

E1-9B. Determining Retained Earnings and Net Income The following information appears in the records of the Jones Corporation at year-end: LO5

Accounts receivable.....	\$ 40,000	Retained earnings	\$?
Accounts payable.....	19,000	Supplies	27,000
Cash.....	17,000	Equipment, net.....	108,000
Common stock.....	120,000		

- Calculate the amount of retained earnings at year-end.
- If the amount of the retained earnings at the beginning of the year was \$60,000, and \$25,000 in dividends is paid during the year, calculate net income (net loss) for the year.

E1-10B. Determining Stockholders' Equity Determine the following: LO5

- The stockholders' equity of a sole proprietorship that has assets of \$750,000 and liabilities of \$300,000.
- The assets of a corporation that has liabilities of \$170,000, common stock of \$85,000, and retained earnings of \$74,000.

E1-11B. Financial Statements Kattie Klein operates a bakery. For each of the following financial statement items related to her business, indicate the financial statement (or statements) in which the item would be reported: LO5

- Accounts payable
- Cash received from the sale of equipment
- Net loss
- Cash invested in the business by Klein
- Notes receivable
- Rent expense
- Building
- Inventory

E1-12B. Omitted Financial Statement Data For the following four unrelated situations, A-D, calculate the unknown amounts appearing in each column: LO5

	A	B	C	D
Beginning				
Assets	\$42,000	\$18,000	\$42,000	?
Liabilities.....	27,900	7,500	28,500	13,500
Ending				
Assets	45,000	39,000	51,000	60,000
Liabilities.....	25,950	?	22,500	28,500
During Year				
Sales revenue.....	?	35,250	36,000	36,000
Expense	12,750	31,500	16,500	25,500
Dividends	4,500	2,250	?	4,500

E1-13B. Other Components of the Annual Report Identify where the following items will appear in a company's annual report: Management Discussion and Analysis (MD&A), notes to the financial statements, the auditor's report, or not disclosed. LO6

- A comment that the statements are presented in conformity with generally accepted accounting principles
- A discussion about new products to be introduced next year
- A quantitative summary of property, plant, and equipment appearing on the balance sheet
- The salaries of every employee

E1-14B. Ethics In each of the following cases, (a) identify the aspect of the accounting environment primarily responsible for the ethical pressure on the accountant and (b) indicate the appropriate behavioral response for the accountant. LO3



1. Purchased \$1,500 of inventory on account.
2. Purchased \$1,300 of inventory on account.
3. Sold inventory with an original cost of \$1,600.
4. Purchased \$1,400 of inventory on account.
5. Sold inventory with an original cost of \$1,300.

PROBLEMS—SET A

- LO2 P2-1A. Transaction Analysis** The accounting equation of L. Chen & Company as of the beginning of the accounting period is given below, followed by seven transactions whose effects on the accounting equation are shown. Describe each transaction that occurred. Of the transactions affecting Retained Earnings, transaction (e) had no effect on net income for the period.

	Cash	+	Accounts Receivable	+	Supplies	=	Accounts Payable	+	Notes Payable	+	Common Stock	+	Retained Earnings
Balance	\$4,100	+	\$9,000	+	\$700	=	\$800	+	\$2,500	+	\$2,000	+	\$8,500
(a)	+6,500		-6,500										
(b)	-400				+400								
(c)			+7,000										+7,000
(d)	-800						-800						
(e)	-4,900												-4,900
(f)	-300				+300								
(g)	+1,200								+1,200				

- LO2 P2-2A. Transaction Analysis** An analysis of the transactions of Hewitt Detective Agency for the month of May appears below. Line 1 summarizes the company's accounting equation data as of May 1; lines 2–10 represent the transactions for May:

	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Accounts Payable	+	Notes Payable	+	Common Stock	+	Retained Earnings
(1)	\$2,400	+	\$7,600	+	\$500	+	\$8,000	=	\$300	+	\$5,000	+	\$10,000	+	\$3,200
(2)	+2,000										+2,000				
(3)	+6,100		-6,100												
(4)					+980				+980						
(5)			+6,800												+6,800
(6)	-300								-300						
(7)	+1,500														+1,500
(8)	-800														-800
(9)	-750						+750								
(10)	-2,500										-2,500				

Required

- a. Show that assets equal liabilities plus stockholders' equity as of May 1.
- b. Describe the apparent transaction indicated by each line. (For example, line 2: Borrowed \$2,000, giving a note payable.) If any line could reasonably represent more than one type of transaction, describe each type.
- c. Show that assets equal liabilities plus stockholders' equity as of May 31.

- LO2 P2-3A. Transaction Analysis** Grant Appraisal Service provides commercial and industrial appraisals and feasibility studies. On January 1, the assets and liabilities of the business were the following: Cash, \$9,700; Accounts Receivable, \$14,800; Accounts Payable, \$600; and Notes Payable, \$2,500. Common Stock had a balance of \$18,400. Assume that Retained Earnings as of January 1, were \$3,000. The following transactions occurred during the month of January:

- Jan. 1 Paid rent for January, \$950.
2 Received \$8,800 payment on customers' accounts.



	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Notes Payable	+	Common Stock	+	Retained Earnings
(a)	\$6,000	+	\$ 0	+	\$ 0	+	\$ 0	=	\$ 0	+	\$6,000	+	\$ 0
(b)	4,000	+	0	+	2,000	+	0	=	0	+	6,000	+	0
(c)	7,500	+	0	+	2,000	+	0	=	3,500	+	6,000	+	0
(d)	2,500	+	0	+	2,000	+	5,000	=	3,500	+	6,000	+	0
(e)	2,500	+	2,000	+	2,000	+	5,000	=	3,500	+	6,000	+	2,000
(f)	3,000	+	1,500	+	2,000	+	5,000	=	3,500	+	6,000	+	2,000

- LO2 P2-8B. Determination of Omitted Financial Statement Data** For the four unrelated situations, A-D, below, calculate the unknown amounts indicated by the letters appearing in each column:

	A	B	C	D
Beginning				
Assets.....	\$38,000	\$12,000	\$28,000	\$ (d)
Liabilities.....	18,600	5,000	10,000	9,000
Ending				
Assets.....	30,000	36,000	\$41,000	40,000
Liabilities.....	17,300	(b)	15,000	15,000
During the Year				
Common stock.....	2,000	4,500	(c)	3,500
Revenues.....	(a)	28,000	18,000	24,000
Dividends.....	5,000	1,500	1,000	6,500
Expenses.....	8,500	21,000	11,000	17,000

- LO2 P2-9B. Transaction Analysis** Appearing below is an analysis of the June transactions for Carlton Communications Company. Line 1 summarizes Carlton's accounting equation data as of June 1; lines 2-10 are the transactions for June:

	Cash	+	Accounts Receivable	+	Supplies	+	Equipment	=	Accounts Payable	+	Notes Payable	+	Common Stock	+	Retained Earnings
(1)	\$3,500	+	\$5,200	+	\$820	+	\$12,000	=	\$600	+	\$3,000	+	\$10,920	+	\$7,000
(2)					+670				+670						
(3)							+6,000				+6,000				
(4)	+4,200		-4,200												
(5)			+7,800												+7,800
(6)	-600								-600						
(7)	-200				+200										
(8)	-4,600														-4,600
(9)	+3,000										+3,000				
(10)	-750						+750								

Required

- Show that assets equal liabilities plus stockholders' equity as of June 1.
- Describe the apparent transaction indicated by each line. For example, line 2: Purchased supplies on account, \$670. If any line could reasonably represent more than one type of transaction, describe each type.
- Show that assets equal liabilities plus stockholders' equity as of June 30.

- LO2 P2-10B. Transaction Analysis** Torrey Mann began the Mann Word Processing Service in December 2012. The firm provides word-processing services for businesses and is currently operating with leased equipment. On January 1, 2013, the assets and liabilities of the business were: Cash, \$6,400; Accounts Receivable, \$8,900; Accounts Payable, \$900; and Notes Payable, \$3,500. Assume that Retained Earnings as of January 1, 2010, were zero. Common Stock balance was \$10,900. The following transactions occurred during the month of January:

2012

- June 30 Paid semiannual interest and recorded semiannual premium amortization on bonds.
 Dec. 31 Paid semiannual interest and recorded semiannual premium amortization on bonds.
 31 Called one-half of the bonds in for retirement at 104.

Required

Record the transactions using effective interest amortization. Round amounts to nearest dollar. It will be helpful to read Appendix 10A prior to attempting this comprehensive problem.

Solution:

$\begin{array}{rclcl} A & = & L & + & SE \\ +562,360 & & +500,000 & & \\ & & +62,360 & & \end{array}$	a.	2011				
		Dec. 31	Cash	562,360		
			Bonds payable		500,000	
			Premium on bonds payable		62,360	
			<i>Issued \$500,000 of 12 percent, ten-year bonds for \$562,360.</i>			
$\begin{array}{rclcl} A & = & L & + & SE \\ -30,000 & & -1,882 & & -28,118 \\ & & & & \text{Exp} \end{array}$	b.	2012				
		June 30	Bond interest expense	28,118		
			Premium on bonds payable	1,882		
			Cash		30,000	
			<i>To record semiannual interest payment and premium amortization [$\\$562,360 \times 0.05 = \\$28,118$].</i>			
$\begin{array}{rclcl} A & = & L & + & SE \\ -30,000 & & -1,976 & & -28,024 \\ & & & & \text{Exp} \end{array}$		Dec. 31	Bond interest expense	28,024		
			Premium on bonds payable	1,976		
			Cash		30,000	
			<i>To record semiannual interest payment and premium amortization [$(\\$562,360 - \\$1,882) \times 0.05 = \\$28,024$, rounded].</i>			
$\begin{array}{rclcl} A & = & L & + & SE \\ -260,000 & & -250,000 & & +19,251 \\ & & -29,251 & & \text{Gain} \end{array}$		31	Bonds payable	250,000		
			Premium on bonds payable	29,251		
			Cash		260,000	
			Gain on bond retirement		19,251	
			<i>To record retirement of \$250,000 of bonds; book value of bonds retired:</i>			
			Face amount	\$250,000		
			Add: Premium (50 percent \times \$58,502)	29,251		
			Book value	<u>\$279,251</u>		
			<i>Retirement payment: $\\$250,000 \times 1.04 = \\$260,000$.</i>			

APPENDIX 10A: Bond Pricing

L05

Explain bond pricing and **illustrate** the effective interest method of amortizing bond discounts/premiums.

We explained that (1) a bond agreement specifies a pattern of future cash flows—usually a series of interest payments and a single payment at maturity equal to the face value—and that (2) bonds are often sold at premiums or discounts to adjust their effective interest rates to the prevailing market rate of interest when they are issued.

Because of the role played by interest, the selling price of a bond that is necessary to yield a specific rate can be determined as follows:

- 1 Use Appendix E's Table III to calculate the present value of the future principal repayment at the bond's effective rate of interest.
- 2 Use Appendix E's Table IV to calculate the present value of the future series of interest payments at the bond's effective rate of interest.
- 3 Add the two present value calculations obtained in steps one and two.

Exhibit 10-6 illustrates the pricing of a \$100,000 issue of eight percent, four-year bonds paying interest semiannually and sold on the date of issue to yield (1) eight percent, (2) ten percent, and (3) six percent. The

The second step involves adjusting the income statement line items identified in Step One with the remaining line items from the operating activities section of the indirect method statement of cash flows. Exhibit 12A-1 summarizes the procedures for converting individual income statement items to the corresponding cash flows from operating activities.

Exhibit 12A-1**Direct Method Conversion Schedule: Adjustments to Convert Income Statement Items to Operating Activity Cash Flows**

Income Statement Item	Adjustment to Cash Flow	Operating Activity Cash Flow
Sales revenue	+ Decrease in accounts receivable or - Increase in accounts receivable	= Receipts from customers
Cost of goods sold	+ Increase in inventory or - Decrease in inventory and + Decrease in accounts payable or - Increase in accounts payable	= Payments for merchandise
Operating expenses Interest expense Income tax expense (excluding items listed below)	+ Increase in related prepaid expense or - Decrease in related prepaid expense and + Decrease in related accrued liability or - Increase in related accrued liability	= Payments for expenses
Depreciation expense Depletion expense Amortization expense	+ Depreciation expense + Depletion expense + Amortization expense	= 0
Gains (investing/financing) Losses (investing/financing)	Omit: Not related to operating activities	= 0

Using Bennett Company's data in Exhibit 12-5, those adjustments would appear as follows:

Income Statement Line Items	Operating Activities Line Items	Direct Method Cash Flow
Sales revenue \$250,000	Less \$5,000 accounts receivable	Cash received from customers . . . \$245,000
Cost of goods sold (148,000)	Add \$6,000 inventory	Cash paid for merchandise (151,000)
	Less \$9,000 accounts payable	
Wage expense (52,000)		Cash paid to employees (52,000)
Insurance expense (5,000)	Less \$13,000 prepaid insurance	Cash paid for insurance (18,000)
Depreciation expense (10,000)	Add \$10,000 depreciation	
Income tax expense (11,000)	Add \$2,000 income tax payable	Cash paid for income taxes (9,000)
Gain on sale of plant assets 8,000	Less \$8,000 gain on sale of plant assets	
Net income \$ 32,000		Cash flow from operations \$ 15,000

Exhibit 12A-2 presents the Bennett Company's direct method statement of cash flows after undertaking the above two steps. As expected, the direct method cash flow from operating activities of \$15,000 is exactly equivalent to the indirect method result of \$15,000 as reported in Exhibit 12-5. Note that the cash flow from investing activities and the cash flow from financing activities are exactly the same in both Exhibit 12-5 and Exhibit 12A-2. The only difference between the two exhibits is the manner in which the cash flow from operating activities is calculated. In Exhibit 12-5, the cash flow from operating activities is calculated by beginning with net income and then adjusting for various noncash expenses (depreciation expense) and nonoperating transactions (gain on sale of plant assets), as well as adjusting for the changes in the various working capital accounts (accounts receivable, inventory, prepaid insurance, accounts payable, and taxes payable). In Exhibit 12A-2, net income is replaced with the income statement line items and the noncash expenses and working capital adjustments are disaggregated to the individual line items. But in each case, the operating cash flow of \$15,000 remains the same.