CHAPTER 2

ANALYZING TRANSACTIONS: THE ACCOUNTING EQUATION

REVIEW QUESTIONS

1. It is necessary to distinguish between business assets and liabilities and nonbusiness assets and liabilities of a single proprietor because, according to the business entity concept, nonbusiness assets and liabilities are not included in the business entity's accounting records. These distinctions allow the owner to make decisions based on the financial condition and results of the business apart from nonbusiness activities.

2. The six major elements of the accounting equation are listed below.
- **a.** Assets are items owned by a business that will provide future benefits.
- **b.** Liabilities are items owed to another business.
- **c.** Owner's equity is the amount by which the business assets exceed the business liabilities. Other terms used for owner's equity include net worth and capital.
- **d.** Revenues represent the amount a business charges customers for products sold or services performed.
- **e.** Expenses represent the decrease in assets (or increase in liabilities) as a result of efforts made to produce revenues.
- **f.** Withdrawals, or drawing, reduce owner's equity as a result of the owner taking cash or other assets out of the business for personal use.

3. The three basic questions that must be answered when analyzing the effects of a business transaction on the accounting equation are as follows:
- **a.** What happened?
- **b.** Which accounts are affected?
- **c.** How is the accounting equation affected?

4. The function of an income statement is to report the profitability of business operations for a specific period of time.

5. The function of a statement of owner's equity is to report the investments and withdrawals by the owner and the profits and losses generated through operating activities for a specific period of time.

6. The function of a balance sheet is to report the assets, liabilities, and owner's equity on a specific date. It is called a balance sheet because it confirms that the accounting equation is in balance.

7. The three basic phases of the accounting process are listed below.
Input—Business transactions are used as input to the accounting process.
Processing—The transactions are processed by recognizing their effects on assets, liabilities, owner's equity, revenues, and expenses.
Output—Output from the accounting process is provided in the form of financial statements.

Exercise 2-1A

Item	Account	Classification
Money in bank	Cash	***A***
Office supplies	Supplies	***A***
Money owed	Accounts Payable	***L***
Office chairs	Office Furniture	***A***
Net worth of owner	John Smith, Capital	***OE***
Money withdrawn by owner	John Smith, Drawing	***OE***
Money owed by customers	Accounts Receivable	***A***

Exercise 2-2A

Assets	=	Liabilities	+	Owner's Equity
$44,000	=	$27,000	+	$17,000
$32,000	=	$18,000	+	***$14,000***
$27,000	=	***$ 7,000***	+	$20,000

Exercise 2-3A

	Assets	=	Liabilities	+	Owner's Equity
(a)	***27,000***				***27,000***
Bal.	***27,000***				***27,000***
(b)	***7,500***		***7,500***		
Bal.	***34,500***		***7,500***		***27,000***
(c)	***(1,600)***				
	1,600				
Bal.	***34,500***		***7,500***		***27,000***
(d)	***(2,300)***		***(2,300)***		
Bal.	***32,200***		***5,200***		***27,000***

Exercise 2-4A

	Assets	=	Liabilities	+	Owner's Equity Capital	–	Drawing	+	Revenues	–	Expenses	Description
Bal. from E 2-3A (d)	*32,200*		*5,200*		*27,000*							
(e)	*1,500*								*1,500*			*Service fees*
(f)	*(600)*										*600*	*Rent expense*
(g)	*(64)*										*64*	*Phone expense*
(h)	*(1,000)*						*1,000*					
(i)	*750*								*750*			*Service fees*
(j)	*(1,200)*										*1,200*	*Wages expense*
(k)	*400*											
	(400)											
Bal.	*31,586*	=	*5,200*	+	*27,000*	–	*1,000*	+	*2,250*	–	*1,864*	

Total Assets	***$31,586***	***Total Liabilities***	***$ 5,200***
		Capital	***27,000***
		Drawing	***(1,000)***
		Revenues	***2,250***
		Expenses	***(1,864)***
		Total Liabilities and Owner's Equity	***$31,586***

Exercise 2-5A

Account	Classification	Financial Statement
Cash	*A*	*BS*
Rent Expense	*E*	*IS*
Accounts Payable	*L*	*BS*
Service Fees	*R*	*IS*
Supplies	*A*	*BS*
Wages Expense	*E*	*IS*
Ramon Martinez, Drawing	*OE*	*SOE*
Ramon Martinez, Capital	*OE*	*SOE, BS*
Prepaid Insurance	*A*	*BS*
Accounts Receivable	*A*	*BS*

Exercise 2-6A

Betsy Ray's Accounting Service

Statement of Owner's Equity

For Month Ended June 30, 20--

Betsy Ray, capital, June 1, 20--		*$ —*
Investment during June		*20,000*
Total investment		*$20,000*
Net income for June	*$10,000*	
Less withdrawals for June	*8,000*	
Increase in capital		*2,000*
Betsy Ray, capital, June 30, 20--		*$22,000*

Exercise 2-7A

Betsy Ray's Accounting Service
Statement of Owner's Equity
For Month Ended June 30, 20--

Betsy Ray, capital, June 1, 20--		*$ —*
Investment during June		*20,000*
Total investment		*$20,000*
Less: Net loss for June	*$3,000*	
Withdrawals for June	*8,000*	
Decrease in capital		*(11,000)*
Betsy Ray, capital, June 30, 20--		*$ 9,000*

Problem 2-8A

	Assets	=	Liabilities	+	Owner's Equity
1.	*$26,960*		*$ 7,550*		*$19,410*
2.	*$35,500*		*$10,910*		*$24,590*
3.	*$32,040*		*$12,910*		*$19,130*

Problem 2-9A: See page 10

Problem 2-10A

Jay Pembroke
Income Statement
For Month Ended April 30, 20--

Revenues:		
Service fees		*$3,300*
Expenses:		
Rent expense		*750*
Net income		*$2,550*

Problem 2-9A

	Assets				= Liabilities	+ Owner's Equity				
	(Items Owned)				(Amts. Owed)	(Owner's Investment)		(Earnings)		
	Cash	+ Accounts Receivable	+ Office Supplies	+ Prepaid Insurance	= Accounts Payable	+ J. Pembroke, Capital	– J. Pembroke, Drawing	+ Revenues	– Expenses	Description
(a)	*18,000*					*18,000*				
(b)	*(2,000)*		*4,600*		*2,600*					
(c)	*(1,200)*			*1,200*						
(d)	*1,300*	*2,000*						*3,300*		*Service fees*
(e)	*(2,300)*				*(2,300)*					
(f)	*(750)*								*750*	*Rent expense*
(g)	*(100)*						*100*			
Bal.	*12,950*	*2,000*	*4,600*	*1,200*	*300*	*18,000*	*100*	*3,300*	*750*	

Cash	***$12,950***
Accounts Receivable	***2,000***
Office Supplies	***4,600***
Prepaid Insurance	***1,200***
Total Assets	***$20,750***

Accounts Payable	***$ 300***
Jay Pembroke, Capital	***18,000***
Jay Pembroke, Drawing	***(100)***
Service Fees	***3,300***
Rent Expense	***(750)***
Total Liabilities and Owner's Equity	***$20,750***

Problem 2-11A

Jay Pembroke
Statement of Owner's Equity
For Month Ended April 30, 20--

Jay Pembroke, capital, April 1, 20--		*$ —*
Investment during April		*18,000*
Total investment		*$18,000*
Net income for April	*$2,550*	
Less withdrawals for April	*100*	
Increase in capital		*2,450*
Jay Pembroke, capital, April 30, 20--		*$20,450*

Problem 2-12A

Jay Pembroke
Balance Sheet
April 30, 20--

Assets		*Liabilities*	
Cash	*$12,950*	*Accounts payable*	*$ 300*
Accounts receivable	*2,000*		
Office supplies	*4,600*	*Owner's Equity*	
Prepaid insurance	*1,200*	*Jay Pembroke, capital*	*20,450*
Total assets	*$20,750*	*Total liab. & owner's equity*	*$20,750*

Exercise 2-1B

Account	Classification
Cash	***A***
Accounts Payable	***L***
Supplies	***A***
Bill Jones, Drawing	***OE***
Prepaid Insurance	***A***
Accounts Receivable	***A***
Bill Jones, Capital	***OE***

Exercise 2-2B

Assets	=	Liabilities	+	Owner's Equity
$25,000	=	$20,000	+	$ 5,000
$30,000	=	$15,000	+	***$15,000***
$20,000	=	***$10,000***	+	$10,000

Exercise 2-3B

	Assets	=	Liabilities	+	Owner's Equity
(a)	***30,000***				***30,000***
Bal.	***30,000***				***30,000***
(b)	***4,500***		***4,500***		
Bal.	***34,500***		***4,500***		***30,000***
(c)	***1,600***				
	(1,600)				
Bal.	***34,500***		***4,500***		***30,000***
(d)	***(2,000)***		***(2,000)***		
Bal.	***32,500***		***2,500***		***30,000***

Exercise 2-4B

	Assets	=	Liabilities	+	Capital (Owner's Equity)	−	Drawing	+	Revenues	−	Expenses	Description
Bal. from E 2-3B (d)	*32,500*		*2,500*		*30,000*							
(e)	*3,000*								*3,000*			*Service fees*
(f)	*(1,000)*										*1,000*	*Rent expense*
(g)	*(68)*										*68*	*Phone expense*
(h)	*(800)*						*800*					
(i)	*900*								*900*			*Service fees*
(j)	*(500)*										*500*	*Wages expense*
(k)	*500*											
	(500)											
Bal.	*34,032*	=	*2,500*	+	*30,000*	−	*800*	+	*3,900*	−	*1,568*	

Total Assets	***$34,032***	***Total Liabilities***	***$ 2,500***
		Capital	***30,000***
		Drawing	***(800)***
		Revenues	***3,900***
		Expenses	***(1,568)***
		Total Liabilities and Owner's Equity	***$34,032***

Exercise 2-5B

Account	Classification	Financial Statement
Cash	*A*	*BS*
Rent Expense	*E*	*IS*
Accounts Payable	*L*	*BS*
Service Fees	*R*	*IS*
Supplies	*A*	*BS*
Wages Expense	*E*	*IS*
Amanda Wong, Drawing	*OE*	*SOE*
Amanda Wong, Capital	*OE*	*SOE, BS*
Prepaid Insurance	*A*	*BS*
Accounts Receivable	*A*	*BS*

Exercise 2-6B

Lopez Financial Consulting

Statement of Owner's Equity

For Month Ended June 30, 20--

Efran Lopez, capital, June 1, 20--		*$ —*
Investment during June		*15,000*
Total investment		*$15,000*
Net income for June	*$6,000*	
Less withdrawals for June	*7,000*	
Decrease in capital		*(1,000)*
Efran Lopez, capital, June 30, 20--		*$14,000*

Exercise 2-7B

Lopez Financial Consulting
Statement of Owner's Equity
For Month Ended June 30, 20--

Efran Lopez, capital, June 1, 20--		*$ —*
Investment during June		*15,000*
Total investment		*$15,000*
Less: Net loss for June	*$2,000*	
Withdrawals for June	*7,000*	
Decrease in capital		*(9,000)*
Efran Lopez, capital, June 30, 20--		*$ 6,000*

Problem 2-8B

	Assets	=	Liabilities	+	Owner's Equity
1.	*$22,860*		*$ 4,605*		*$18,255*
2.	*$27,425*		*$ 8,515*		*$18,910*
3.	*$25,235*		*$10,165*		*$15,070*

Problem 2-9B: See page 16

Problem 2-10B

David Segal
Income Statement
For Month Ended October 31, 20--

Revenues:		
Service fees		*$2,700*
Expenses:		
Rent expense		*650*
Net income		*$2,050*

Problem 2-9B

	Assets				= Liabilities	+ Owner's Equity				
	(Items Owned)				(Amts. Owed)	(Owner's Investment)		(Earnings)		
	Cash	+ Accounts Receivable	+ Office Supplies	+ Prepaid Insurance	= Accounts Payable	+ D. Segal, Capital	– D. Segal, Drawing	+ Revenues	– Expenses	Description
(a)	*15,000*					*15,000*				
(b)	*(1,800)*		*3,800*		*2,000*					
(c)	*(1,000)*			*1,000*						
(d)	*1,700*	*1,000*						*2,700*		*Service fees*
(e)	*(1,800)*				*(1,800)*					
(f)	*(650)*								*650*	*Rent expense*
(g)	*(150)*						*150*			
Bal.	*11,300*	*1,000*	*3,800*	*1,000*	*200*	*15,000*	*150*	*2,700*	*650*	

Cash	***$11,300***
Accounts Receivable	***1,000***
Office Supplies	***3,800***
Prepaid Insurance	***1,000***
Total Assets	***$17,100***

Accounts Payable	***$ 200***
David Segal, Capital	***15,000***
David Segal, Drawing	***(150)***
Service Fees	***2,700***
Rent Expense	***(650)***
Total Liabilities and Owner's Equity	***$17,100***

Problem 2-11B

David Segal
Statement of Owner's Equity
For Month Ended October 31, 20--

David Segal, capital, October 1, 20--		*$ —*
Investment during October		*15,000*
Total investment		*$15,000*
Net income for October	*$2,050*	
Less withdrawals for October	*150*	
Increase in capital		*1,900*
David Segal, capital, October 31, 20--		*$16,900*

Problem 2-12B

David Segal
Balance Sheet
October 31, 20--

Assets		*Liabilities*	
Cash	*$11,300*	*Accounts payable*	*$ 200*
Accounts receivable	*1,000*		
Office supplies	*3,800*	*Owner's Equity*	
Prepaid insurance	*1,000*	*David Segal, capital*	*16,900*
Total assets	*$17,100*	*Total liab. & owner's equity*	*$17,100*

MANAGING YOUR WRITING

The students should focus on the following differences:

1. An expense is an outflow of assets or increase in liabilities as a result of the efforts made to earn revenues. A withdrawal is an outflow of assets for the owner's personal use. The withdrawal is not related to the earning process.

2. A withdrawal that increases a liability would be unusual. Expenses often increase liabilities.

The student should focus on the following similarity:

1. Expenses and withdrawals reduce owner's equity.

Mastery Problem

1.

	Assets						= Liabilities (Amts. Owed)	+ Owner's Equity				
	(Items Owned)							(Owner's Investment)		(Earnings)		
	Cash	+ Accts. Rec.	+ Sup-plies	+ Prepaid Ins.	+ Tools	+ Van	= Accts. Payable	+ L. Vozniak, Capital	– L. Vozniak, Drawing	+ Rev.	– Exp.	Description
(a)	*8,000*							*8,000*				
(b)	*(150)*										*150*	*Rent expense*
(c)	*(5,000)*					*5,000*						
(d)					*600*		*600*					
(e)	*(200)*		*300*				*100*					
(f)	*(100)*										*100*	*Wages expense*
(g)	*(75)*										*75*	*Adver. expense*
(h)	*(480)*			*480*								
(i)	*800*									*800*		*Cleaning fees*
(j)		*500*								*500*		*Cleaning fees*
(k)	*(40)*										*40*	*Phone expense*
(l)	*200*	*(200)*										
(m)	*(150)*										*150*	*Wages expense*
(n)	*(200)*						*(200)*					
(o)	*600*	*200*								*800*		*Cleaning fees*
(p)	*(100)*								*100*			
2. Bal.	*3,105*	*500*	*300*	*480*	*600*	*5,000*	*500*	*8,000*	*100*	*2,100*	*515*	

Mastery Problem (Continued)

3.

We Do Windows
Income Statement
For Month Ended July 31, 20--

Revenues:		
Cleaning fees		*$2,100*
Expenses:		
Wages expense	*$250*	
Rent expense	*150*	
Advertising expense	*75*	
Phone expense	*40*	
Total expenses		*515*
Net income		*$1,585*

4.

We Do Windows
Statement of Owner's Equity
For Month Ended July 31, 20--

Lisa Vozniak, capital, July 1, 20--		*$ —*
Investment in July		*8,000*
Total investment		*$8,000*
Net income for July	*$1,585*	
Less withdrawals for July	*100*	
Increase in capital		*1,485*
Lisa Vozniak, capital, July 31, 20--		*$9,485*

Mastery Problem (Concluded)

5.

We Do Windows

Balance Sheet

July 31, 20--

Assets		***Liabilities***	
Cash	*$3,105*	*Accounts payable*	*$ 500*
Accounts receivable	*500*		
Supplies	*300*		
Prepaid insurance	*480*		
Tools	*600*	***Owner's Equity***	
Van	*5,000*	*Lisa Vozniak, capital*	*9,485*
Total assets	*$9,985*	*Total liab. & owner's equity*	*$9,985*

Challenge Problem

Cash from customers		*$3,700*
Cash paid for wages	*$450*	
Cash paid for rent	*300*	
Cash paid for utilities	*50*	
Cash paid for insurance	*600*	
Cash paid for supplies	*100*	
Cash paid for phone	*35*	
Total cash paid for operating items		*1,535*
Difference between cash received from customers and		
cash paid for goods and services		*$2,165*

Yes, there is a difference of $2,000. Net income does a better job of measuring profits because it offers a better matching of revenues and expenses. However, cash flows are important. If you don't have enough cash to pay your bills, you will go out of business.