepaid Insurance .....	128	5,000	
	Cash.....	101		5,000
	<i>Paid premium for insurance.</i>			
22	Cash.....	101	3,500	
	Accounts Receivable .....	106		3,500
	<i>Collected part of amount owed by client.</i>			
25	Accounts Receivable .....	106	3,820	
	Services Revenue.....	403		3,820
	<i>Billed client for completed work.</i>			
29	D. Brooks, Withdrawals .....	302	5,100	
	Cash.....	101		5,100
	<i>Owner withdrew cash for personal use.</i>			
30	Office Supplies .....	124	600	
	Accounts Payable.....	201		600
	<i>Purchased supplies on account.</i>			
31	Utilities Expense.....	690	500	
	Cash.....	101		500
	<i>Paid monthly utility bill.</i>			

**Problem 2-3A (Continued)**  
**Part 2**

		Cash		Acct. No. 101	
Date	Explanation	PR	Debit	Credit	Balance
Mar. 1		G1	150,000		150,000
2		G1		6,000	144,000
6		G1	4,000		148,000
12		G1		4,200	143,800
19		G1		5,000	138,800
22		G1	3,500		142,300
29		G1		5,100	137,200
31		G1		500	136,700

		Accounts Receivable		Acct. No. 106	
Date	Explanation	PR	Debit	Credit	Balance
Mar. 9		G1	7,500		7,500
22		G1		3,500	4,000
25		G1	3,820		7,820

		Office Supplies		Acct. No. 124	
Date	Explanation	PR	Debit	Credit	Balance
Mar. 3		G1	1,200		1,200
30		G1	600		1,800

		Prepaid Insurance		Acct. No. 128	
Date	Explanation	PR	Debit	Credit	Balance
Mar. 19		G1	5,000		5,000

		Prepaid Rent		Acct. No. 131	
Date	Explanation	PR	Debit	Credit	Balance
Mar. 2		G1	6,000		6,000

		Office Equipment		Acct. No. 163	
Date	Explanation	PR	Debit	Credit	Balance
Mar. 1		G1	22,000		22,000
3		G1	3,000		25,000

**Problem 2-3A (Continued)****Part 2 (Continued)**

<b>Accounts Payable</b>				<b>Acct. No. 201</b>	
<b>Date</b>	<b>Explanation</b>	<b>PR</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
Mar. 3		G1		4,200	4,200
12		G1	4,200		0
30		G1		600	600

<b>D. Brooks, Capital</b>				<b>Acct. No. 301</b>	
<b>Date</b>	<b>Explanation</b>	<b>PR</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
Mar. 1		G1		172,000	172,000

<b>D. Brooks, Withdrawals</b>				<b>Acct. No. 302</b>	
<b>Date</b>	<b>Explanation</b>	<b>PR</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
Mar. 29		G1	5,100		5,100

<b>Services Revenue</b>				<b>Acct. No. 403</b>	
<b>Date</b>	<b>Explanation</b>	<b>PR</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
Mar. 6		G1		4,000	4,000
9		G1		7,500	11,500
25		G1		3,820	15,320

<b>Utilities Expense</b>				<b>Acct. No. 690</b>	
<b>Date</b>	<b>Explanation</b>	<b>PR</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
Mar. 31		G1	500		500

**Problem 2-3A (Concluded)****Part 3**

<b>VENTURE CONSULTANTS</b>		
<b>Trial Balance</b>		
<b>March 31</b>		
	<b>Debit</b>	<b>Credit</b>
Cash .....	\$136,700	
Accounts receivable .....	7,820	
Office supplies.....	1,800	
Prepaid insurance .....	5,000	
Prepaid rent .....	6,000	
Office equipment .....	25,000	
Accounts payable.....		\$ 600
D. Brooks, Capital .....		172,000
D. Brooks, Withdrawals .....	5,100	
Services revenue.....		15,320
Utilities expense .....	<u>500</u>	
Totals .....	<u>\$187,920</u>	<u>\$187,920</u>

**Problem 2-4A (90 minutes)****Part 1**

a.	Cash.....	101	60,000	
	Office Equipment.....	163	25,000	
	H. Venedict, Capital.....	301		85,000
	<i>Owner invested cash and equipment.</i>			
b.	Land.....	172	40,000	
	Building.....	170	160,000	
	Cash.....	101		30,000
	Notes Payable.....	250		170,000
	<i>Purchased land and building with cash and note payable.</i>			
c.	Office Supplies.....	108	2,000	
	Accounts Payable.....	201		2,000
	<i>Purchased office supplies on account.</i>			
d.	Automobiles.....	164	16,500	
	H. Venedict, Capital.....	301		16,500
	<i>Owner contributed automobile to business.</i>			
e.	Office Equipment.....	163	5,600	
	Accounts Payable.....	201		5,600
	<i>Purchased office equipment on account.</i>			
f.	Salaries Expense.....	601	1,800	
	Cash.....	101		1,800
	<i>Paid assistant's salary.</i>			
g.	Cash.....	101	8,000	
	Fees Earned.....	402		8,000
	<i>Provided services for cash.</i>			
h.	Utilities Expense.....	602	635	
	Cash.....	101		635
	<i>Paid cash for utilities.</i>			

**Problem 2-4A (Part 1 Continued)**

i.	Accounts Payable .....	201	2,000	
	Cash .....	101		2,000
	<i>Paid cash on account.</i>			
j.	Office Equipment.....	163	20,300	
	Cash .....	101		20,300
	<i>Purchased new equipment with cash.</i>			
k.	Accounts Receivable .....	106	6,250	
	Fees Earned.....	402		6,250
	<i>Provided services on account.</i>			
l.	Salaries Expense.....	601	1,800	
	Cash .....	101		1,800
	<i>Paid assistant's salary.</i>			
m.	Cash.....	101	4,000	
	Accounts Receivable.....	106		4,000
	<i>Received cash due on account.</i>			
n.	H. Venedict, Withdrawals.....	302	2,800	
	Cash .....	101		2,800
	<i>Owner withdrew cash for personal use.</i>			

**Problem 2-4A (Continued)**  
**Part 2**

Cash				No. 101
Date	PR	Debit	Credit	Balance
(a)		60,000		60,000
(b)			30,000	30,000
(f)			1,800	28,200
(g)		8,000		36,200
(h)			635	35,565
(i)			2,000	33,565
(j)			20,300	13,265
(l)			1,800	11,465
(m)		4,000		15,465
(n)			2,800	12,665

Accounts Receivable				No. 106
Date	PR	Debit	Credit	Balance
(k)		6,250		6,250
(m)			4,000	2,250

Office Supplies				No. 108
Date	PR	Debit	Credit	Balance
(c)		2,000		2,000

Office Equipment				No. 163
Date	PR	Debit	Credit	Balance
(a)		25,000		25,000
(e)		5,600		30,600
(j)		20,300		50,900

Automobiles				No. 164
Date	PR	Debit	Credit	Balance
(d)		16,500		16,500

Building				No. 170
Date	PR	Debit	Credit	Balance
(b)		160,000		160,000

Land				No. 172
Date	PR	Debit	Credit	Balance
(b)		40,000		40,000

Accounts Payable				No. 201
Date	PR	Debit	Credit	Balance
(c)			2,000	2,000
(e)			5,600	7,600
(i)		2,000		5,600

Notes Payable				No. 250
Date	PR	Debit	Credit	Balance
(b)			170,000	170,000

H. Venedict, Capital				No. 301
Date	PR	Debit	Credit	Balance
(a)			85,000	85,000
(d)			16,500	101,500

H. Venedict, Withdrawals				No. 302
Date	PR	Debit	Credit	Balance
(n)		2,800		2,800

Fees Earned				No. 402
Date	PR	Debit	Credit	Balance
(g)			8,000	8,000
(k)			6,250	14,250

Salaries Expense				No. 601
Date	PR	Debit	Credit	Balance
(f)		1,800		1,800
(l)		1,800		3,600

Utilities Expense				No. 602
Date	PR	Debit	Credit	Balance
(h)		635		635

**Problem 2-4A (Concluded)**  
**Part 3**

<b>HV CONSULTING</b>		
<b>Trial Balance</b>		
<b>September 30</b>		
	<b>Debit</b>	<b>Credit</b>
Cash .....	\$ 12,665	
Accounts receivable .....	2,250	
Office supplies.....	2,000	
Office equipment .....	50,900	
Automobiles.....	16,500	
Building .....	160,000	
Land .....	40,000	
Accounts payable.....		\$ 5,600
Notes payable .....		170,000
H. Venedict, Capital .....		101,500
H. Venedict, Withdrawals.....	2,800	
Fees earned .....		14,250
Salaries expense .....	3,600	
Utilities expense .....	<u>635</u>	
<b>Total .....</b>	<b><u>\$291,350</u></b>	<b><u>\$291,350</u></b>

## Problem 2-5A (90 minutes)

## Part 1

NETTLE DISTRIBUTION Balance Sheet December 31, 2016			
<b>Assets</b>		<b>Liabilities</b>	
Cash.....	\$ 64,300	Accounts payable.....	\$ 3,500
Accounts receivable ....	26,240		
Office supplies.....	3,160		
Trucks.....	148,000	<b>Equity</b>	
Office equipment.....	<u>44,000</u>	Total equity .....	<u>282,200</u>
Total assets.....	<u>\$285,700</u>	Total liabilities and equity...	<u>\$285,700</u>

NETTLE DISTRIBUTION Balance Sheet December 31, 2017			
<b>Assets</b>		<b>Liabilities</b>	
Cash.....	\$ 15,640	Accounts payable .....	\$ 33,500
Accounts receivable ....	19,100	Note payable.....	<u>40,000</u>
Office supplies.....	1,960	Total liabilities .....	73,500
Trucks.....	157,000		
Office equipment.....	44,000	<b>Equity</b>	
Building .....	80,000	Total equity .....	<u>304,200</u>
Land .....	<u>60,000</u>	Total liabilities and equity....	<u>\$377,700</u>
Total assets.....	<u>\$377,700</u>		

## Part 2

## Computation of 2017 net income:

Owner investment .....	35,000
Add net income .....	?
Deduct withdrawals by owner.....	<u>(19,000)</u>
Increase in equity during 2017* .....	<u>\$ 22,000*</u>

Thus, net income =  $(\$22,000 + \$19,000 - \$35,000) = \underline{\$ 6,000}$

\* Computation of 2017 equity increase:

Equity, December 31, 2016 .....	\$282,200
Equity, December 31, 2017 .....	<u>(304,200)</u>
Increase in equity during 2017 .....	<u>\$ 22,000</u>

## Part 3

Debt Ratio =  $\$73,500 / \$377,700 = \underline{19.5\%}$

## Problem 2-6A (35 minutes)

## Part 1

<b>MIN ENGINEERING</b>		
<b>Trial Balance</b>		
<b>May 31</b>		
	<b>Debit</b>	<b>Credit</b>
Cash.....	\$37,600	
Office supplies.....	890	
Prepaid insurance .....	4,600	
Office equipment .....	12,900	
Accounts payable.....		\$12,900
Y. Min, Capital.....		18,000
Y. Min, Withdrawals.....	3,370	
Engineering fees earned.....		36,000
Rent expense .....	<u>7,540</u>	
Totals.....	<u>\$66,900</u>	<u>\$66,900</u>

## Part 2

<b>Cash</b>			
(a)	18,000	(b)	7,540
(f)	36,000	(c)	4,600
		(d)	890
		(g)	3,370
<b>Balance</b>	<b>37,600</b>		

Transactions a through g coded in T-account:

- (a) Yi Min invested \$18,000 cash in the business.
- (b) Paid \$7,540 cash for May's monthly rent expense.
- (c) Paid \$4,600 cash for this year's insurance premium beginning immediately.
- (d) Purchased office supplies for \$890 cash.
- (e) Purchased \$12,900 of office equipment on credit (with accounts payable).
- (f) Received \$36,000 cash for engineering services provided in May.
- (g) Yi Min withdrew \$3,370 cash for personal use.

## PROBLEM SET B

### Problem 2-1B (90 minutes)

#### Part 1

Sept. 1	Cash.....	101	38,000	
	Office Equipment.....	163	15,000	
	H. Humble, Capital .....	301		53,000
	<i>Owner invested in the business.</i>			
2	Prepaid Rent .....	131	9,000	
	Cash .....	101		9,000
	<i>Prepaid twelve months' rent.</i>			
4	Office Equipment.....	163	8,000	
	Office Supplies .....	124	2,400	
	Accounts Payable .....	201		10,400
	<i>Purchased equipment and supplies on credit.</i>			
8	Cash.....	101	3,280	
	Services Revenue .....	401		3,280
	<i>Received cash for services.</i>			
12	Accounts Receivable .....	106	15,400	
	Services Revenue .....	401		15,400
	<i>Billed client for completed work.</i>			
13	Accounts Payable .....	201	10,400	
	Cash .....	101		10,400
	<i>Paid balance due on account.</i>			
19	Prepaid Insurance .....	128	1,900	
	Cash .....	101		1,900
	<i>Paid premium for insurance.</i>			
22	Cash.....	101	7,700	
	Accounts Receivable.....	106		7,700
	<i>Collected part of amount owed by client.</i>			
24	Accounts Receivable.....	106	2,100	
	Services Revenue .....	401		2,100
	<i>Billed client for completed work.</i>			
28	H. Humble, Withdrawals .....	302	5,300	
	Cash .....	101		5,300
	<i>Owner withdrew cash for personal use.</i>			
29	Office Supplies .....	124	550	
	Accounts Payable .....	201		550
	<i>Purchased supplies on account.</i>			
30	Utilities Expense.....	690	860	
	Cash .....	101		860
	<i>Paid monthly utility bill.</i>			

**Problem 2-1B (Continued)**  
**Part 2**

			Cash		Acct. No. 101
Date		Explanation	PR	Debit	Credit Balance
Sept.	1		G1	38,000	38,000
	2		G1		9,000
	8		G1	3,280	32,280
	13		G1		10,400
	19		G1		1,900
	22		G1	7,700	27,680
	28		G1		5,300
	30		G1		860
					21,520

			Accounts Receivable		Acct. No. 106
Date		Explanation	PR	Debit	Credit Balance
Sept.	12		G1	15,400	15,400
	22		G1		7,700
	24		G1	2,100	9,800

			Office Supplies		Acct. No. 124
Date		Explanation	PR	Debit	Credit Balance
Sept.	4		G1	2,400	2,400
	29		G1	550	2,950

			Prepaid Insurance		Acct. No. 128
Date		Explanation	PR	Debit	Credit Balance
Sept.	19		G1	1,900	1,900

			Prepaid Rent		Acct. No. 131
Date		Explanation	PR	Debit	Credit Balance
Sept.	2		G1	9,000	9,000

			Office Equipment		Acct. No. 163
Date		Explanation	PR	Debit	Credit Balance
Sept.	1		G1	15,000	15,000
	4		G1	8,000	23,000

## Problem 2-1B (Continued)

Accounts Payable				Acct. No. 201	
Date	Explanation	PR	Debit	Credit	Balance
Sept. 4		G1		10,400	10,400
13		G1	10,400		0
29		G1		550	550

H. Humble, Capital				Acct. No. 301	
Date	Explanation	PR	Debit	Credit	Balance
Sept. 1		G1		53,000	53,000

H. Humble, Withdrawals				Acct. No. 302	
Date	Explanation	PR	Debit	Credit	Balance
Sept. 28		G1	5,300		5,300

Services Revenue				Acct. No. 401	
Date	Explanation	PR	Debit	Credit	Balance
Sept. 8		G1		3,280	3,280
12		G1		15,400	18,680
24		G1		2,100	20,780

Utilities Expense				Acct. No. 690	
Date	Explanation	PR	Debit	Credit	Balance
Sept. 30		G1	860		860

**Problem 2-1B (Concluded)****Part 3**

<b>HUMBLE MANAGEMENT SERVICES</b>		
<b>Trial Balance</b>		
<b>September 30</b>		
	<b>Debit</b>	<b>Credit</b>
Cash.....	\$21,520	
Accounts receivable .....	9,800	
Office supplies.....	2,950	
Prepaid insurance .....	1,900	
Prepaid rent .....	9,000	
Office equipment .....	23,000	
Accounts payable.....		\$ 550
H. Humble, Capital.....		53,000
H. Humble, Withdrawals .....	5,300	
Services revenue.....		20,780
Utilities expense .....	<u>860</u>	
<b>Totals .....</b>	<b><u>\$74,330</u></b>	<b><u>\$74,330</u></b>

**Problem 2-2B (90 minutes)****Part 1**

a.	Cash.....	101	65,000	
	Office Equipment.....	163	5,750	
	Computer Equipment.....	164	30,000	
	B. Grechus, Capital .....	301		100,750
	<i>Owner invested cash and equipment.</i>			
b.	Land.....	172	22,000	
	Cash.....	101		5,000
	Notes Payable .....	250		17,000
	<i>Purchased land with cash and note payable.</i>			
c.	Building .....	170	34,500	
	Cash.....	101		34,500
	<i>Purchased building.</i>			
d.	Prepaid Insurance .....	108	5,000	
	Cash.....	101		5,000
	<i>Purchased 24-month insurance policy.</i>			
e.	Cash.....	101	4,600	
	Fees Earned .....	402		4,600
	<i>Collected cash for completed work.</i>			
f.	Computer Equipment.....	164	4,500	
	Cash.....	101		800
	Notes Payable .....	250		3,700
	<i>Purchased equipment with cash and note payable.</i>			
g.	Accounts Receivable .....	106	4,250	
	Fees Earned .....	402		4,250
	<i>Completed services for client.</i>			
h.	Office Equipment.....	163	950	
	Accounts Payable.....	201		950
	<i>Purchased equipment on credit.</i>			

**Problem 2-2B (Part 1 Continued)**

i.	Accounts Receivable .....	106	10,200	
	Fees Earned .....	402		10,200
	<i>Billed client for completed work.</i>			
j.	Computer Rental Expense.....	602	580	
	Accounts Payable.....	201		580
	<i>Incurred computer rental expense.</i>			
k.	Cash.....	101	5,100	
	Accounts Receivable .....	106		5,100
	<i>Collected cash on account.</i>			
l.	Wages Expense .....	601	1,800	
	Cash.....	101		1,800
	<i>Paid assistant's wages.</i>			
m.	Accounts Payable .....	201	950	
	Cash.....	101		950
	<i>Paid amount due on account.</i>			
n.	Repairs Expense .....	604	608	
	Cash.....	101		608
	<i>Paid for repair of equipment.</i>			
o.	B. Grechus, Withdrawals .....	302	6,230	
	Cash.....	101		6,230
	<i>Owner withdrew cash for personal use.</i>			
p.	Wages Expense .....	601	1,800	
	Cash.....	101		1,800
	<i>Paid assistant's wages.</i>			
q.	Advertising Expense.....	603	750	
	Cash.....	101		750
	<i>Paid for advertising expense.</i>			

**Problem 2-2B (Continued)**  
**Part 2**

Cash				No. 101
Date	PR	Debit	Credit	Balance
(a)		65,000		65,000
(b)			5,000	60,000
(c)			34,500	25,500
(d)			5,000	20,500
(e)		4,600		25,100
(f)			800	24,300
(k)		5,100		29,400
(l)			1,800	27,600
(m)			950	26,650
(n)			608	26,042
(o)			6,230	19,812
(p)			1,800	18,012
(q)			750	17,262

Accounts Receivable				No. 106
Date	PR	Debit	Credit	Balance
(g)		4,250		4,250
(i)		10,200		14,450
(k)			5,100	9,350

Prepaid Insurance				No. 108
Date	PR	Debit	Credit	Balance
(d)		5,000		5,000

Office Equipment				No. 163
Date	PR	Debit	Credit	Balance
(a)		5,750		5,750
(h)		950		6,700

Computer Equipment				No. 164
Date	PR	Debit	Credit	Balance
(a)		30,000		30,000
(f)		4,500		34,500

Building				No. 170
Date	PR	Debit	Credit	Balance
(c)		34,500		34,500

Land				No. 172
Date	PR	Debit	Credit	Balance
(b)		22,000		22,000

Accounts Payable				No. 201
Date	PR	Debit	Credit	Balance
(h)			950	950
(j)			580	1,530
(m)		950		580

Notes Payable				No. 250
Date	PR	Debit	Credit	Balance
(b)			17,000	17,000
(f)			3,700	20,700

B. Grechus, Capital				No. 301
Date	PR	Debit	Credit	Balance
(a)			100,750	100,750

B. Grechus, Withdrawals				No. 302
Date	PR	Debit	Credit	Balance
(o)		6,230		6,230

Fees Earned				No. 402
Date	PR	Debit	Credit	Balance
(e)			4,600	4,600
(g)			4,250	8,850
(i)			10,200	19,050

Wages Expense				No. 601
Date	PR	Debit	Credit	Balance
(l)		1,800		1,800
(p)		1,800		3,600

Computer Rental Expense				No. 602
Date	PR	Debit	Credit	Balance
(j)		580		580

Advertising Expense				No. 603
Date	PR	Debit	Credit	Balance
(q)		750		750

Repairs Expense				No. 604
Date	PR	Debit	Credit	Balance
(n)		608		608

**Problem 2-2B (Concluded)****Part 3**

<b>SOFTWORKS</b>		
<b>Trial Balance</b>		
<b>April 30</b>		
	<b>Debit</b>	<b>Credit</b>
Cash .....	\$ 17,262	
Accounts receivable .....	9,350	
Prepaid insurance.....	5,000	
Office equipment.....	6,700	
Computer equipment.....	34,500	
Building.....	34,500	
Land .....	22,000	
Accounts payable .....		\$ 580
Notes payable.....		20,700
B. Grechus, Capital.....		100,750
B. Grechus, Withdrawals .....	6,230	
Fees earned .....		19,050
Wages expense .....	3,600	
Computer rental expense.....	580	
Advertising expense.....	750	
Repairs expense .....	<u>608</u>	
<b>Totals .....</b>	<b><u>\$141,080</u></b>	<b><u>\$141,080</u></b>

## Problem 2-3B (90 minutes)

## Part 1

Nov. 1	Cash.....101	30,000	
	Office Equipment.....163	15,000	
	M. Zucker, Capital.....301		45,000
	<i>Owner invested cash and equipment.</i>		
2	Prepaid Rent.....131	4,500	
	Cash.....101		4,500
	<i>Prepaid six months' rent.</i>		
4	Office Equipment.....163	2,500	
	Office Supplies.....124	600	
	Accounts Payable.....201		3,100
	<i>Purchased equipment and supplies on credit.</i>		
8	Cash.....101	3,400	
	Services Revenue.....403		3,400
	<i>Received cash for services.</i>		
12	Accounts Receivable.....106	10,200	
	Services Revenue.....403		10,200
	<i>Billed client for completed work.</i>		
13	Accounts Payable.....201	3,100	
	Cash.....101		3,100
	<i>Paid balance due on account.</i>		
19	Prepaid Insurance.....128	1,800	
	Cash.....101		1,800
	<i>Paid premium for 24 months of insurance.</i>		
22	Cash.....101	5,200	
	Accounts Receivable.....106		5,200
	<i>Collected part of amount owed by client.</i>		
24	Accounts Receivable.....106	1,750	
	Services Revenue.....403		1,750
	<i>Billed client for completed work.</i>		
28	M. Zucker, Withdrawals.....302	5,300	
	Cash.....101		5,300
	<i>Owner withdrew cash for personal use.</i>		
29	Office Supplies.....124	249	
	Accounts Payable.....201		249
	<i>Purchased supplies on account.</i>		
30	Utilities Expense.....690	831	
	Cash.....101		831
	<i>Paid monthly utility bill.</i>		

## Problem 2-3B (Continued)

## Part 2

		Cash		Acct. No. 101	
Date	Explanation	PR	Debit	Credit	Balance
Nov. 1		G1	30,000		30,000
2		G1		4,500	25,500
8		G1	3,400		28,900
13		G1		3,100	25,800
19		G1		1,800	24,000
22		G1	5,200		29,200
28		G1		5,300	23,900
30		G1		831	23,069

		Accounts Receivable		Acct. No. 106	
Date	Explanation	PR	Debit	Credit	Balance
Nov. 12		G1	10,200		10,200
22		G1		5,200	5,000
24		G1	1,750		6,750

		Office Supplies		Acct. No. 124	
Date	Explanation	PR	Debit	Credit	Balance
Nov. 4		G1	600		600
29		G1	249		849

		Prepaid Insurance		Acct. No. 128	
Date	Explanation	PR	Debit	Credit	Balance
Nov. 19		G1	1,800		1,800

		Prepaid Rent		Acct. No. 131	
Date	Explanation	PR	Debit	Credit	Balance
Nov. 2		G1	4,500		4,500

		Office Equipment		Acct. No. 163	
Date	Explanation	PR	Debit	Credit	Balance
Nov. 1		G1	15,000		15,000
4		G1	2,500		17,500

		Accounts Payable		Acct. No. 201	
Date	Explanation	PR	Debit	Credit	Balance
Nov. 4		G1		3,100	3,100
13		G1	3,100		0
29		G1		249	249

## Problem 2-3B (Continued)

M. Zucker, Capital				Acct. No. 301	
Date	Explanation	PR	Debit	Credit	Balance
Nov. 1		G1		45,000	45,000

M. Zucker, Withdrawals				Acct. No. 302	
Date	Explanation	PR	Debit	Credit	Balance
Nov. 28		G1	5,300		5,300

Services Revenue				Acct. No. 403	
Date	Explanation	PR	Debit	Credit	Balance
Nov. 8		G1		3,400	3,400
12		G1		10,200	13,600
24		G1		1,750	15,350

Utilities Expense				Acct. No. 690	
Date	Explanation	PR	Debit	Credit	Balance
Nov. 30		G1	831		831

## Part 3

ZUCKER MANAGEMENT SERVICES		
Trial Balance		
November 30		
	Debit	Credit
Cash.....	\$23,069	
Accounts receivable .....	6,750	
Office supplies.....	849	
Prepaid insurance .....	1,800	
Prepaid rent .....	4,500	
Office equipment .....	17,500	
Accounts payable.....		\$ 249
M. Zucker, Capital.....		45,000
M. Zucker, Withdrawals .....	5,300	
Services revenue .....		15,350
Utilities expense .....	<u>831</u>	
Totals.....	<u>\$60,599</u>	<u>\$60,599</u>

**Problem 2-4B (90 minutes)****Part 1**

a.	Cash.....	101	35,000	
	Office Equipment.....	163	11,000	
	A. Nuncio, Capital.....	301		46,000
	<i>Owner invested cash and equipment.</i>			
b.	Land.....	172	7,500	
	Building.....	170	40,000	
	Cash.....	101		15,000
	Notes Payable.....	250		32,500
	<i>Purchased land and building with cash and note payable.</i>			
c.	Office Supplies.....	108	500	
	Accounts Payable.....	201		500
	<i>Purchased office supplies on account.</i>			
d.	Automobiles.....	164	8,000	
	A. Nuncio, Capital.....	301		8,000
	<i>Owner contributed automobile to business.</i>			
e.	Office Equipment.....	163	1,200	
	Accounts Payable.....	201		1,200
	<i>Purchased office equipment on account.</i>			
f.	Salaries Expense.....	601	1,000	
	Cash.....	101		1,000
	<i>Paid assistant's salary.</i>			
g.	Cash.....	101	3,200	
	Fees Earned.....	402		3,200
	<i>Provided services for cash.</i>			
h.	Utilities Expense.....	602	540	
	Cash.....	101		540
	<i>Paid cash for utilities.</i>			

**Problem 2-4B****Part 1—Concluded**

i.	Accounts Payable .....	201	500	
	Cash .....	101		500
	<i>Paid cash on account.</i>			
j.	Office Equipment.....	163	3,400	
	Cash .....	101		3,400
	<i>Purchased equipment for cash.</i>			
k.	Accounts Receivable .....	106	4,200	
	Fees Earned.....	402		4,200
	<i>Provided services on account.</i>			
l.	Salaries Expense.....	601	1,000	
	Cash .....	101		1,000
	<i>Paid assistant's salary.</i>			
m.	Cash.....	101	2,200	
	Accounts Receivable.....	106		2,200
	<i>Received cash due on account.</i>			
n.	A. Nuncio, Withdrawals .....	302	1,100	
	Cash .....	101		1,100
	<i>Owner withdrew cash for personal use.</i>			

## Problem 2-4B (Continued) Part 2

Cash				No. 101
Date	PR	Debit	Credit	Balance
(a)		35,000		35,000
(b)			15,000	20,000
(f)			1,000	19,000
(g)		3,200		22,200
(h)			540	21,660
(i)			500	21,160
(j)			3,400	17,760
(l)			1,000	16,760
(m)		2,200		18,960
(n)			1,100	17,860

Accounts Receivable				No. 106
Date	PR	Debit	Credit	Balance
(k)		4,200		4,200
(m)			2,200	2,000

Office Supplies				No. 108
Date	PR	Debit	Credit	Balance
(c)		500		500

Office Equipment				No. 163
Date	PR	Debit	Credit	Balance
(a)		11,000		11,000
(e)		1,200		12,200
(j)		3,400		15,600

Automobiles				No. 164
Date	PR	Debit	Credit	Balance
(d)		8,000		8,000

Building				No. 170
Date	PR	Debit	Credit	Balance
(b)		40,000		40,000

Land				No. 172
Date	PR	Debit	Credit	Balance
(b)		7,500		7,500

Accounts Payable				No. 201
Date	PR	Debit	Credit	Balance
(c)			500	500
(e)			1,200	1,700
(i)		500		1,200

Notes Payable				No. 250
Date	PR	Debit	Credit	Balance
(b)			32,500	32,500

A. Nuncio, Capital				No. 301
Date	PR	Debit	Credit	Balance
(a)			46,000	46,000
(d)			8,000	54,000

A. Nuncio, Withdrawals				No. 302
Date	PR	Debit	Credit	Balance
(n)		1,100		1,100

Fees Earned				No. 402
Date	PR	Debit	Credit	Balance
(g)			3,200	3,200
(k)			4,200	7,400

Salaries Expense				No. 601
Date	PR	Debit	Credit	Balance
(f)		1,000		1,000
(l)		1,000		2,000

Utilities Expense				No. 602
Date	PR	Debit	Credit	Balance
(h)		540		540

**Problem 2-4B (Concluded)****Part 3**

<b>NUNCIO CONSULTING</b>		
<b>Trial Balance</b>		
<b>June 30</b>		
	<b>Debit</b>	<b>Credit</b>
Cash .....	\$17,860	
Accounts receivable .....	2,000	
Office supplies.....	500	
Office equipment.....	15,600	
Automobiles.....	8,000	
Building .....	40,000	
Land.....	7,500	
Accounts payable.....		\$ 1,200
Notes payable .....		32,500
A. Nuncio, Capital.....		54,000
A. Nuncio, Withdrawals .....	1,100	
Fees earned .....		7,400
Salaries expense .....	2,000	
Utilities expense .....	540	
<b>Total .....</b>	<b><u>\$95,100</u></b>	<b><u>\$95,100</u></b>

## Problem 2-5B (60 minutes)

## Part 1

TAMA CO. Balance Sheet December 31, 2016				
Assets		=	Liabilities	
Cash .....	\$ 30,000		Accounts payable .....	\$ 4,000
Accounts receivable .....	35,000			
Office supplies .....	8,000			
Office equipment.....	40,000			
Machinery .....	<u>28,000</u>			
Total assets .....	<u>\$141,000</u>			
			Equity	
			Total equity.....	<u>137,000</u>
			Total liabilities & equity.....	<u>\$141,000</u>

TAMA CO. Balance Sheet December 31, 2017				
Assets		=	Liabilities	
Cash .....	\$ 5,000		Accounts payable .....	\$ 12,000
Accounts receivable .....	25,000		Note payable.....	<u>250,000</u>
Office supplies .....	13,500		Total liabilities .....	262,000
Office equipment.....	40,000			
Machinery .....	28,500			
Building.....	250,000			
Land .....	<u>50,000</u>			
Total assets .....	<u>\$412,000</u>			
			Equity	
			Total equity.....	<u>150,000</u>
			Total liabilities & equity.....	<u>\$412,000</u>

## Part 2

## Computation of 2017 net income:

Owner investment .....	5,000
Add net income .....	?
Deduct withdrawals by owner.....	<u>(3,000)</u>
Increase in equity during 2017* .....	<u>\$ 13,000*</u>

Thus, net income =  $(\$13,000 + \$3,000 - \$5,000) = \underline{\underline{\$ 11,000}}$

\* Computation of 2017 equity increase:

Equity, December 31, 2016 .....	\$137,000
Equity, December 31, 2017 .....	<u>(150,000)</u>
Increase in equity during 2017 .....	<u>\$ 13,000</u>

## Part 3

Debt ratio =  $\$262,000 / \$412,000 = \underline{\underline{63.6\%}}$

**Problem 2-6B (35 minutes)**

**Part 1**

<b>GOULD SOLUTIONS</b>		
<b>Trial Balance</b>		
<b>April 30</b>		
	<b>Debit</b>	<b>Credit</b>
Cash.....	\$20,000	
Office supplies.....	750	
Prepaid rent .....	1,800	
Office equipment .....	12,250	
Accounts payable.....		\$12,250
R. Gould, Capital .....		15,000
R. Gould, Withdrawals .....	5,200	
Consulting fees earned.....		20,400
Miscellaneous expenses .....	<u>7,650</u>	
<b>Totals .....</b>	<b><u>\$47,650</u></b>	<b><u>\$47,650</u></b>

**Part 2**

<b>Cash</b>			
(a)	15,000	(b)	1,800
(f)	20,400	(c)	7,650
		(d)	750
		(g)	5,200
<b>Balance</b>	<b>20,000</b>		

- Transactions a through g coded in T-account:
- (a) R.Gould, the owner, invested \$15,000 cash in the business.
  - (b) Paid \$1,800 cash for monthly rent expense for April.
  - (c) Paid \$7,650 cash for miscellaneous expenses.
  - (d) Purchased office supplies for \$750 cash.
  - (e) Purchased \$12,250 of office equipment on credit (with accounts payable).
  - (f) Received \$20,400 cash for consulting services provided in April.
  - (g) R.Gould, the owner, withdrew \$5,200 cash for personal use.

## Serial Problem — SP 2

### Part 1 (120 minutes) Serial Problem, Business Solutions

2017

Oct. 1	Cash.....	101	45,000	
	Office Equipment.....	163	8,000	
	Computer Equipment.....	167	20,000	
	S. Rey, Capital .....	301		73,000
	<i>Owner invests cash and equipment.</i>			
2	Prepaid Rent .....	131	3,300	
	Cash .....	101		3,300
	<i>Paid four months' rent in advance.</i>			
3	Computer Supplies .....	126	1,420	
	Accounts Payable .....	201		1,420
	<i>Purchased supplies on credit.</i>			
5	Prepaid Insurance .....	128	2,220	
	Cash .....	101		2,220
	<i>Paid 12 months' premium in advance.</i>			
6	Accounts Receivable .....	106	4,800	
	Computer Services Revenue .....	403		4,800
	<i>Billed customer for services.</i>			
8	Accounts Payable .....	201	1,420	
	Cash .....	101		1,420
	<i>Paid balance due on account payable.</i>			
10	<i>No entry necessary in the journal.</i>			
12	Accounts Receivable .....	106	1,400	
	Computer Services Revenue .....	403		1,400
	<i>Billed customer for services.</i>			
15	Cash.....	101	4,800	
	Accounts Receivable .....	106		4,800
	<i>Collected accounts receivable.</i>			
17	Repairs Expense—Computer.....	684	805	
	Cash .....	101		805
	<i>Paid for computer repairs.</i>			
20	Advertising Expense.....	655	1,728	
	Cash .....	101		1,728
	<i>Purchased ads in local newspaper.</i>			
22	Cash.....	101	1,400	
	Accounts Receivable .....	106		1,400
	<i>Collected accounts receivable.</i>			

Serial Problem, Business Solutions (*Continued*)

28	Accounts Receivable .....	106	5,208	
	Computer Services Revenue .....	403		5,208
	<i>Billed customer for services.</i>			
31	Wages Expense .....	623	875	
	Cash .....	101		875
	<i>Paid employee for part-time work.</i>			
31	S. Rey, Withdrawals .....	302	3,600	
	Cash .....	101		3,600
	<i>Owner withdrew cash.</i>			
Nov. 1	Mileage Expense .....	676	320	
	Cash .....	101		320
	<i>Reimbursed Rey for mileage.</i>			
2	Cash.....	101	4,633	
	Computer Services Revenue .....	403		4,633
	<i>Collected cash revenue from client.</i>			
5	Computer Supplies .....	126	1,125	
	Cash .....	101		1,125
	<i>Purchased computer supplies for cash.</i>			
8	Accounts Receivable .....	106	5,668	
	Computer Services Revenue .....	403		5,668
	<i>Billed customer for services.</i>			
13	<i>No entry necessary. (No revenue recognized until work performed.)</i>			
18	Cash.....	101	2,208	
	Accounts Receivable.....	106		2,208
	<i>Collected accounts receivable.</i>			
22	Miscellaneous Expenses .....	677	250	
	Cash .....	101		250
	<i>Record donation. (Some companies use a Donations account.)</i>			
24	Accounts Receivable .....	106	3,950	
	Computer Services Revenue .....	403		3,950
	<i>Billed customer for services.</i>			
25	<i>No entry necessary.</i>			
28	Mileage Expense .....	676	384	
	Cash .....	101		384
	<i>Reimbursed Rey for mileage.</i>			
30	Wages Expense .....	623	1,750	
	Cash .....	101		1,750
	<i>Paid employee for part-time work.</i>			
30	S. Rey, Withdrawals .....	302	2,000	
	Cash .....	101		2,000
	<i>Owner withdrew cash.</i>			

## Serial Problem, Business Solutions (Continued)

## Part 2

General Ledger accounts					
Cash			Acct. No. 101		
Date	Explanation	PR	Debit	Credit	Balance
Oct. 1			45,000		45,000
2				3,300	41,700
5				2,220	39,480
8				1,420	38,060
15			4,800		42,860
17				805	42,055
20				1,728	40,327
22			1,400		41,727
31				875	40,852
31				3,600	37,252
Nov. 1				320	36,932
2			4,633		41,565
5				1,125	40,440
18			2,208		42,648
22				250	42,398
28				384	42,014
30				1,750	40,264
30				2,000	38,264

Accounts Receivable			Acct. No.106		
Date	Explanation	PR	Debit	Credit	Balance
Oct. 6			4,800		4,800
12			1,400		6,200
15				4,800	1,400
22				1,400	0
28			5,208		5,208
Nov. 8			5,668		10,876
18				2,208	8,668
24			3,950		12,618

Computer Supplies			Acct. No. 126		
Date	Explanation	PR	Debit	Credit	Balance
Oct. 3			1,420		1,420
Nov. 5			1,125		2,545

**Serial Problem, Business Solutions (Continued)**

Prepaid Insurance					Acct. No. 128	
Date	Explanation	PR	Debit	Credit	Balance	
Oct. 5			2,220		2,220	

Prepaid Rent					Acct. No. 131	
Date	Explanation	PR	Debit	Credit	Balance	
Oct. 2			3,300		3,300	

Office Equipment					Acct. No. 163	
Date	Explanation	PR	Debit	Credit	Balance	
Oct. 1			8,000		8,000	

Computer Equipment					Acct. No. 167	
Date	Explanation	PR	Debit	Credit	Balance	
Oct. 1			20,000		20,000	

Accounts Payable					Acct. No. 201	
Date	Explanation	PR	Debit	Credit	Balance	
Oct. 3				1,420	1,420	
8			1,420		0	

S. Rey, Capital					Acct. No. 301	
Date	Explanation	PR	Debit	Credit	Balance	
Oct. 1				73,000	73,000	

S. Rey, Withdrawals					Acct. No. 302	
Date	Explanation	PR	Debit	Credit	Balance	
Oct. 31			3,600		3,600	
Nov. 30			2,000		5,600	

**Serial Problem, Business Solutions (Concluded)**

<b>Computer Services Revenue</b>				<b>Acct. No. 403</b>	
<b>Date</b>	<b>Explanation</b>	<b>PR</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
Oct. 6				4,800	4,800
12				1,400	6,200
28				5,208	11,408
Nov. 2				4,633	16,041
8				5,668	21,709
24				3,950	25,659

<b>Wages Expense</b>				<b>Acct. No. 623</b>	
<b>Date</b>	<b>Explanation</b>	<b>PR</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
Oct. 31			875		875
Nov. 30			1,750		2,625

<b>Advertising Expense</b>				<b>Acct. No. 655</b>	
<b>Date</b>	<b>Explanation</b>	<b>PR</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
Oct. 20			1,728		1,728

<b>Mileage Expense</b>				<b>Acct. No. 676</b>	
<b>Date</b>	<b>Explanation</b>	<b>PR</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
Nov. 1			320		320
28			384		704

<b>Miscellaneous Expenses</b>				<b>Acct. No. 677</b>	
<b>Date</b>	<b>Explanation</b>	<b>PR</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
Nov. 22			250		250

<b>Repairs Expense—Computer</b>				<b>Acct. No. 684</b>	
<b>Date</b>	<b>Explanation</b>	<b>PR</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
Oct. 17			805		805

Serial Problem, Business Solutions (*Continued*)**Part 3**

<b>BUSINESS SOLUTIONS</b>		
<b>Trial Balance</b>		
<b>November 30</b>		
	<b>Debit</b>	<b>Credit</b>
Cash.....	\$38,264	
Accounts receivable .....	12,618	
Computer supplies.....	2,545	
Prepaid insurance .....	2,220	
Prepaid rent .....	3,300	
Office equipment.....	8,000	
Computer equipment .....	20,000	
Accounts payable.....		\$ 0
S. Rey, Capital .....		73,000
S. Rey, Withdrawals .....	5,600	
Computer services revenue .....		25,659
Wages expense .....	2,625	
Advertising expense .....	1,728	
Mileage expense.....	704	
Miscellaneous expense .....	250	
Repairs expense—Computer .....	<u>805</u>	
<b>Totals.....</b>	<b><u>\$98,659</u></b>	<b><u>\$98,659</u></b>

## Reporting in Action — BTN 2-1

1. Apple reports (\$ millions):  
 $\$171,124$  in liabilities at September 26, 2015.  
 $\$120,292$  in liabilities at September 27, 2014.
  
2. Apple reports (\$ millions):  
 $\$290,479$  in assets at September 26, 2015.  
 $\$231,839$  in assets at September 27, 2014.
  
3. \$ millions:  
As of September 26, 2015 Debt Ratio =  $\$171,124/\$290,479$  = 58.9%  
As of September 27, 2014 Debt Ratio =  $\$120,292/\$231,839$  = 51.9%
  
4. Apple employed more financial leverage as of September 26, 2015, when 58.9% of its assets were financed by debt, relative to September 27, 2014, when 51.9% of its assets were financed by debt. Consequently, its financing structure was more risky in its fiscal 2015 in comparison to its fiscal 2014.
  
5. Solution depends on the financial statements accessed.

## Comparative Analysis — BTN 2-2

1. Apple (\$ millions)  
Current year debt ratio:  $\$171,124/\$290,479$  = 58.9%  
Prior year debt ratio:  $\$120,292/\$231,839$  = 51.9%
  
2. Google (\$ millions)  
Current year debt ratio:  $\$27,130/\$147,461$  = 18.4%  
Prior year debt ratio:  $\$25,327/\$129,187$  = 19.6%
  
3. Apple has the higher degree of financial leverage. Apple's debt ratio is markedly higher for the current year than that of Google (58.9% vs. 18.4%). This indicates that Apple carries more debt financing than Google. This also implies that Apple is attempting to use nonowner financing to make more money for its owners. This is fine provided Apple's return does not decline below that of what it pays nonowners for use of that money— this is the main source of financing risk.

## **Ethics Challenge — BTN 2-3**

**This case involves a conflict between the need for efficiency and the need for control. While it makes sense to take and process lunch orders quickly, this efficiency is being accomplished by a shortcut that greatly weakens control over cash receipts. Cash could be received and lost or stolen because there would be no initial record of how much was received.**

**The assistant manager's explanation about the head manager not arriving until 3 o'clock suggests that the head manager doesn't know about the proposed shortcut. Thus, the new employee is faced with the dilemma of deciding whether to accept the assistant manager's instructions, suggest to the assistant manager that the shortcut seems wrong, or to ask the head manager to confirm the instructions. Each of these alternatives involves personal risk.**

**It is possible that the assistant manager does not understand the potential for fraud and abuse if this shortcut is used. If the relationship between you and the assistant manager is such that you feel you can do so, you should explain your understanding of how the shortcut could lead to the problems of inaccurate records for tax purposes, gathering inaccurate marketing information, and abuse by other employees who might not be as honest as you and the assistant manager.**

**If the assistant manager insists, you may want to work as instructed to get an idea of whether the shortcut is being abused by the assistant manager and perhaps to find out discreetly whether the head manager knows about it. (Although, this behavior does involve personal risk of perceived collusion with the assistant manager.) If you conclude that the assistant manager is committing fraud, you should report the situation to the head manager as quickly as possible.**

**Communicating in Practice — BTN 2-4****MEMORANDUM**

**To:** Lila Corentine  
**From:** \_\_\_\_\_  
**Subject:** Financial statements explanation  
**Date:** \_\_\_\_\_

The four major financial statements and their purposes are:

- ***Income statement*** describes a company's revenues and expenses along with the resulting net income or loss over a period of time. It helps explain how equity changes during a period due to earnings activities.
- ***Statement of owner's equity*** explains changes in equity due to net income (or net loss) and any withdrawals and or owner investments over a period of time.
- ***Balance sheet*** describes a company's financial position (assets, liabilities, and equity) at a point in time.
- ***Statement of cash flows*** identifies cash inflows (receipts) and outflows (payments) over a period of time. It also explains how the cash balance on the balance sheet changed from the beginning to the end of a period.

These financial statements are linked to each other across time. Specifically, a balance sheet reports an organization's financial position at a *point in time*. The income statement, statement of owner's equity, and statement of cash flows report on performance over a *period of time*. These three statements link balance sheets from the beginning to the end of a reporting period. That is, they explain how the financial position of an organization changes from one point to another.

## Taking It to the Net — BTN 2-5

1. The prior three years' net income or (loss) for Amazon are (\$ millions):  
 2014 = \$ (241)                      2013 = \$ 274                      2012 = \$ (39)
2. The three years net cash *provided* by operations follows (\$ millions):  
 2014 = \$6,842                      2013 = \$5,475                      2012 = \$4,180
3. In 2014, Amazon had net loss of \$(241) million and operating cash flows of \$6,842 million; and, in that same year, total net cash increased by only \$5,899 million (see its statement of cash flows).

The reason its cash balance only increased by \$5,899 million in 2014 was because of cash outflows of \$5,065 million for its investing activities (and further reduced by \$310 million related to foreign currency effects). Those uses of cash absorbed much of the cash generated by its operating activities. A large part of those cash outflows was tied to its investments in securities and its other purchases and acquisitions.

## Teamwork in Action — BTN 2-6

*<Instructor note: There is no specific solution to this activity.>*

The following sample solution gives a summary outline of what a minimum report needs to include. Assume a team member selects assets:

**Category: Assets**

- a. Increases (decreases) in assets are debits (credits) to asset accounts. Debit means left side, credit means right side. The normal side of an account refers to the side where increases are recorded. For assets, this is the debit, or left, side.
- b. Owner investment of \$10,000 cash in business.
- c.    Assets = Liabilities + Owner, Capital – Withdrawals + Revenues – Expenses  
 + \$10,000 =    \$0    +    \$10,000    –    \$0    +    \$0    –    \$0  
 Owner investments have no effect on the income statement, but they do increase the cash flows from financing by \$10,000 on the statement of cash flows (this increases its net cash flow).
- d. Paid rent expense with \$2,000 cash.
- e.    Assets = Liabilities + Owner, Capital – Withdrawals + Revenues – Expenses  
 - \$2,000 =    \$0    +    \$0    –    \$0    +    \$0    –    \$2,000  
 An expense paid in cash will decrease net income on the income statement and decrease operating cash flows on the statement of cash flows.

## **Entrepreneurial Decision — BTN 2-7**

**There are several issues that this entrepreneurial owner should consider. Those considerations include the following three issues (among others):**

- If she chooses to contribute her own funds for the expansion, she will be risking her own money, but she will not have the expense of interest payments, nor will she have the risk of the inability to repay a loan.**
- If she chooses to borrow, she will have interest and loan payments to make, and she will have more risk (as reflected in her company's debt ratio).**
- If she can pay the interest and loan payments, it can be to her advantage to borrow, as long as her return on assets is high enough (that is, higher than the rate of interest on the borrowings).**

## Entrepreneurial Decision — BTN 2-8

1.

### MARTIN MUSIC SERVICES Balance Sheet December 31, 2017

<b>Assets</b>		<b>Liabilities</b>	
Cash.....	\$ 3,600	Accounts payable.....	\$ 2,200
Accounts receivable .....	9,600	Unearned lesson fees .....	<u>15,600</u>
Prepaid insurance .....	1,500	Total liabilities .....	17,800
Prepaid rent .....	9,400		
Store supplies.....	6,600	<b>Equity</b>	
Equipment .....	<u>50,000</u>	Total equity .....	<u>62,900</u>
Total assets.....	<u>\$80,700</u>	Total liabilities and equity .....	<u>\$80,700</u>

2.

Debt ratio = Total liabilities / Total assets = \$17,800 / \$80,700 = 22.1%

Return on assets = Net income/Average assets = \$40,000/\$80,700\* = 49.6%

\*Ending balance is used per instructions ("assume average assets equal its ending balance").

3. The prospects of a bank loan are likely to be good. (i) The debt ratio indicates that 78% of the company's funding is from equity. Also, there are no debt obligations requiring periodic payments. This implies low risk. (ii) The level of return on assets is very high. This implies good return.

Overall, given the information and the assumption that current performance will continue into the future, the prospects of a bank loan are good.

Note: The loan does carry some risk—fueling this risk are (i) poor recordkeeping, (ii) lack of information on growth potential, and (iii) a much higher pro forma debt ratio—that is, if the loan is granted, the debt ratio will jump to 43%, computed as:

$$(\$17,800 + \$30,000) / (\$80,700 + \$30,000).$$

## Hitting the Road — BTN 2-9

Findings will vary. It is advisable that the instructor obtain a few classified sections from newspapers that were published over the period of the assignment. If student reports lack responses for question 2, it is informative and motivating to bring these (accounting-related job opportunities) sections to class when discussing or returning student reports as many students are not accounting majors.

## Global Decision — BTN 2-10

1. An analysis of return on assets suggests that Apple (20.4%) yields the greatest return on assets, followed by Google (11.8%), and then Samsung (8.1%), which yields the lowest return.
2. An analysis of the debt ratio suggests that Apple (at 58.9%) presents the greatest risk, followed by Samsung (26.1%), and then Google (18.4%) with the least risk. That is, Apple carries the most debt, and debt must be repaid with principal and interest. The lower debt levels of Google and Samsung result in less risk in that their contractually required payments are less as a percent of their respective asset bases.
3. In this case, there is no clear answer based on these two ratios alone. Apple has a relatively higher return on assets but also the highest debt ratio. Google has the middle-level return (slightly higher return on assets compared to Samsung and substantially lower than that for Apple), but it has the lowest debt ratio. Samsung has the lowest return and the middle-level debt ratio. Overall, based on return on assets, Apple would warrant additional consideration for expanded investment; however, based on the debt ratio, Google would warrant additional consideration. Therefore, in this analysis of these three companies, we get a mixed inference from these two ratios (and further analysis is warranted, which we will illustrate over the next several chapters).

