## OVERVIEW OF BRIEF EXERCISES, EXERCISES, PROBLEMS, AND CRITICAL

 THINKING CASES| Brief Exercises | Topic | Learning Objectives | Skills |
| :---: | :---: | :---: | :---: |
| B. Ex. 7.1 | Real World: Westinghouse <br> Electric Cash and cash equivalents | 1, 2 | Analysis |
| B. Ex. 7.2 | Bank reconciliations | 2, 3 | Analysis |
| B. Ex. 7.3 | Real World: Weis Markets Mark-to-market adjustments | 1, 4 | Analysis, communication |
| B. Ex. 7.4 | Accounting for marketable securities | 1, 4 | Analysis |
| B. Ex. 7.5 | Uncollectible accounts - balance sheet approach | 1, 5 | Analysis |
| B. Ex. 7.6 | Uncollectible accounts - Income statement approach | 1, 5 | Analysis |
| B. Ex. 7.7 | Real World: Molson Coors <br> Brewing Co. and Anheuser- <br> Busch Companies, Inc. Analyzing accounts receivable | 1, 5, 7 | Analysis, judgment, communication |
| B. Ex. 7.8 | Notes receivable and interest | 6 | Analysis |
| B. Ex. 7.9 | Real World: Weis Markets and Sprint Nextel Co. Doubtful accounts by industry | 5, 7 | Analysis, judgment, communication |
| B. Ex. 7.10 | Analyzing accounts receivable | 7 | Analysis |
| Exercises | Topic | Learning Objectives | Skills |
| 7.1 | You as a student | 3 | Analysis, communication |
| 7.2 | Real World: Apple Computer <br> Reporting financial assets | 1, 2 | Analysis |
| 7.3 | Real World: White Electric Supply Embezzling cash | 2 | Analysis, judgment |
| 7.4 | Protecting liquid assets | 2 | Analysis, communication |
| 7.5 | Bank reconciliation | 3 | Analysis |
| 7.6 | Real World: Nexity Bank, Bank of America, Discover Bank, Commerce Bank Evaluating cash equivalents | 1, 2 | Analysis, communication |
| 7.7 | Real World: Microsoft Corporation Marketable securities | 1, 4 | Analysis, communication |
| 7.8 | Estimating uncollectible accounts | 1, 5 | Analysis |


| Exercises | Topic | Learning <br> Objective | Skills |
| :--- | :--- | :---: | :--- |
| 7.9 | Real World: Goodyear Tire <br> \& Rubber and PPL Energy <br> Co. Collection performance by |  |  |
|  | industry |  |  |
|  | Analysis, communication |  |  |
| 7.10 | Effects of transactions | $1-5$ | Analysis |
| 7.11 | Reporting financial assets | 1 | Analysis |
| 7.12 | Effects of account errors | $1,5,7$ | Analysis |
| 7.13 | Sale of marketable securities | 1,4 | Analysis |
| 7.14 | Notes and interest | 6 | Analysis |
| 7.15 | Real World: The Home | $1,4,5,7$ | Analysis, communication |
|  | Depot, Inc. Examining an |  |  |
|  | annual report |  |  |
| Problems |  |  |  |
| Sets A, B |  | Learning |  |
| 7.1 A,B | Bank reconciliation | Objective |  |
| 7.2 A,B | Protecting cash | 2,3 | Analysis, communication |
| 7.3 A,B | Aging accounts receivable | 1,5 | Analysis, communication |
| 7.4 A,B | Uncollectible accounts | 1,5 | Analysis, communication |
| 7.5 A,B | Accounting for marketable | 1,4 | Analysis, communication |
|  | securities |  |  |
| 7.6 A,B | Notes receivable and interest | 6 | Analysis, communication |
| 7.7 A,B | Short Comprehensive Problem | $1,3-7$ | Analysis, communication, judgment |
| 7.8 A,B | Short Comprehensive Problem | $1,3-7$ | Analysis, communication, judgment |

## Critical Thinking Cases

| 7.1 | Accounting principles | $1,5,6$ | Analysis, communication |
| :--- | :--- | :---: | :--- |
| 7.2 | Understanding cash flows | $2,5,7$ | Analysis, communication, judgment |
| 7.3 | Window dressing <br> (Ethics, fraud \& corporate | $1-5,7$ | Analysis, communication, judgment |
| 7.4 | governance) |  |  |
| 7.5 | Cash management <br> (Business Week) <br> Real World: Bankrate.com Cash <br> management (Internet) | 1,2 | Analysis, communication |

## DESCRIPTIONS OF PROBLEMS AND CRITICAL THINKING CASES

Below are brief descriptions of each problem and case. These descriptions are accompanied by the estimated time (in minutes) required for completion and by a difficulty rating. The time estimates assume use of the partially filled-in working papers.

## Problems (Sets A and B)

| 7.1 A,B | Banner, Inc./Dodge, Inc. | $\mathbf{2 5}$ Medium |
| :--- | :--- | :--- |
|  | A comprehensive bank reconciliation. |  |

7.2 A,B Osage Farm Supply/Jason Chain Saws, Inc.

45 Strong
Students are to analyze a fraudulently prepared bank reconciliation to determine the amount of concealed embezzlement. Also calls for recommendations for improving internal control. A very challenging problem well suited to use as a group assignment.

| 7.3 A,B | Super Star/Starlight <br> Computation of the amount required in the allowance for doubtful <br> accounts based on an aging schedule of accounts receivable. Also <br> requires journal entries for adjustment of the allowance account and <br> for write-off of a worthless receivable. |
| :--- | :--- |

7.4 A,B Wilcox Mills/Walc Factory

30 Medium
A problem designed to dispel the misconception that the allowance is equal to annual bad debt expense. Students are to summarize (in general journal entry form) transactions during the year that affect the allowance for doubtful accounts. Then they are to comment on the relative size of the year-end allowance in comparison to writeoffs during the subsequent year.
7.5 A,B Weston Manufacturing Co./Westport Manufacturing Co. A comprehensive problem on marketable securities. Includes recording gains and losses, the mark-to-market adjustment, and balance sheet presentation.
7.6 A,B Eastern Supply/Southern Supply

Briefly covers accounting for notes receivable, including accrual of interest, maturity, and default.
7.7 A,B Scooter Warehouse/Data Management, Inc.

A short comprehensive problem that integrates the various components of financial assets. Includes a bank reconciliation, cash equivalents, short-term investments, doubtful accounts, notes receivable, and interest revenue.
7.8 A,B Hendry Corporation/Ciavarella Corporation

40 Strong
A short comprehensive problem that integrates the various components of financial assets. Includes a bank reconciliation, cash equivalents, short-term investments, doubtful accounts, notes receivable, and interest revenue.

## Critical Thinking Cases

7.1 Accounting Principles
Accounting practices are described in four separate situations. Students are asked to determine whether there has been a violation of generally accepted accounting principles, to identify the principles involved, and to explain the nature of the violations.
7.2 Rock, Inc.
An unstructured problem involving the effects of a major change in credit policy upon sales, cash receipts, turnover of accounts receivable, and uncollectible accounts. Good problem for classroom discussion.
7.3 "Window Dressing"
Ethics, Fraud \& Corporate Governance
Students are to evaluate several proposals being considered by management for "improving" the year-end balance sheet. One issue is whether the company must comply with GAAP as it is not publicly owned. Involves both ethical and accounting issues.
7.4 Cash Management
Business Week
Students are asked to discuss the pros and cons of using cell phones to make credit purchases.
7.5 Bankrate.com Internet
No time estimate
Estimate, Medium

Estimate, MediumAn Internet research problem that requires students to compare interestrates of various U.S. Treasury securities, CDs, and money marketaccounts.

40 Strong

40 Strong

10 Easy

## SUGGESTED ANSWERS TO DISCUSSION QUESTIONS

1. Receivables are created as a result of sales and are converted into cash as they are collected. Cash receipts that will not be needed in the near term are invested in marketable securities. Then, should cash needs exceed the cash on hand, some of the marketable securities may quickly be converted back into cash.
2. All financial assets appear in the balance sheet at their current value -that is, the amount of cash that the assets represent. For cash, current value is simply the face amount. But for marketable securities, current value means current market value. For receivables, current value means the collectible amount, which is called net realizable value (i.e., the amount of cash to be received).
3. Cash equivalents are very short-term investments that convert quickly into cash. Examples include money market funds, U.S. Treasury bills, certificates of deposit, and high-grade commercial paper. These items are considered so similar to cash that they often are combined with cash in the balance sheet. The first asset in the balance sheet then is called Cash and cash equivalents.
4. Lines of credit are preapproved loans, which the borrower may access simply by writing a check. A line of credit increases solvency, because it gives the holder immediate access to cash. Unused lines of credit generally are disclosed in the notes accompanying financial statements.
5. Yes, efficient management of cash includes more than preventing losses from fraud or theft. Efficient management of cash also includes policies that will (a) provide accurate accounting for all cash receipts, cash payments, and cash balances; (b) maintain a sufficient amount of cash to make all payments promptly as required; and (c) prevent unnecessarily large amounts of cash from being held idle in bank checking accounts that produce little or no revenue.
6. Cash generates little or no revenue. In fact, federal laws prohibit banks from paying interest on corporate checking accounts. Therefore, cash not needed in the near future should be invested to earn some form of revenue. Short-term, liquid investments include cash equivalents and marketable securities. If cash is available on a long-term basis, it usually can be used to finance growth or repay long-term debt. If it cannot be used efficiently in the business, it should be distributed to the company's owners.
7. a. Separate the functions of handling cash receipts from maintenance of (or access to) the accounting records.
b. Prepare a cash budget so that departmental cash receipts can be compared with expected amounts.
c. Prepare an immediate record (or control listing) of all cash receipts.
d. Deposit cash receipts in the bank on a daily basis.
e. Reconcile bank statements to determine that recorded cash receipts reached the bank.
8. (a) Outstanding checks, and (b) items collected for the depositor by the bank.
9. A petty cash fund is a convenient way to pay for small expenditures without having to issue a check. Receipts are kept for all amounts disbursed from the fund. Periodically, the fund is replenished by debiting various expenses (or Miscellaneous Expense) and crediting Cash by the amount of the disbursement receipts on file.
10. Marketable securities are less liquid than cash equivalents, primarily due to management's intent with regard to converting them to cash. They are usually presented separate from cash and cash equivalents in the balance sheet.
11. For each type of security owned the marketable securities subsidiary ledger shows the total cost, number of units (shares or bonds) owned, and cost per unit. The record assists the investor in keeping track of the securities owned, of interest and dividends received, and in computing the gain or loss resulting from sales of specific securities.
12. Mark-to-market is the process of adjusting the balance sheet valuation of investments in marketable securities to current market value at each balance sheet date. This adjustment affects only the balance sheet. The offsetting entry is to an owners' equity account sometimes entitled Unrealized Holding Gains (or Losses) on Investments.
13. The account Unrealized Holding Gains (or Losses) on Investments represents the difference between the cost of marketable securities owned and their current market value. In essence, this is the amount of gain or loss that would be realized if the securities were sold today. The amount of unrealized gain or loss appears in the owners' equity section of the balance sheet. An unrealized gain increases total owners' equity, and an unrealized loss decreases owners' equity.
14. Uncollectible accounts expense is associated with the revenue resulting from making credit sales to customers who do not pay their bills. The matching principle states that revenue should be offset with all of the expenses incurred in producing that revenue. Therefore, the expense of an uncollectible account should be recognized in the same accounting period as the credit sale.

At the time of a credit sale, we do not know that the resulting account receivable will prove to be uncollectible. This determination usually is made only after months of unsuccessful collection effort. Therefore, if the expense of uncollectible accounts is to be recognized in the same period as the related sales revenue, this expense must be estimated.
15. The balance sheet approach to estimating uncollectible accounts means aging the accounts receivable on hand at year-end and estimating the uncollectible portion of these receivables. The Allowance for Doubtful Accounts is then adjusted by the amount necessary to make it equal to the estimated uncollectible amount contained in the receivables.

The income statement approach to estimating uncollectible accounts means determining the average percentage relationship of uncollectible accounts expense to the year's net sales on credit. Ordinarily, no consideration is given to the existing balance in the allowance account. If the percentage used is valid, the allowance account will be subject to fluctuations in the short run but will neither build up to unreasonable size nor become exhausted.
16. The direct write-off method does not require estimates of uncollectible accounts expense or use a valuation allowance. When individual accounts receivable are determined to be uncollectible, they are written off by debiting Uncollectible Accounts Expense. This method (in contrast to the allowance method ) does not attempt to assign the expense from uncollectible accounts to the accounting period in which the uncollectible receivables originated, and therefore does not match related revenue and expenses.
17. No; companies are not required to use the same method of accounting for uncollectible accounts in their financial statements and in their income tax returns. In fact, tax regulations require use of the direct write-off method in income tax returns. In financial statements, however, an allowance method generally is considered preferable and is required for compliance with generally accepted accounting principles. Exceptions may be made due to the concept of materiality.
18. The advantages of making credit sales only to customers who use nationally recognized credit cards are that this policy: (1) eliminates all the work associated with maintaining records of accounts receivable from individual customers, billing customers, and collection procedures; (2) provides cash almost immediately from credit sales; (3) eliminates the risk of uncollectible accounts; (4) eliminates the need to investigate a customer's credit before making a credit sale; and (5) does not restrict sales by excluding the large number of shoppers who prefer to use these credit cards for purchases.
19. Alta Mine Company apparently has not benefited from the new policy of honoring nationally known credit cards. Since all previous sales were for cash, the restaurant has not had problems with accounts receivable or uncollectible accounts. The only possible benefit for Alta Mine Company from honoring credit cards would be an increase in sales, and this did not occur. Since former cash customers have begun using the credit cards, Alta Mine Company is actually having to wait longer to receive cash from sales and is having to pay a discount to the credit card company.
20. The accounts receivable turnover rate is computed by dividing annual net sales by the average amount of accounts receivable throughout the year. This ratio indicates the number of times during the year that the average amount of accounts receivable is collected. Thus, dividing 365 days by the accounts receivable turnover rate indicates the number of days required (on average) for the company to collect its average accounts receivable.

These computations are of interest to short-term creditors because they indicate the liquidity of the company's accounts receivable-that is, how quickly this asset is converted into cash.
21. The annual audit of a company by a CPA firm includes the confirmation of receivables by direct communication with the debtors. The debtors (customers) are asked to respond directly to the CPA firm, confirming the amount and due date of the accounts being confirmed. Thus, documentary evidence is gathered to prove that the customers actually exist and that they agree with the terms stated. The CPA firm will also study the client's internal controls relating to receivables, evaluate the credit ratings of major debtors, and consider the adequacy of the allowance for doubtful accounts.
22. a. In a multiple-step income statement, the loss from a sale of marketable securities reduces net income and is classified as a nonoperating item. In a statement of cash flows, the entire proceeds from the sale are shown as a cash receipt from investing activities.
b. The adjusting entry to create or increase the allowance for doubtful accounts involves the recognition of an expense. This expense (uncollectible accounts expense) appears as a selling expense in a multiple-step income statement. But this adjusting entry, like all adjusting entries, involves no cash receipts or cash payments. Therefore, it has no effect upon cash flows.
c. Writing off an account receivable against the allowance does not affect income or cash flows.
d. The adjusting entry to increase the balance sheet valuation of marketable securities affects only the balance sheet. No cash flows are involved, and the unrealized gain appears in the stockholders' equity section of the balance sheet, not in the income statement.
23. Changes in the market value of securities owned do not affect the investor's taxable income. For income tax purposes, gains on investments are recognized only when the investments are sold.
24. a. Maturity value $=\$ 10,900$ (interest $=\$ 10,000 \times .09 \times 1=\$ 900$.)

Maturity date = July 1, 2010 ( 365 days later, but the counting starts on July 2).
b. Maturity value $=\$ 20,400$ (interest $=\$ 20,000 \times .08 \times 90 / 360=\$ 400$.)

Maturity date = June 9, (20 days in March, 30 days in April, 31 days in May, leaves 9 days in June).

## SOLUTIONS TO BRIEF EXERCISES

B.Ex.7.1 a. Cash equivalents are usually short-term debt securities (e.g., U.S. Treasury bills, high-grade commercial paper, etc.). This appears to be true for Westinghouse Electric, as the footnote specifically mentions that all cash equivalents have a maturity date of three months or less (equity securities have no maturity date).
b. The statement referring to the company's limited credit exposure to any one financial institution means simply that Westinghouse has not put "all of its eggs in any one basket." In short, it has spread any risk associated with cash equivalents across numerous financial institutions that issue these short-term securities.
c. The $\mathbf{\$ 4 2}$ million designated as restricted cash and cash equivalents is not available to meet the normal operating needs of the company. The amount may be reserved for a specific purpose or may represent a compensating balance as a condition of a bank loan or some other credit agreement.
B.Ex.7.2 a. Cash balance per general ledger ..... \$ 21,749
Less: Bank service charge ..... (200)
NSF check from Susque Company ..... $(3,000)$
Error corrections, office supplies ..... (549)
Adjusted cash balance, December 31 ..... 18,000
Cash balance per bank statement ..... \$ 22,000
Add: Deposits in transit ..... 5,000
Less: Outstanding checks ..... $(9,000)$
Adjusted cash balance, December 31 ..... 18,000
b. Adjusted cash balance, December 31 (from part a.) ..... \$ 18,000
Cash equivalents: Money market account ..... 60,000
Cash and cash equivalents, December 31. ..... 78,000Note: Stocks are never considered cash equivalents and commercialpaper can be considered cash equivalents only when durations are 90days or less.
c. Bank Service Charges ..... 200
Accounts Receivable ..... 3,000
Office Supplies ..... 549
Cash.3,749To record bank service charges, to reclassify a NSF check as anaccount receivable, and to correct an error in the recording of officesupplies.
a. Weis's unrealized gain on investments is the difference between the cost of these investments and their current market values. In essence, it is the amount of gain that would be realized if the investments were sold today. But the term "unrealized" indicates that this gain has not been finalized through an actual sale of the investments. Therefore, its amount will change as market values fluctuate.
b. The $\mathbf{\$ 1 4}$ million unrealized gain increases the asset amount and also appears in an account in Weis's stockholders' equity section of its balance sheet. The recognition of this gain does not involve any cash flow.
c. Weis's unrealized gain is not included in the computation of taxable income. For income tax purposes, losses and gains on investments are reported in the period in which the investments are sold.
d. Weis's short-term creditors are primarily interested in the company's current debt-paying ability. From this perspective, mark-to-market should enhance the usefulness of the balance sheet by showing the amount of liquid resources that would be available if the marketable securities were sold.
B. Ex. 7.4
a. Dec. 4 Marketable Securities

30,000
Cash. $\qquad$
To record the purchase of marketable securities.
b. Dec. 9 Cash.

10,000
Marketable Securities7,000
Gain on Sale of Investments........... $\mathbf{3 , 0 0 0}$

To record the sale of marketable securities at a gain.
c. Dec. 18 Cash

5,000
Loss on Sale of Investments.................. $\mathbf{1 , 0 0 0}$
Marketable Securities 6,000
To record the sale of marketable securities at a loss.
d. Dec. 31 Marketable Securities.......................... 3,000

Unrealized Holding Gain on Investments.
To adjust the balance sheet valuation of marketable securities from their cost ( $\mathbf{\$ 3 0 , 0 0 0 - \$ 7 , 0 0 0 - \$ 6 , 0 0 0 = \$ 1 7 , 0 0 0 ) ~ t o ~ t h e i r ~}$ current market value of $\mathbf{\$ 2 0 , 0 0 0}$.
a. Uncollectible Accounts Expense

12,000
Allowance for Doubtful Accounts
To record uncollectible accounts expense (\$13,400-\$1,400 credit balance $=\mathbf{\$ 1 2 , 0 0 0}$ ).
b. Uncollectible Accounts Expense....................... 15,000

Allowance for Doubtful Accounts
To record uncollectible accounts expense (\$13,400 + \$1,600 debit balance $=\mathbf{\$ 1 5 , 0 0 0}$ ).

Computations:
Current
Past due 1-30 days
Past due 31-60 days
Past due 61-90 days
$\$ 60,000 \times 2 \%=\$ 1,200$
$40,000 \times 4 \%=1,600$
$25,000 \times 16 \%=4,000$

Past due over 90 days
$12,000 \times 40 \%=4,800$

Required allowance for doubtful accounts balance $\underline{\underline{\$ 13,400} \text { credit }}$
B.Ex.7.6 Ending net realizable value of accounts receivable.
$\$ 6,000,000$

Computations:
Accounts Receivable (beginning balance).............................. \$ 5,000,000
Add: Credit sales for the period................................................ 9,000,000

| Less: Accounts receivable written-off. | $\begin{array}{r} (100,000) \\ (7,835,000) \end{array}$ |  |
| :---: | :---: | :---: |
| Accounts receivable collected. |  |  |
| Recei | \$ | 6,065,00 |

Allowance for Doubtful Accounts (beginning balance*).......... \$ 75,000
Add: Uncollectible accounts expense (\$9 million x 1\%)......... $9 \mathbf{9 0 , 0 0 0}$
Less: Accounts receivable written-off.........................................
$(100,000)$
Allowance for Doubtful Accounts (ending balance)
65,000

* \$5,000,000 - \$4,925,000 = \$75,000 beginning balance in the Allowance for Doubtful Accounts.

Ending net realizable value (\$6,065,000-\$65,000)
$\$ 6,000,000$
B.Ex. 7.7 a. Accounts receivable turnover rate (net sales/average accounts receivable):

Molson Coors : \$8,320/\$720 = 11.6 $\underline{\underline{\text { times }}}$
Anheuser-Busch : \$17,400/\$900 = 19.3 times
b. Accounts receivable days outstanding ( $\mathbf{3 6 5}$ days/accounts receivable turnover rate):

Molson Coors : 365 days/11.6 times $=31$ days
Anheuser-Busch : $\mathbf{3 6 5}$ days/19.3 times $=19$ days
c. Both of these companies have very liquid accounts receivable - that is, their receivables convert quickly into cash. However, the accounts receivable of Anheuser-Busch are even more liquid than those of Molson Coors. AnheuserBusch, on average, collects on its outstanding accounts 12 days faster than Anheuser-Busch ( $\mathbf{3 1}$ days - $\mathbf{1 9}$ days).
B.Ex. 7.8 a. Sept. 1 Notes Receivable ...................................... 22,000

Accounts Receivable ..................... 22,000
To record receipt of a 9 -month, $12 \%$ note receivable in settlement of the account receivable of Herbal Innovations.
b. Dec. 31 Interest Receivable $\qquad$ 880
Interest Revenue
To recognize 4 months' interest on note from Herbal Innovations (\$22,000 x 12\% x $4 / 12=\$ 880$ ).
c. May 31 Cash $\qquad$ 23,980
Notes Receivable

Interest Revenue
To record collection of principal and interest on 12\% note from Herbal Innovations. Interest revenue is computed as $\$ 22,000 \mathrm{x}$ $12 \% \times 5 / 12$.
B.Ex. 7.9 All sales by long distance carriers, such as Sprint Nextel Corporation, are made on account. In contrast, the majority of sales made by grocery chains, such as Weis Markets, are cash sales. Thus, one would expect accounts receivable, expressed as a percentage of net sales, to be larger for Sprint Nextel than it is for Weis $\mathbf{( 1 0 . 5 \%}$ versus $\mathbf{2 . 1 \%}$ ).
Sales made on account by grocery chains are often to institutional customers (e.g., restaurants, college cafeterias, Boy Scout Camps, etc.). Long distance carriers, on the other hand, generate a large volume of credit sales from individuals. Generally speaking, individuals pose a greater credit risk than institutional customers. Therefore, it is not surprising that the allowance for doubtful accounts, expressed as a percentage of net sales, is nearly 28 times greater for Sprint Nextel than it is for Weis ( $\mathbf{1 . 1 \%}$ versus $\mathbf{0 . 0 4 \%}$ ).
B.Ex. 7.10 a. $\quad \$ 1,500,000 \div \$ 125,000=12$ times
b. $\mathbf{3 6 5}$ days $\div \mathbf{1 2}$ times turnover rate $=\underline{\mathbf{3 0 . 4} \text { days }}$

| Ex. 7.1 a. | Balance per bank statement at September 30 $\qquad$ <br> Add: Deposit made by your parents on October 2 | \$ | $\begin{array}{r} 3,400 \\ 2,400 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: |
|  |  | \$ | 5.800 |
|  | Deduct outstanding checks: |  |  |
|  | \#203 University tuition |  | 1,500 |
|  | \#205 University bookstore |  | 350 |
|  | \#208 Rocco's pizza |  | 25 |
|  | \#210 Stereo purchase |  | 425 |
|  | \#211 October apartment rent |  | 500 |
|  | Adjusted cash balance | \$ | 3,000 |
|  | Balance per your checkbook (including \$2,400.00 deposit) | \$ | 3,001 |
|  | Add: Interest earned in September |  | 4 |
|  |  | \$ | 3,005 |
|  | Deduct bank's service charge |  | 5 |
|  | Adjusted cash balance (as above) | \$ | 3,000 |

As shown above, your correct current checkbook balance is $\$ 3,000$. Prior to adjusting your records, neither your checkbook nor your bank statement report this balance because neither contains complete information about your account activity during the month.

Ex. 7.2 a. Financial assets are cash and other assets that will convert directly into known amounts of cash.
b. Cash and cash equivalents are reported in the balance sheet at face value. Marketable securities are reported at market value, whereas accounts receivable are reported at net realizable value. The common goal is to report these assets at their current value -that is, the amount of cash that each asset represents.
c. Companies hold marketable securities because these assets, unlike corporate checking accounts, have the potential to generate income through interest and capital appreciation. The reason companies hold accounts receivable is different. Most companies must be willing to make sales on account (as opposed to only cash sales) in order to maximize their income potential. Thus, they must be willing to hold some of their resources in the form of accounts receivable.
d. Cash equivalents are safe and highly liquid investments that convert to cash within 90 days of acquisition. These investments often include certificates of deposits (CDs), U.S. Treasury bills, and money market accounts.
e. Apple Computer's accounts receivable, in total, amount to $\mathbf{\$ 1 . 6 3 7}$ billion. Of this amount, however, the company estimates that $\$ 44$ million will not be collected. Thus, the company reports receivables at a net realizable value of $\mathbf{\$ 1 . 5 9 3}$ billion in its balance sheet ( $\$ 1.637$ billion - $\$ 44$ million).

Ex. 7.3 a. There were several controls lacking at White Electric Supply which made it possible for the bookkeeper to embezzle nearly $\$ 416,000$ in less than five years. First, not only did the bookkeeper prepare the company's bank reconciliation each month, but she also had complete control over all cash receipts and disbursements. These duties must be segregated for adequate protection against theft. Second, the company had no inventory control system in place. Thus, it went undetected by management when the check register consistently showed inventory purchase amounts in excess of actual inventory received. Finally, because White Electric Supply was not a publicly owned corporation, an independent audit was not required. As a result, management never considered conducting an independent review of the company's financial records and control systems.
b. Employee theft is never ethical, even if it is committed to pay for medical bills. It is also unethical for employees to "borrow" funds from their employers without formal permission (even if one has the "intent" of eventually paying back the full amount).

Note to instructor: The White Electric Supply example is one of several "real world" cases documented in a video entitled, Red Flags: What Every Manager Should Know About Crime. The video is produced by The Institute for Financial Crime Prevention, 716 West Avenue, Austin, TX 78701.

Ex. 7.4 a. The fraudulent actions by D. J. Fletcher would not cause the general ledger to be out of balance, nor would these actions prevent the subsidiary ledger for accounts receivable from agreeing with the control account. Equal debits and credits have been posted for each transaction recorded.
b. In the income statement, the Sales Returns and Allowances account would be overstated by $\$ 3,000$; hence net sales would be understated by $\$ 3,000$. Net income would also be understated by $\$ 3,000$.
In the balance sheet, the assets would be understated because the company has an unrecorded (and unasserted) claim against Fletcher for $\$ \mathbf{3 , 0 0 0}$. Thus, understatement of assets is offset by an understatement of owners' equity by $\$ 3,000$.

If Bluestem Products bonds its employees, it may be able to collect the $\mathbf{\$ 3 , 0 0 0}$ from the bonding company if the loss is discovered and Fletcher is unable to make restitution.
c. (1) Cash receipts should be deposited daily in the bank. The $\$ 3,000$ of currency stolen by Fletcher represented the larger part of three days' receipts from over-the- counter cash collections.
(2) The function of handling cash should be separate from the maintenance of accounting records. Fletcher apparently has access to the cash receipts, to incoming mail, to the general journal, and to the general and subsidiary ledgers.
(3) The employee who opens the mail should prepare a list of amounts received. One copy of the list should be sent to the accounting department to record the collections. Another copy should be sent with the checks to the cashier who should deposit each day's cash collections.
(4) The total of each day's cash receipts recorded by the accounting department should be compared with the amount of the daily bank deposit by the cashier.
Note to instructor: The exercise calls for only three specific actions to strengthen internal control. The above list of four is not exhaustive; others could be cited.
Ex 7.5 a. Balance per bank statement

$\qquad$ ..... \$ ..... 15,200
Add: Undeposited receipts of December 31 ..... 10,000
\$ ..... 25,200
Less: Outstanding checks
No. 620 ..... \$ ..... 1,000
630. ..... 3,000
641 ..... 4,500Adjusted cash balance
$\qquad$
$\qquad$Balance per depositor's records
$\qquad$\$ 17,500
$\begin{array}{r}\$ 25 \\ \\ \hline\end{array}$ Jane Jones check returned NSF
Less: Service charges800
Adjusted cash balance, as above
$\qquad$\$16,700
b. Bank Service Charges ..... 25
Accounts Receivable (Jane Jones) ..... 775Cash800To record bank service charge for December and NSF checkreturned by bank.
c. The $\$ 25$ service charge most likely resulted from the $\$ 775$ check drawn by Jane Jones and marked NSF. Banks normally charge between \$5 and \$25 for each NSF check processed. This fee is often added to the balance of the offending customer's account receivable.

Ex. 7.6 If the company is certain it will not need any of the $\$ 100,000$ in the form of cash for at least $\mathbf{9 0}$ days, putting the entire amount in Commerce Bank's 90-day CD may be its best choice. After all, this investment's $2.3 \%$ interest rate is the highest among the four alternatives, and it's FDIC insured. If, however, the company is uncertain about its future cash needs, the risk of penalty associated with liquidating the CD may offset its slightly higher interest rate.

Management may wish to consider investing a portion of the $\mathbf{\$ 1 0 0 , 0 0 0}$, say $\mathbf{\$ 5 0 , 0 0 0}$, in the $\mathbf{2 . 1 \%}$ Discover Bank CD. The remaining $\$ 50,000$ could be invested in the Bank of America money market account at $\mathbf{2 . 0 \%}$. This option would offer the company flexibility, should its cash needs change prior to the CD's maturity date. It would also give the company FDIC coverage on the portion invested in the CD. If it decides to put more than $\mathbf{\$ 5 0 , 0 0 0}$, but less than $\mathbf{\$ 1 0 0 , 0 0 0}$, in the Discover Bank $\mathbf{C D}$, it would have to invest the remainder in the Nexity Bank money market account.

The company must also keep in mind that the interest rates on the CDs are guaranteed so long as they are held for $\mathbf{9 0}$ days. The rates on the two money market accounts may fluctuate slightly, either up or down.

Ex. 7.7 a. Marketable securities are either equity or debt instruments that are readily marketable at quoted market prices. They often consist of investments in the capital stock issued by large, publicly traded, corporations. Marketable securities are financial assets because they are convertible directly into known amounts of cash at quoted market prices.
b. Cash generates little or no revenue. Marketable securities, on the other hand, produce revenue in the form of dividends, interest, and perhaps increases in their market values over time. For a company like Microsoft, revenue from short-term investments represents billions of dollars each year. Of course, investments in marketable securities are of higher risk than investments in lower yielding cash equivalents.
c. Investments in marketable securities appear in the investor's balance sheet at their current market value.
d. (1) The valuation of marketable securities at market value is a departure from the cost principle. Cost is often disclosed in the footnotes to the financial statements, but it does not serve as the basis for valuation.
(2) Valuation at market value is not a departure from the principle of objectivity. The quotation of up-to-date market prices enables companies to measure market values with considerable objectivity.
e. Mark-to-market benefits users of financial statements by showing marketable securities at the amount of cash those securities represent under current market conditions. Current market values are far more relevant to the users of financial statements than what was paid for the securities when they were purchased.
a. Uncollectible Accounts Expense

200,000
Allowance for Doubtful Accounts.
200,000
To record estimated uncollectible accounts expense at $2.5 \%$ of net credit sales $\mathbf{( \$ 8 , 0 0 0 , 0 0 0 \times 2 . 5 \%}=\$ 200,000)$.
b. Uncollectible Accounts Expense ..................................... 155,000

Allowance for Doubtful Accounts.
155,000
To increase balance in allowance account to required \$84,000:

Credit balance at beginning of year........... \$ 25,000
Write-offs during year.................................. $\mathbf{( 9 6 , 0 0 0 )}$
Temporary debit balance......................... \$ 71,000
Required year-end credit balance .............. 84,000
Required adjustment for year.................... $\$ 155,000$
c. Uncollectible Accounts Expense........................................... 96,000

Accounts Receivable.
96,000
To record as uncollectible expense only those accounts determined during the year to be uncollectible.
d. Adjusting the balance in the Allowance for Doubtful Accounts account based upon the aging schedule will provide to investors and creditors the most accurate assessment of the company's liquidity. This method is the only approach to take into consideration the underlying declining probability of collecting outstanding accounts as they become increasingly past due.

Ex. 7.9 a. Accounts receivable turnover rate (net sales/average accounts receivable):
Goodyear Tire \& Rubber: $\$ 19.6 / \$ 3.1=\underline{\underline{6.3} \text { times }}$
PPL: \$5.1 billion/\$376 million = 13.5 times
b. Accounts receivable days outstanding (365 days/accounts receivable turnover rate):

Goodyear Tire \& Rubber 365 days/6.3 times $=\underline{\underline{58} \text { days }}$
PPL: 365 days/13.5 times = 27 days
c. The reason it takes Goodyear 31 days longer than PPL to collect its receivables is due, in large part, to industry characteristics of each company. Customers of public utilities have a tendency to pay their bills quickly to avoid having bad credit ratings and to keep from having their electricity turned off. Goodyear's customers, on the other hand, are primarily large retailers and automobile manufacturers. These businesses are notorious for making delayed payments to their suppliers, and often do so without penalty. How do they get away with it? In Goodyear's case, a relatively small number of very large accounts comprise a significant percentage of the company's total revenue.

| Ex. 7.10 |  | Total | Net | Net Cash Flow <br> from Operating | Net Cash Flow <br> (from Any |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Transaction | Assets | Income | Activities | Source) |

*Cash payment or receipt is classified as an investing activity.

## Ex. 7.11

a. Cash equivalents normally are not shown separately in financial statements. Rather, they are combined with other types of cash and reported under the caption, "Cash and Cash Equivalents." A note to the statements often shows the breakdown of this asset category.
b. Cash earmarked for a special purpose is not available to pay current liabilities and, therefore, should be separated from cash and cash equivalents. This fund should be listed under the caption "Investments and Restricted Funds" in the balance sheet.
c. Compensating balances are included in the amount of cash listed in the balance sheet, and the total amount of these balances should be disclosed in notes accompanying the statements.
d. The difference between the cost and current market value of securities owned is shown in the balance sheet as an element of stockholders' equity. The account is entitled, "Unrealized Holding Gain (or Loss) on Investments." Unrealized gains and losses are not shown in the income statement.
e. The allowance for doubtful accounts is a contra-asset account. It reduces the amount shown for accounts receivable in the balance sheet.
f. The accounts receivable turnover rate is equal to net sales divided by average accounts receivable. The rate itself does not appear in financial statements, but the information needed to compute it does.
g. Realized gains and losses on investments sold during the year are reported in the income statement. If the income statement is prepared in a multiple-step format, these gains and losses are classified as nonoperating activities, and appear after the determination of income from operations.
h. Transfers between cash and cash equivalents are not reported in financial statements. For financial statement purposes, cash and cash equivalents are regarded as a single type of financial asset.
i. Proceeds from sales of marketable securities are shown in the statement of cash flows as cash receipts from investing activities.

| Ex. 7.12 | Gross | Quick | Receivables <br> Turnover <br> Ratio | Net <br> Income | Retained <br> Earnings | Working <br> Capital |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Transaction | Profit | Rate | NE | NE | NE |
| a. | U | NE | U | NE |  |  |
| b. | NE | U | O | U | U | U |
| c. | O | O | U | O | O | O |

Ex. 7.13 a. The amount of unrealized holding gain included in the securities' current market value will appear as an element of stockholders' equity. The securities also will appear in the balance sheet at current market value, with their cost disclosed as supplemental information.
b. As of December 31, 2009, McGoun Industries still owns the marketable securities. Therefore, it has not yet paid any income taxes on the increase in the securities' value. Unrealized gains on investments are not subject to income taxes. Taxes are owed only in the year in which the gains are realized through the sale of investments.
c. Jan. 4 Cash ................................................... 260,000

Marketable Securities 90,000
Gain on Sale of Investments
170,000
To record sale of investments at a price above cost.

Note to instructor: If no other marketable securities were purchased during the month, an adjusting entry is needed at the end of January which includes a debit to Unrealized Holding Gain and a credit to Marketable Securities in the amount of $\mathbf{\$ 1 7 0 , 0 0 0}$.
d. The sale of securities on January 4, 2010, will increase McGoun's taxable income for that year by $\mathbf{\$ 1 7 0 , 0 0 0}$, the amount of the gain. As the company pays income taxes at the rate of $\mathbf{3 0 \%}$ on capital gains, 2010 income taxes will be increased by $\$ 51,000$ ( $\mathbf{\$ 1 7 0 , 0 0 0}$ capital gain $\times 30 \%$ tax rate).

## Ex. 7.14

a.

2009
Aug. 1

> 1. Notes Receivable
> 36,000
> Accounts Receivable (Dusty Roads)
> 36,000

Accepted a six-month, $9 \%$ note receivable in settlement of an account receivable on August 1, 2009.

Dec. 31
2. Interest Receivable .................................................... 1,350

Interest Revenue
1,350
To record accrued interest earned from August through December: $\mathbf{\$ 3 6 , 0 0 0 \times 9 \%} \times 5 / 12=\$ 1,350$.

## 2010

Jan. 31
3. Cash ....................................................................... 37,620

Notes Receivable ................................................... 36,000
Interest Receivable ................................................ $\mathbf{1 , 3 5 0}$
Interest Revenue ................................................... 270
To record collection of six-month note plus interest from Dusty Roads. Total interest amounts to \$1,620 (\$36,000 × $9 \% \times 1 / 2$ ), of which $\$ 270$ was earned in 2010.

2010
Jan. 31
4. Accounts Receivable (Dusty Roads) ................................ 37,620

Notes Receivable ................................................... 36,000
Interest Receivable ................................................ $\mathbf{1 , 3 5 0}$
Interest Revenue ................................................... 270
To record default by Dusty Roads on six-month note receivable.


Ex. 7.15 a. Financial assets $=\$ 1.716$ billion
b. The company reports $\$ 12$ million in short-term investments. Unrealized gains and losses are reported in the stockholders' equity section of its balance sheet as Accumulated Other Comprehensive Income (Loss).
c. The company's allowance for uncollectible accounts (referred to in the footnotes as its "valuation reserve") was not considered material and was therefore treated as zero.
d. Net sales
$\div$ Average accounts receivable
Accounts receivable turnover
Days in a year
$\div$ Accounts receivable turnover
Average days outstanding (rounded)

* Computation of average accounts receivable:

Accounts receivable 2/3/08
Accounts receivable 1/28/07
$\$ 77.349$ billion
2.241 billion

35 times
365 days
35 times
10 days
[ 10 days
$\$ 2.241$ billion

Note to instructor: The notes accompanying the financial statements reveal that $\$ 1.743$ billion of the reduction in accounts receivable resulted from the company's selling of a subsidiary during the year.

## SOLUTIONS TO PROBLEMS SET A

25 Minutes, Medium PROBLEM 7.1A BANNER, INC.
a.


| b. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| General Journal |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| July | 31 | Cash | 4,396 |  |
|  |  | Notes Receivable |  | 4,000 |
|  |  | Office Equipment |  | 396 |
|  |  | To record collection by bank of note receivable |  |  |
|  |  | from Rene Manes, and correct recorded cost of |  |  |
|  |  | office equipment. |  |  |
|  |  |  |  |  |
| July | 31 | Bank Service Charge | 50 |  |
|  |  | Accounts Receivable (Howard Williams) | 200 |  |
|  |  | Cash |  | 250 |
|  |  | To adjust accounting records for bank service |  |  |
|  |  | charges and the customer's check charged back as |  |  |
|  |  | NSF. |  |  |
|  |  |  |  |  |

c. The amount of cash that should be included in the balance sheet at July 31 is the adjusted balance of $\underline{\$ 129,714}$.
d. The balance per the company's bank statement is often larger for two reasons: (1) There are checks outstanding which have been deducted in the company's records but which have not yet cleared the bank, and (2) the bank periodically makes collections and deposits them into the company's account.

| OSAGE FARM SUPPLY |  |  |  |
| :---: | :---: | :---: | :---: |
| BANK RECONCILIATION |  |  |  |
| November 30 |  |  |  |
| a. Corrected bank reconciliation for November: |  |  |  |
| Balance per bank statement, November 30 |  | \$ | 20,600 |
| Add: Deposit in transit |  |  | 1,245 |
| Subtotal |  | \$ | 21,845 |
| Less: Outstanding checks: |  |  |  |
| no. 8231 | \$ 400 |  |  |
| no. 8263 | 524 |  |  |
| no. 8288 | 176 |  |  |
| no. 8294 | 5.000 |  |  |
| Total outstandina checks |  |  | 6.100 |
| Adiusted cash balance per bank statement |  | \$ | 15,745 |
| Balance per accounting records |  | \$ | 35,400 |
| Add: Note receivable collected bv bank |  |  | 6.255 |
| Subtotal |  | \$ | 41,655 |
| Less: NSF check returned | 130 |  |  |
| Bank service charges | 15 |  | 145 |
| Adjusted cash balance per accounting records prior to |  |  |  |
| recognition of cash shortage |  | \$ | 41,510 |
| Less: Indicated cash shortage (\$41.510-\$15.745) |  |  | 25.765 |
| Adiusted cash balance per accountina records |  | \$ | 15.745 |
|  |  |  |  |
|  |  |  |  |
| b. Escola attempted to conceal the shortage by making |  |  |  |
| the following intentional errors in her reconciliation: |  |  |  |
| Errors leading to a \$13,255 overstatement of the |  |  |  |
| adjusted balance per the bank statement: |  |  |  |
| Overstating the deposit in transit with a |  |  |  |
| transposition error |  | \$ | 900 |
| Improperly adding the amount of the note collected |  |  |  |
| by the bank to the bank balance |  |  | 6,255 |
| Making an addition error in adding the adiustments |  |  |  |
| to the balance per the bank statement |  |  | 1,000 |
| Omitting check no. 8294 from the outstanding check |  |  |  |
| list. |  |  | 5,000 |
| Understating the sum of the outstanding checks |  |  |  |
| that were listed. |  |  | 100 |
|  |  | \$ | 13,255 |
| Error causing a \$12,510 understatement of the |  |  |  |
| adjusted balance per the accounting records: |  |  |  |
| Subtracting the \$6,255 amount of the credit |  |  |  |
| memorandum even though the caption stated |  |  |  |
| that this amount should be added |  |  | 12.510 |
| Total shortage concealed in Escola's bank |  |  |  |
| reconciliation |  | \$ | 25.765 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

c. Two weaknesses in internal control are apparent. First, the bank account should be reconciled by someone with no other responsibilities for cash transactions, not by the company's cashier. The person performing a control function never should have a personal incentive to conceal the types of errors that the control procedure may bring to light.

Second, cash receipts are not being deposited intact in the bank, and management is unaware of this internal control failure even after several months. Failure to deposit receipts intact can be detected by comparison of the daily deposits listed in the bank statement with the daily totals in the special journals used to record cash receipts.
a.

| Accounts Receivable by Age Group |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Percentage | Estimated |
|  |  | Considered | Uncollectible |
|  | Amount | Uncollectible | Accounts |
| Not yet due | \$ 500,000 | 1 | \$ 5,000 |
| 1-30 days past due | 210,000 | 3 | 6,300 |
| 31-60 days past due | 80,000 | 10 | 8,000 |
| 61-90 days past due | 15,000 | 20 | 3,000 |
| Over 90 days past due | 30,000 | 50 | 15,000 |
| Totals | 835,000 |  | \$ 37,300 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

b.

| General Ledger |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dec | 31 | Uncollectible Accounts Expense |  | 25,500 |  |
|  |  | Allowance for Doubtful Accounts |  |  | 25,500 |
|  |  | To increase the valuation account to the estimated |  |  |  |
|  |  | required total of \$37,300 computed as follows: |  |  |  |
|  |  | Required credit balance for valuation account: | \$ | 37,300 |  |
|  |  | Present credit balance |  | 11,800 |  |
|  |  | Current provision (\$37,300-\$11,800) | \$ | 25,500 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| c. |  |  |  |  |  |
| Jan | 10 | Allowance for Doubtful Accounts |  | 8,250 |  |
|  |  | Accounts Receivable (April Showers) |  |  | 8,250 |
|  |  | To write-off as uncollectible the account |  |  |  |
|  |  | receivable from April Showers. |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

d. Such a policy would compensate the company for having to wait extended periods of time to collect its cash. It also provides the company with additional "leverage" in a court of law should it decide to press charges against customers with delinquent accounts.

*The first three entries summarize entries occurring at various dates throughout 2009.
b. A case can probably be made that the allowance is unreasonably low. The amount of the allowance at the end of 2008 was $\$ 80,000$, but $\$ 165,000$ were written off during the following year which may imply that the allowance should have been higher. A counter argument, which may justify the $\mathbf{\$ 8 0 , 0 0 0}$ balance, is that the allowance at the end of a year is not necessarily intended to provide for all accounts that will be written off during the coming year. Rather, it represents only the portion of the receivables existing at year-end estimated to be uncollectible.

As Wilcox Mills sells on 30-day terms, it should turn over its receivables about 12 times each year. Thus, the year-end receivables should equal only about $\mathbf{1 / 1 2}$ of a year's credit sales, and the balance in the allowance should provide for about $\mathbf{1 / 1 2}$ of the accounts written off during the year. WESTON MANUFACTURING CO.


## PROBLEM 7.5A WESTON MANUFACTURING CO. (concluded)


h. Unrealized gains and losses are not reported in a company's income tax return. The realized loss on the sale of marketable securities will reduce both taxable income and the company's income tax liability.

c. There are two reasons why the company adopts this policy: (1) The interest earned on the note compensates the company for delaying the collection of cash beyond the standard due date, and (2) should the company have to take a customer to court, written contracts always are preferred over verbal agreements. SCOOTER WAREHOUSE

| General Journal |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| a. |  | Bank Reconciliation |  |  |
| Dec | 31 | Bank Service Charges | 25 |  |
|  |  | Accounts Receivable | 375 |  |
|  |  | Office Supplies |  | 234 |
|  |  | Cash |  | 166 |
|  |  | To record bank service charges, to reclassify NSF |  |  |
|  |  | check as an account receivable, and to correct |  |  |
|  |  | an error in the recording of office supplies. |  |  |
|  |  |  |  |  |
| b. |  | Marketable Securities |  |  |
|  |  |  |  |  |
|  | 31 | Marketable Securities | 2,500 |  |
|  |  | Unrealized Holding Gain on Investments |  | 2,500 |
|  |  | To increase marketable securities to their |  |  |
|  |  | current market value ( $\$ 28,500-\$ 26,000$ ). |  |  |
|  |  |  |  |  |
| c. |  | Notes and Interest Receivable |  |  |
|  |  |  |  |  |
|  | 31 | Interest Receivable | 250 |  |
|  |  | Interest Revenue |  | 250 |
|  |  | To record accrued interest revenue on notes |  |  |
|  |  | receivable (\$60,000 $\times 5 \% \times 1 / 12$ ). |  |  |
|  |  |  |  |  |
| d. |  | Accounts Receivable at Net Realizable Value |  |  |
|  |  |  |  |  |
|  | 31 | Uncollectible Accounts Expense | 11,000 |  |
|  |  | Allowance for Doubtful Accounts |  | 11,000 |
|  |  | To report accounts receivable at their net |  |  |
|  |  | realizable value. \$15,000 allowance required |  |  |
|  |  | (\$450,000-\$435,000). \$4,000 credit balance prior |  |  |
|  |  | to the adjustment. \$11,000 adjustment required |  |  |
|  |  | (\$15,000-\$4,000). |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
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|  |  |  |  |  |

e. The accounts receivable turnover rate is computed by dividing sales by average accounts receivable at their net realizable value . Recording uncollectible accounts expense results decreases the net realizable value of accounts receivable and therefore increases the accounts receivable turnover rate. The write-off of an accounts receivable has no effect on the net realizable value of accounts receivable. The net realizable value of accounts receivable remains exactly the same before and after an account is written-off.


## PROBLEM 7.8A HENDRY CORPORATION (continued)



## PROBLEM 7.8A HENDRY CORPORATION (concluded))

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| f. |  | December 31, 2009 | January 1, 2009 |
|  |  |  |  |
|  |  |  |  |
|  | Accounts receivable (see part d.) | \$ 800,000 | \$ 2,150,000 |
|  | Allowance for doubtful accounts (see part d.) | 300,000 | 40,000 |
|  | Net realizable value | \$ 500,000 | \$ 2,110,000 |
|  |  |  |  |
|  | Average accounts receivable |  |  |
|  | $(\$ 2,110,000+\$ 500,000) \div 2$ | 1,305,000 |  |
|  | Sales | 20,000,000 |  |
|  | Accounts receivable turnover |  |  |
|  | (sales $\div$ average accounts receivable) | 15.33 |  |
|  | Accounts receivable days |  |  |
|  | ( $365 \div$ accounts receivable turnover) | 23.81 | days |
|  |  |  |  |
|  | If the industry average is 45 days, |  |  |
|  | Hendry Corporation is well below |  |  |
|  | the average. |  |  |
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| a. |  |  |  |
| :---: | :---: | :---: | :---: |
| Balance per bank statement, November 30 |  | \$ | 4,710 |
| Add: Deposit in transit |  |  | 3.850 |
|  |  | \$ | 8,560 |
| Deduct: Outstanding checks |  |  |  |
| no. 814 | \$ 115 |  |  |
| no. 816 | 170 |  |  |
| no. 830 | 530 |  | 815 |
| Adiusted cash balance |  | \$ | 7.745 |
|  |  |  |  |
| Balance per accounting records, November 30 |  | \$ | 6.750 |
| Add: Note receivable collected bv bank |  |  | 4.000 |
|  |  | \$ | 10,750 |
| Deduct: |  |  |  |
| Service charge | 15 |  |  |
| NSF check | 2,900 |  |  |
| Check recordina error (no. 810) | 90 |  | 3.005 |
| Adiusted cash balance (as above) |  | \$ | 7.745 |
|  |  |  |  |


| b. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Nov. | 30 | Cash | 4,000 |  |
|  |  | Notes Receivable |  | 4,000 |
|  |  | To record collection by bank of note receivable |  |  |
|  |  | from Wright Sisters. |  |  |
|  |  |  |  |  |
|  | 30 | Computer Equipment | 90 |  |
|  |  | Bank Service Charges | 15 |  |
|  |  | Accounts Receivable | 2.900 |  |
|  |  | Cash |  | 3,005 |
|  |  | To adjust accounting records for bank service |  |  |
|  |  | charges, customer's check charged back as |  |  |
|  |  | NSF, and correct the recorded cost of equipment. |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

c. The amount of cash that should be included in the balance sheet at November 30 is the adjusted balance of $\$ 7,745$.

c. Two weaknesses in internal control are apparent. First, the bank account should be reconciled by someone with no other responsibilities for cash transactions, not by the company's cashier. The person performing a control function never should have a personal incentive to conceal the types of errors that the control procedure may bring to light.

Second, cash receipts are not being deposited intact in the bank, and management is unaware of this internal control failure even after several months. Failure to deposit receipts intact can be detected by comparison of the daily deposits listed in the bank statement with the daily totals in the special journals used to record cash receipts.
a.

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Accounts Receivable by Age Group    |  |  |  |  |  |
|  | Amount |  | Considered | Uncollectible Accounts |  |
|  |  |  | Uncollectible |  |  |
| Not yet due | \$ | 500,000 | 1 | \$ | 5,000 |
| 1-30 days past due |  | 110,000 | 3 |  | 3,300 |
| 31-60 days past due |  | 50,000 | 10 |  | 5,000 |
| 61-90 days past due |  | 30,000 | 20 |  | 6,000 |
| Over 90 days past due |  | 60,000 | 50 |  | 30,000 |
| Totals | \$ | 750,000 |  | \$ | 49,300 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

b.

|  |
| :--- |
|  |
|  |


| Dec | 31 | Uncollectible Accounts Expense |  | 44,600 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Allowance for Doubtful Accounts |  |  | 44,600 |
|  |  | To increase the valuation account to the estimated |  |  |  |
|  |  | required total of \$49,300 computed as follows: |  |  |  |
|  |  | Required allowance balance: | \$ | 49,300 |  |
|  |  | Present credit balance |  | 4,700 |  |
|  |  | Required adjustment (\$49,300-\$4,700) | \$ | 44.600 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| c. |  |  |  |  |  |
| Jan | 18 | Allowance for Doubtful Accounts |  | 1,600 |  |
|  |  | Accounts Receivable (May Flowers) |  |  | 1,600 |
|  |  | To write-off as uncollectible the account |  |  |  |
|  |  | receivable from May Flowers. |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

d. Such a policy would compensate the company for having to wait extended periods of time to collect its cash. It also provides the company with additional "leverage" in a court of law, should it decide to press charges against customers with delinquent accounts.

*The first three entries summarize entries occurring at various dates throughout 2009.
b. The $\$ 40,000$ allowance for doubtful accounts established at the end of 2008 appears to be inadequate in view of the fact that $\$ 106,000$ of accounts receivable were written off during 2009. However, one might view the $\$ 40,000$ allowance established at the end of 2008 as being reasonable, given it represents only those accounts receivable existing at year-end estimated to be uncollectible.

As Walc sells on 30-day terms, it should turn over its receivables about 12 times each year. Thus, the year-end receivables should equal only about $\mathbf{1 / 1 2}$ of a year's credit sales. Likewise, one could argue that the balance established in the allowance for doubtful accounts at year-end need only be large enough to provide for $1 / 12$ of the accounts expected to be written off in the upcoming year. WESTPORT MANUFACTURING CO.
 WESTPORT MANUFACTURING CO. (concluded)

h. Unrealized gains and losses are not reported in a company's income tax return. The realized loss will reduce both taxable income and the income tax liability.

c. There are two reasons why the company adopts this policy: (1) The interest earned on the note compensates the company for delaying the collection of cash beyond the standard due date, and (2) should the company have to take a customer to court, written contracts always are preferred over verbal agreements. DATA MANAGEMENT, INC.

| General Journal |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| a. |  | Bank Reconciliation |  |  |
| Dec | 31 | Bank Service Charges | 125 |  |
|  |  | Accounts Receivable | 2,350 |  |
|  |  | Office Supplies | 962 |  |
|  |  | Cash |  | 3,437 |
|  |  | To record bank service charges, reclassify NSF |  |  |
|  |  | check as an account receivable, and correct |  |  |
|  |  | an error in the recording of office supplies. |  |  |
|  |  |  |  |  |
| b. |  | Marketable Securities |  |  |
|  |  |  |  |  |
|  | 31 | Unrealizable Holding Loss on Investments | 7,000 |  |
|  |  | Marketable Securities |  | 7,000 |
|  |  | To decrease marketable securities to their |  |  |
|  |  | current market value (\$75,000-\$68,000). |  |  |
|  |  |  |  |  |
| c. |  | Notes and Interest Receivable |  |  |
|  |  |  |  |  |
|  | 31 | Interest Receivable | 360 |  |
|  |  | Interest Revenue |  | 360 |
|  |  | To record accrued interest revenue on notes |  |  |
|  |  | receivable (\$72,000 $\times 6 \% \times 1 / 12$ ). |  |  |
|  |  |  |  |  |
| d. |  | Accounts Receivable at Net Realizable Value |  |  |
|  |  |  |  |  |
|  | 31 | Uncollectible Accounts Expense | 49,000 |  |
|  |  | Allowance for Doubtful Accounts |  | 49,000 |
|  |  | To report accounts receivable at their net |  |  |
|  |  | realizable value. \$40,000 allowance required |  |  |
|  |  | ( $\$ 900,000-\$ 860,000) . \$ 9,000$ debit balance prior |  |  |
|  |  | to the adjustment. \$49,000 adjustment required |  |  |
|  |  | (\$40,000-\$9,000). |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

e. In the prior period the company had established what it thought to be a reasonable credit balance in the Allowance for Doubtful Accounts. Throughout the current period, as receivables were written-off, the Allowance for Doubtful Accounts was debited and Accounts Receivable was credited. Given that the allowance had a debit balance at the end of the period, it is apparent that more receivables were written-off than what had been anticipated. To avoid this shortfall in the future, the company should consider increasing the percentage it applies to each of its aging categories. CIAVARELLA CORPORATION


## PROBLEM 7.8B <br> CIAVARELLA CORPORATION

 (continued)| d. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  | Accounts receivable balance January 1, 2009 | \$ | 540,000 |  |  |
|  | Accounts receivable written off during 2009 |  | (14,000) |  |  |
|  | Collections on account during 2009 |  | $(5,252,500)$ |  |  |
|  | Credit sales made during 2009 |  | 6,480,000 |  |  |
|  | Reinstating Needham Company's account |  |  |  |  |
|  | (resulting from NSF check) |  | 2,500 |  |  |
|  | Accounts receivable balance December 31, 2009 |  |  | \$ | 1,756,000 |
|  |  |  |  |  |  |
|  | Allowance for doubtful accounts balance |  |  |  |  |
|  | January 1, 2009 |  | 12,000 |  |  |
|  | Accounts receivable written off during 2009 |  | (14,000) |  |  |
|  | Uncollectible accounts expense in 2009 ( $1 \%$ x sales) |  | 64,800 |  |  |
|  | Allowance for doubtful accounts balance |  |  |  |  |
|  | December 31, 2009 |  |  |  | 62,800 |
|  | Net realizable value of accounts receivable |  |  |  |  |
|  | at December 31, 2009 |  |  | \$ | 1,693,200 |
| e. |  |  |  |  |  |
|  | Cash and cash equivalents (part b.) | \$ | 263,500 |  |  |
|  | Marketable securities (at FMV, not cost) |  | 245,000 |  |  |
|  | Notes receivable (from Ritter Industries) |  | 18,000 |  |  |
|  | Interest receivable (part c.) |  | 135 |  |  |
|  | Accounts receivable (see net realizable value |  |  |  |  |
|  | computed in part d.) |  | 1,693,200 |  |  |
|  | Total financial assets at December 31, 2009 | \$ | 2,219,835 |  |  |
|  |  |  |  |  |  |

## PROBLEM 7.8B CIAVARELLA CORPORATION (concluded))


a.

This practice violates the matching principle. The expense relating to uncollectible accounts is not recorded until long after the related sales revenue has been recognized. The distortion caused in the company's financial statements is magnified by the fact that sales (and the creation of uncollectible accounts receivable) fluctuate greatly from year to year.
b. In most cases, charging petty cash expenditures to Miscellaneous Expense would not violate generally accepted accounting principles. The only principle at issue is that of adequate disclosure. However, petty cash expenditures usually are not sufficiently material in dollar amount for users of the financial statements to be concerned with the specific purpose of these outlays.
c. This practice violates the realization principle. The company is recognizing all of the interest to be earned from its notes receivable as revenue at the date of sale. This revenue is actually earned over the life of the note, not at the date on which the customer borrows the money.
d. By combining restricted cash (the $\$ 1$ million earmarked for construction) with unrestricted cash, the company is violating the accounting principle of adequate disclosure. This restricted cash is not available for paying current liabilities. Therefore, this amount should be classified as a long-term investment, not as a current asset.
a. It is logical and predictable that the Double Zero policy-which calls for no down payment and allows customers 12 months to pay-will cause an increase in sales. It also is predictable that implementation of the Double Zero plan will cause cash receipts from customers to decline, at least temporarily. Cash sales and sales on 30-day accounts are now being made on terms that extend the collection period over one year. Thus, cash receipts that normally would occur in the immediate future have been postponed.

Whether the plan will cause profits to increase or decline is more difficult to predict. The basic question is whether the additional sales will exceed increases in the cost of goods sold and expenses. The bookkeeper's schedule indicates that they do, and that net income has more than doubled (from $\mathbf{\$ 1 0 , 0 0 0}$ per month to $\$ 25,000$ per month). However, the company uses the direct write-off method of accounting for uncollectible accounts, which delays the recognition of uncollectible accounts expense to future periods. Therefore, the bookkeeper's measurement of net income in the latest month ignores entirely what may be a major expense associated with sales of Double Zero accounts.
b. The uncollectible accounts expense has dropped to zero only because the company uses the direct write-off method and the Double Zero plan has just begun. It is too early for specific Double Zero receivables to have been identified as uncollectible and written off. (Apparently all of the old 30-day accounts have now been collected, are considered collectible, or have been written off.)
In the future-certainly within a year-some of the Double Zero accounts will be determined uncollectible. At this time, the company will begin to incur significant amounts of uncollectible accounts expense under the direct write-off method. This expense should eventually become much larger than the uncollectible accounts expense in the past, due to the larger dollar amount of accounts receivable and the nature of these accounts.
c. The reduction in cash receipts should be temporary. Under the old 30-day account plan, the company was collecting approximately all of its sales within 30 days, and cash collections were approximately equal to monthly sales. With the Double Zero accounts, however, only about $\mathbf{1 / 1 2}$ of the sales price is collected in the month of sale. In the early months of the plan, cash receipts may be expected to fall dramatically. In later months, however, the company will be collecting installment receivables that originated during the $\mathbf{1 2}$ prior months, as well as $1 / 12$ of the credit sales in the current month.

After the plan has been in effect for one year, monthly cash collections again should approximate a month's sales (less uncollectible accounts expense). As sales are rising, monthly cash receipts eventually may become significantly higher than before.

The above analysis ignores one crucial point. As of yet, we have no information as to the percentage of Double Zero accounts that will prove to be uncollectible. Uncollectible accounts will somewhat limit the increase in future monthly cash collections.

# CASE 7.2 <br> ROCK, INC. (concluded) 

d. The Double Zero receivables generate no revenue after the date of sale. Hence, they represent resources that are "tied up" for up to 12 months without earning any return. As the company uses the direct write-off method of accounting for uncollectible accounts, its receivables are actually a "shrinking" asset. Not only will they generate no future revenue, but some of these accounts will be written off as an expense.
e. Several means exist for a company to turn its accounts receivable into cash more quickly than the normal turnover period. One approach is to offer credit customers cash discounts to encourage earlier payment. Another is to sell the receivables to a factor, or to borrow money by pledging the accounts receivable as collateral to secure the loan.

As Rock's monthly income has increased dramatically, and cash receipts should increase in future months (part c), the company may qualify for an unsecured line of credit from its bank. However, the bank probably would require the company to develop estimates of its uncollectible accounts receivable, and to recompute its monthly net income using an allowance method of recording uncollectible accounts expense.
f. Note to instructor: This last question calls for students to express a personal opinion. Answers, therefore, should be expected to vary greatly.
Net income has increased dramatically, and cash receipts should eventually increase well above former levels. At first glance, therefore, the Double Zero plan looks quite successful.

No information has been provided, however, enabling us to estimate the amount of Double Zero accounts that will prove uncollectible. In the bookkeeper's schedule, monthly net income appears to have increased by $\mathbf{\$ 1 5 , 0 0 0}$. This computation, however, ignores the fact that some of these credit sales will be uncollectible. Credit sales for the month on Double Zero terms amounted to $\mathbf{\$ 7 5 , 0 0 0}$. If $\mathbf{\$ 1 5 , 0 0 0}$ of these sales (or $\mathbf{2 0 \%}$ ) prove to be uncollectible, monthly net income may be lower under the Double Zero plan than before.

Credit losses of $\mathbf{2 0 \%}$ or more are quite high. Thus, the Double Zero plan probably is increasing the company's profitability, though not by the $\mathbf{\$ 1 5 , 0 0 0}$ per month shown in the bookkeeper's schedule.
Several other factors also may enter into the decision. For example, will competitors respond with plans similar to Double Zero? If so, Rock's sales may decline toward former levels. Without a sustainable increase in sales, the Double Zero plan clearly is less advantageous than the 30 -day credit policy.

Another factor to consider is whether Rock will, in fact, be able to survive the temporary decline in monthly cash receipts which accompanies the new, liberal credit terms.
a. 1. There is certainly nothing improper or unethical about offering customers a discount for prompt payment, but an interesting accounting issue arises. A 10\% discount is quite substantial, and many customers would likely take advantage of it. This affects the net realizable value of accounts receivable-that is, the amount likely to be collected. It would probably be necessary to establish a contra-asset account called Allowance for Sales Discounts. This allowance would reduce the net realizable value of accounts receivable in the same manner as the allowance for doubtful accounts.

Note to instructor: Few companies encounter bad debts of anywhere near $10 \%$ of receivables. Therefore, the allowance for sales discounts might well be the larger of the two allowances.
2. The need for an allowance for doubtful accounts is not based upon whether these accounts are officially "overdue," but whether they are collectible. The grace period is unlikely to affect the collectibility of accounts receivable. Therefore, it does not eliminate the need for an allowance reducing these accounts to estimated net realizable value.
3. Combining all forms of cash, cash equivalents, and compensating balances under a single caption is quite acceptable. In fact, it is common practice. But unused lines of credit are not an asset; these represent only the ability to borrow money. They may be disclosed in notes to the financial statements, but they should not appear in the money columns of the balance sheet.
4. Having officers repay their loans at year-end only to renew them several days later is a sham transaction. Its only purpose is to deceive the users of the financial statements. It would be unethical (and perhaps illegal) to show the money collected from these officers as unrestricted cash available for the payment of current liabilities. If these transactions are executed as described, the cash "earmarked" for renewing loans should appear as a noncurrent asset.
5. It is appropriate to report marketable securities at their current market value. Thus, there are no problems with this proposal.
6. This situation poses two questions: (1) The valuation of inventory in conformity with generally accepted accounting principles, and (2) whether Affections can depart from generally accepted accounting principles in its reporting to creditors.
(1) Inventory is not a financial asset. Generally accepted accounting principles call for the valuation of inventory at cost (or the lower of cost or market value), not at market values in excess of cost.
(2) As Affections is not a publicly owned company, need its financial statements be prepared in conformity with GAAP? This is an interesting question. Affections is not required by federal securities laws to prepare and distribute financial statements in conformity with GAAP. But it does have a legal and ethical obligation not to deceive the users of its financial statements.

## CASE 7.3 WINDOW DRESSING (continued)

Unless they clearly are told otherwise, users of financial statements reasonably may assume that financial statements are based upon GAAP. If Affections departs from GAAP and shows its inventory at current sales value, it must take appropriate steps to make the users of the statements fully aware of this departure from GAAP.
7. Although these funds might actually be included in both year-end bank statements, they are not really available to the company in both bank accounts. Thus, this check should be included as an outstanding check in the year-end bank reconciliation of the account upon which it was drawn. To double count these funds in financial statements would be more than unethical-it would be an act of criminal fraud.

Note to instructor: This fraudulent practice is called "kiting." It more often is used to defraud banks, rather than users of financial statements. The depositor/crook creates the inflated bank balances, then withdraws the funds from both banks and runs.
b. There is nothing unethical about holding the meeting. Taking legitimate steps to "put the company's best foot forward" is both an ethical and widespread practice. In fact, any management that failed to plan how to maintain an adequate credit rating would be breaching its ethical obligations to the company's stockholders.

## Pros:

- Convenience (people seem to always have their cells phones with them).
- Better reporting (consolidated and aggregated billing makes budgeting and personal financial management easier).
- More attractive to the "youth" market (many of whom have cell phones but no bank accounts).
- A banking relationship is not required.


## Cons:

- Ignores the importance of establishing a banking relationship.
- Security issues.
- May cause cell phone rates to increase.
- May not always have available reception.
- Relies upon a charged battery.

This assignment is based upon financial information that is continually updated. Thus, we are unable to provide the same responses as students.

Note to instructor: It is important that students be guided to discover the wide range of cash equivalent investment vehicles available to businesses, and the variation in the interest rates they yield. It is also important that they consider the potential financial impact of selecting a cash equivalent with an interest rate below market. Thus, you may wish to have students compute and compare the interest that would be earned on an average excess cash balance of, say, $\mathbf{\$ 1} \mathbf{m i l l i o n}$ dollars invested in: (1) market accounts, (2) CDs offered by banks, and (3) U.S. Treasury securities of varying maturities. Such comparisons will provide a springboard for discussing the concepts of risk, diversification, and liquidity.

