

# CHAPTER 7

## Cash and Receivables

### ASSIGNMENT CLASSIFICATION TABLE (BY TOPIC)

Topics	Questions	Brief Exercises	Exercises	Problems	Concepts for Analysis
1. Accounting for cash.	1, 2, 3, 4, 21	1	1, 2	1	
2. Accounting for accounts receivable, bad debts, other allowances.	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	2, 3, 4, 5	3, 4, 5, 6, 7, 8, 9, 10, 11, 12	2, 3, 4, 5, 6	1, 2, 3, 4, 5, 10, 11
3. Accounting for notes receivable.	14, 15	6, 7	18, 19	8, 9, 10	6, 7, 8, 9
4. Assignment and factoring of accounts receivable.	16, 17, 18, 19	8, 9, 10, 11, 12	12, 13, 14, 15, 16, 17, 21	7, 11, 12, 13	6, 8
5. Analysis of receivables.	20	13	20, 21	1	
*6. Petty cash and bank reconciliations.	22	14, 15, 16	22, 23, 24, 25	12, 13, 14	

\*This material is covered in an Appendix to the chapter.

## ASSIGNMENT CLASSIFICATION TABLE (BY LEARNING OBJECTIVE)

Learning Objectives	Brief Exercises	Exercises	Problems
1. Identify items considered as cash.	1	1, 2	
2. Indicate how to report cash and related items.			1
3. Define receivables and identify the different types of receivables.		3, 4	6
4. Explain accounting issues related to recognition of accounts receivable.	2, 3, 4	3, 4, 5, 6, 12	6
5. Explain accounting issues related to valuation of accounts receivable.	5	7, 8, 9, 10, 11, 12	2, 3, 4, 5, 6
6. Explain accounting issues related to recognition of notes receivable.	6, 7, 8	18, 19	8, 9, 10
7. Explain accounting issues related to valuation of notes receivable.		18, 19	10
8. Explain accounting issues related to disposition of accounts and notes receivable.	9, 10, 11, 12	13, 14, 15, 16, 17, 21	7, 11
9. Describe how to report and analyze receivables.	13	20	11
*10. Explain common techniques employed to control cash.	14, 15, 16	22, 23, 24, 25	12, 13, 14

## ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E7-1	Determining cash balance.	Moderate	10–15
E7-2	Determine cash balance.	Moderate	10–15
E7-3	Financial statement presentation of receivables.	Simple	10–15
E7-4	Determine ending accounts receivable.	Simple	10–15
E7-5	Record sales gross and net.	Simple	15–20
E7-6	Recording sales transactions.	Moderate	5–10
E7-7	Recording bad debts.	Moderate	10–15
E7-8	Recording bad debts.	Simple	5–10
E7-9	Computing bad debts and preparing journal entries.	Simple	8–10
E7-10	Bad debt reporting.	Simple	10–12
E7-11	Bad debts—aging.	Simple	8–10
E7-12	Journalizing various receivable transactions.	Simple	15–20
E7-13	Assigning accounts receivable.	Simple	10–15
E7-14	Journalizing various receivable transactions.	Simple	15–18
E7-15	Transfer of receivables with recourse.	Simple	10–15
E7-16	Transfer of receivables with recourse.	Moderate	15–20
E7-17	Transfer of receivables without recourse.	Simple	10–15
E7-18	Notes transactions at unrealistic interest rates.	Simple	10–15
E7-19	Notes receivable with unrealistic interest rate.	Moderate	20–25
E7-20	Analysis of receivables.	Moderate	10–15
E7-21	Transfer of receivables.	Moderate	10–15
*E7-22	Petty cash.	Simple	5–10
*E7-23	Petty cash.	Simple	10–15
*E7-24	Bank reconciliation and adjusting entries.	Moderate	15–20
*E7-25	Bank reconciliation and adjusting entries.	Simple	15–20
P7-1	Determine proper cash balance.	Simple	20–25
P7-2	Bad debt reporting.	Moderate	20–25
P7-3	Bad debt reporting—aging.	Moderate	20–30
P7-4	Bad debt reporting.	Moderate	25–35
P7-5	Bad debt reporting.	Moderate	20–30
P7-6	Journalize various accounts receivable transactions.	Moderate	25–35
P7-7	Assigned accounts receivable—journal entries.	Moderate	25–30
P7-8	Notes receivable with realistic interest rate.	Moderate	30–35
P7-9	Notes receivable journal entries.	Moderate	30–35
P7-10	Comprehensive receivables problem.	Complex	40–50
P7-11	Income effects of receivables transactions.	Moderate	20–25
*P7-12	Petty cash, bank reconciliation.	Moderate	20–25
*P7-13	Bank reconciliation and adjusting entries.	Moderate	20–30
*P7-14	Bank reconciliation and adjusting entries.	Moderate	20–30

## ASSIGNMENT CHARACTERISTICS TABLE (Continued)

CA7-1	Bad debt accounting.	Simple	10–15
CA7-2	Various receivable accounting issues.	Simple	15–20
CA7-3	Bad debt reporting issues.	Moderate	25–30
CA7-4	Basic note and accounts receivable transactions.	Moderate	25–30
CA7-5	Bad debt reporting issues.	Moderate	25–30
CA7-6	Sale of notes receivable.	Moderate	20–25
CA7-7	Zero-interest-bearing note receivable.	Moderate	20–30
CA7-8	Reporting of notes receivable, interest, and sale of receivables.	Moderate	25–30
CA7-9	Accounting for zero-interest-bearing note.	Moderate	25–30
CA7-10	Receivables management.	Moderate	25–30
CA7-11	Bad debt reporting, ethics.	Moderate	25–30

# ANSWERS TO QUESTIONS

1. Cash normally consists of coins and currency on hand, bank deposits, and various kinds of orders for cash such as bank checks, money orders, travelers' checks, demand bills of exchange, bank drafts, and cashiers' checks. Balances on deposit in banks which are subject to immediate withdrawal are properly included in cash. Money market funds that provide checking account privileges may be classified as cash. There is some question as to whether deposits not subject to immediate withdrawal are properly included in cash or whether they should be set out separately. Savings accounts, time certificates of deposit, and time deposits fall in this latter category. Unless restrictions on these kinds of deposits are such that they cannot be converted (withdrawn) within one year or the operating cycle of the entity, whichever is longer, they are properly classified as current assets. At the same time, they may well be presented separately from other cash and the restrictions as to convertibility reported.
2. 

<p>(a) Cash</p> <p>(b) Trading securities.</p> <p>(c) Temporary investments.</p> <p>(d) Accounts receivable.</p> <p>(e) Accounts receivable, a loss if uncollectible.</p> <p>(f) Other assets if not expendable, cash if expendable for goods and services in the foreign country.</p> <p>(g) Receivable if collection expected within one year; otherwise, other asset.</p>	<p>(h) Investments, possibly other assets.</p> <p>(i) Cash.</p> <p>(j) Trading securities.</p> <p>(k) Cash.</p> <p>(l) Cash.</p> <p>(m) Postage expense, or prepaid expense, or office supplies inventory.</p> <p>(n) Receivable from employee if the company is to be reimbursed; otherwise, prepaid expense.</p>
--	--
3. A compensating balance is that portion of any cash deposit maintained by an enterprise which constitutes support for existing borrowing arrangements with a lending institution.  
  
A compensating balance representing a legally restricted deposit held against short-term borrowing arrangements should be stated separately among the cash and cash-equivalent items. A restricted deposit held as a compensating balance against long-term borrowing arrangements should be separately classified as a noncurrent asset in either the investments or other assets section.
4. Restricted cash for debt redemption would be reported in the long-term asset section, probably in the investments section. Another alternative is the other assets section. Given that the debt is long term, the restricted cash should also be reported as long term.
5. The seller normally uses trade discounts to avoid frequent changes in its catalogs, to quote different prices for different quantities purchased, and to hide the true invoice price from competitors. Trade discounts are not recorded in the accounts because the price finally quoted is generally an accurate statement of the fair market value of the product on that date. In addition, no subsequent changes can occur to affect this value from an accounting standpoint. With a cash discount, the buyer receives a choice and events subsequent to the original transaction dictate that additional entries may be needed.
6. Two methods of recording accounts receivable are:
  1. Record receivables and sales gross.
  2. Record receivables and sales net.

## Questions Chapter 7 (Continued)

The net method is desirable from a theoretical standpoint because it values the receivable at its net realizable value. In addition, recording the sales at net provides a better assessment of the revenue that was earned from the sale of the product. If the purchasing company fails to take the discount, then the company should reflect this amount as income. The gross method for receivables and sales is used in practice normally because it is expedient and its use does not generally have any significant effect on the presentation of the financial statements.

7. The basic problems that relate to the valuation of receivables are (1) the determination of the face value of the receivable, (2) the probability of future collection of the receivable, and (3) the length of time the receivable will be outstanding. The determination of the face value of the receivable is a function of the trade discount, cash discount, and certain allowance accounts such as the Allowance for Sales Returns and Allowances.
8. The theoretical superiority of the allowance method over the direct write-off method of accounting for bad debts is two-fold. First, since revenue is considered to be recognized at the point of sale on the assumption that the resulting receivables are valid liquid assets merely awaiting collection, periodic income will be overstated to the extent of any receivables that eventually become uncollectible. The proper matching of revenue and expense requires that gross sales in the income statement be partially offset by a charge to bad debt expense that is based on an estimate of the receivables arising from gross sales that will not be converted into cash.

Second, accounts receivable on the balance sheet should be stated at their estimated net realizable value. The allowance method accomplishes this by deducting from gross receivables the allowance for doubtful accounts. The latter is derived from the charges for bad debt expense on the income statement.

9. **The percentage-of-sales method.** Under this method Bad Debt Expense is debited and Allowance for Doubtful Accounts is credited with a percentage of the current year's credit or total sales. The rate is determined by reference to the relationship between prior years' credit or total sales and actual bad debts arising therefrom. Consideration should also be given to changes in credit policy and current economic conditions. Although the rate should theoretically be based on and applied to credit sales, the use of total sales is acceptable if the ratio of credit sales to total sales does not vary significantly from year to year.

The percentage-of-sales method of providing for estimated uncollectible receivables is intended to charge bad debt expense to the period in which the corresponding sales are recorded and is, therefore, designed for the preparation of a fair income statement. Due to annually insignificant but cumulatively significant errors in the experience rate which may result in either an excessive or inadequate balance in the allowance account, however, this method may not accurately report accounts receivable in the balance sheet at their estimated net realizable value. This can be prevented by periodically reviewing and, if necessary, adjusting the balance in the allowance account. The materiality of any such adjustment would govern its treatment for reporting purposes.

The necessity of such adjustments of the allowance account indicates that bad debt expenses have not been accurately matched against related sales. Further, even when the experience rate does not result in an excessive or inadequate balance in the allowance account, this method tends to have a smoothing effect on reported periodic income due to year-to-year differences between the amounts of bad debt write-offs and estimated bad debts.

## Questions Chapter 7 (Continued)

**The aging method.** With this method each year's debit to the expense account and credit to the allowance account are determined by an evaluation of the collectibility of open accounts receivable at the close of the year. An analysis of the accounts according to their due dates is the usual procedure. For each of the age categories established in the analysis, average percentage rates may be developed on the basis of past experience and applied to the accounts in the respective age categories. This method may also utilize individual analysis for some accounts, especially those that are considerably past due, in arriving at estimated uncollectible receivables. On the basis of the foregoing analysis the balance in the valuation account is then adjusted to the amount estimated to be uncollectible.

This method of providing for uncollectible accounts is quite accurate for purposes of reporting accounts receivable at their estimated net realizable value in the balance sheet. From the standpoint of the income statement, however, the aging method may not match accurately bad debt expenses with the sales which caused them because the charge to bad debt expense is not based on sales. The accuracy of both the charge to bad debt expense and the reported value of receivables depends on the current estimate of uncollectible accounts. The accuracy of the expense charge, however, is additionally dependent upon the timing of actual write-offs.

10. A major part of accounting is the measurement of financial data. Changes in values should be recognized as soon as they are measurable in objective terms in order for accounting to provide useful information on a periodic basis.

The very existence of accounts receivable is based on the decision that a credit sale is an objective indication that revenue should be recognized. The alternative is to wait until the debt is paid in cash. If revenue is to be recognized and an asset recorded at the time of a credit sale, the need for fairness in the statements requires that both expenses and the asset be adjusted for the estimated amounts of the asset that experience indicates will not be collected.

The argument may be persuasive that the evidence supporting write-offs permits a more accurate decision than that which supports the allowance method. The latter method, however, is "objective" in the sense in which accountants use the term and is justified by the need for fair presentation of receivables and income. The direct write-off method is not wholly objective; it requires the use of judgment in determining when an account has become uncollectible.

11. Because estimation of the allowance requires judgment, management could either over-estimate or under-estimate the amount of uncollectible accounts depending on whether a higher or lower earnings number is desired. For example, Sun Trust bank (referred to in the chapter) was having a very profitable year. By over-estimating the amount of bad debts, Sun Trust could record a higher allowance and expense, thereby reducing income in the current year. In a subsequent year, when earnings are low, they could under-estimate the allowance, record less expense and get a boost to earnings.
12. The receivable due from Kishwaukee Company should be written off to an appropriately named loss account and reported in the income statement as part of income from operations. Note that the profession specifically excludes write-offs of receivables from being extraordinary. In this case, classification as an unusual item would seem appropriate. The loss may properly be reduced by the portion of the allowance for doubtful accounts at the end of the preceding year that was allocable to the Kishwaukee Company account.

Estimates for doubtful accounts are based on a firm's prior bad debt experience with due consideration given to changes in credit policy and forecasted general or industry business conditions.

**Questions Chapter 7 (Continued)**

The purpose of the allowance method is to anticipate only that amount of bad debt expense which can be reasonably forecasted in the normal course of events; it is not intended to anticipate bad debt losses which are abnormal and nonrecurring in nature.

13. If the direct write-off method is used, the only alternative is to debit Cash and credit a revenue account entitled Uncollectible Amounts Recovered. If the allowance method is used, then the accountant may debit Accounts Receivable and credit the Allowance for Doubtful Accounts. An entry is then made to credit the customer's account and debit Cash upon receipt of the remittance.

14. The journal entry on John Singer's books would be:

Notes Receivable .....	1,000,000	
Discount on Notes Receivable .....		380,000
Sales Revenue .....		620,000*

\*Assumes that seller is a dealer in this property. If not, the property might be credited, and a loss on sale of \$70,000 would be recognized.

15. Imputed interest is the interest ascribed or attributed to a situation or circumstance which is void of a stated or otherwise appropriate interest factor. Imputed interest is the result of a process of interest rate estimation called imputation.

An interest rate is imputed for notes receivable when (1) no interest rate is stated for the transaction, or (2) the stated interest rate is unreasonable, or (3) the stated face amount of the note is materially different from the current cash price for the same or similar items or from the current market value of the debt instrument.

In imputing an appropriate interest rate, consideration should be given to the prevailing interest rates for similar instruments of issuers with similar credit ratings, the collateral, and restrictive covenants.

16. A company might sell receivables because money is tight and access to normal credit is not available or prohibitively expensive. Also, a company may have to sell its receivables, instead of borrowing, to avoid violating existing lending arrangements. In addition, billing and collection of receivables are often time-consuming and costly.
17. A financial components approach is used when receivables are sold but there is continuing involvement by the seller in the receivable. Examples of continuing involvement are recourse provisions or continuing rights to service the receivable. A transfer of receivables should be recorded as a sale when the following three conditions are met:
- (a) The transferred asset has been isolated from the transferor (put beyond reach of the transferor and its creditors).
  - (b) The transferees have obtained the right to pledge or exchange either the transferred assets or beneficial interests in the transferred assets.
  - (c) The transferor does not maintain effective control over the transferred assets through an agreement to repurchase or redeem them before their maturity.

18. Recourse is a guarantee from Hale that if any of the sold receivables are uncollectible, Hale will pay the factor for the amount of the uncollectible account. This recourse obligation represents continuing involvement by Hale after the sale. Under the financial components model, the estimated fair value of the recourse obligation will be reported as a liability on Hale's balance sheet.

## Questions Chapter 7 (Continued)

19. Several acceptable solutions are possible depending upon assumptions made as to whether certain items are collectible within the operating cycle or not. The following illustrates one possibility:

Current Assets	
Accounts receivable—Trade (of which accounts in the amount of \$75,000 have been assigned as security for loans payable) (\$523,000 + \$75,000)	\$598,000
Federal income tax refund receivable	15,500
Advance payments on purchases	61,000
Investments	
Advance to subsidiary	45,500
Other Assets	
Travel advance to employee	22,000
Notes receivable past due plus accrued interest	27,000

20. The accounts receivable turnover ratio is computed by dividing net sales by average net receivables outstanding during the year. This ratio is used to assess the liquidity of the receivables. It measures the number of times, on average, receivables are collected during the period. It provides some indication of the quality of the receivables and how successful the company is in collecting its outstanding receivables.
21. Because the restricted cash can not be used by Hawthorn to meet current obligations, it should not be reported as a current asset – it should be reported in investments or other assets. Thus, although this item has cash in its label, it should not be reflected in liquidity measures, such as the current or acid-test ratios.
- \*22. (1) The **general checking account** is the principal bank account of most companies and frequently the only bank account of small companies. Most if not all transactions are cycled through the general checking account, either directly or on an imprest basis.
- (2) **Imprest bank accounts** are used to disburse cash (checks) for a specific purpose, such as dividends, payroll, commissions, or travel expenses. Money is deposited in the imprest fund from the general fund in an amount necessary to cover a specific group of disbursements.
- (3) **Lockbox accounts** are local post office boxes to which a multi-location company instructs its customers to mail remittances. A local bank is authorized to empty the box daily and credit the company's accounts for collections.

# SOLUTIONS TO BRIEF EXERCISES

## BRIEF EXERCISE 7-1

Cash in bank—savings account	\$63,000
Cash on hand	9,300
Checking account balance	<u>17,000</u>
Cash to be reported	<u>\$89,300</u>

## BRIEF EXERCISE 7-2

June 1	Accounts Receivable .....	40,000	
	Sales .....		40,000
June 12	Cash .....	38,800*	
	Sales Discounts .....	1,200	
	Accounts Receivable .....		40,000

\*\$40,000 – (\$40,000 X .03) = \$38,800

## BRIEF EXERCISE 7-3

June 1	Accounts Receivable .....	38,800*	
	Sales .....		38,800
June 12	Cash .....	38,800	
	Accounts Receivable .....		38,800

\*\$40,000 – (\$40,000 X .03) = \$38,800

**BRIEF EXERCISE 7-4**

<b>Bad Debt Expense</b> .....	<b>24,000</b>	
<b>Allowance for Doubtful Accounts</b> .....		<b>24,000</b>
( $\$1,200,000 \times 2\% = \$24,000$ )		

**BRIEF EXERCISE 7-5**

<b>(a) Bad Debt Expense</b> .....	<b>22,900</b>	
<b>Allowance for Doubtful Accounts</b> .....		<b>22,900</b>
$[(10\% \times \$250,000) - \$2,100]$		

<b>(b) Bad Debt Expense</b> .....	<b>22,500</b>	
<b>Allowance for Doubtful Accounts</b> .....		<b>22,500</b>
$(\$24,600 - \$2,100)$		

**BRIEF EXERCISE 7-6**

<b>11/1/07</b> <b>Notes Receivable</b> .....	<b>20,000</b>	
<b>Sales</b> .....		<b>20,000</b>

<b>12/31/07</b> <b>Interest Receivable</b> .....	<b>200</b>	
<b>Interest Revenue</b> .....		<b>200</b>
$(\$20,000 \times 6\% \times 2/12)$		

<b>5/1/08</b> <b>Cash</b> .....	<b>20,600</b>	
<b>Notes Receivable</b> .....		<b>20,000</b>
<b>Interest Receivable</b> .....		<b>200</b>
<b>Interest Revenue</b> .....		<b>400</b>
$(\$400 = \$20,000 \times 6\% \times 4/12)$		

**BRIEF EXERCISE 7-7**

Notes Receivable .....	20,000	
Discount on Notes Receivable .....		4,056
Cash.....		15,944
Discount on Notes Receivable .....	1,913	
Interest Revenue .....		1,913
\$15,944 X 12% = \$1,913		
Discount on Notes Receivable .....	2,143	
Interest Revenue .....		2,143
(\$15,944 + \$1,913) X 12% = \$2,143		
Cash .....	20,000	
Notes Receivable.....		20,000

**BRIEF EXERCISE 7-8**

Akira, Inc.

Cash .....	680,000	
Finance Charge (\$1,000,000 X 2%).....	20,000	
Notes Payable.....		700,000

Alisia National Bank

Notes Receivable .....	700,000	
Cash.....		680,000
Financing Revenue (\$1,000,000 X 2%) .....		20,000

## BRIEF EXERCISE 7-9

### CRC

Cash .....	92,000	
Due from Factor .....	6,000*	
Loss on Sale of Receivables .....	2,000**	
Accounts Receivable.....		100,000

\*6% X \$100,000 = \$6,000

\*\*2% X \$100,000 = \$2,000

### Fredrick

Accounts Receivable .....	100,000	
Due to CRC .....		6,000
Financing Revenue .....		2,000
Cash .....		92,000

## BRIEF EXERCISE 7-10

### CRC

Cash .....	92,000	
Due from Factor .....	6,000*	
Loss on Sale of Receivables .....	9,500**	
Accounts Receivable.....		100,000
Recourse Obligation.....		7,500

\*6% X \$100,000 = \$6,000

\*\*2% X \$100,000 = \$2,000 + \$7,500

### BRIEF EXERCISE 7-11

Cash \$200,000 – [\$200,000 X (.05 + .04)] .....	182,000	
Due from Factor (\$200,000 X .04).....	8,000	
Loss on Sale of Receivables.....	18,000*	
Accounts Receivable .....		200,000
Recourse Obligation .....		8,000

\*(\$200,000 X .05) + \$8,000

### BRIEF EXERCISE 7-12

The entry for the sale now would be:

Cash \$200,000 – [(\$200,000 X (.05 + .04)].....	182,000	
Due from Factor (\$200,000 X .04).....	8,000	
Loss on Sale of Receivables.....	14,000*	
Account Receivable .....		200,000
Recourse Obligation .....		4,000

\*(\$200,000 X .05) + \$4,000

This lower estimate for the recourse obligation reduces the amount of the loss—this will result in higher income in the year of the sale. Keyser's liabilities will be lower by \$4,000.

### BRIEF EXERCISE 7-13

The accounts receivable turnover ratio is computed as follows:

$$\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}} = \frac{\$5,416,000,000}{\frac{\$277,300,000 + \$337,800,000}{2}} = 17.61 \text{ times}$$

## BRIEF EXERCISE 7-13 (Continued)

The average collection period for accounts receivable in days is

$$\frac{365 \text{ days}}{\text{Accounts Receivable Turnover}} = \frac{365}{17.61} = 20.73 \text{ days}$$

As indicated from these ratios, General Mills' accounts receivable turnover ratio appears quite strong.

### \*BRIEF EXERCISE 7-14

Petty Cash.....	200	
Cash .....		200
Office Supplies.....	94	
Miscellaneous Expense.....	87	
Cash Over and Short.....	2	
Cash (\$200 – \$17).....		183

### \*BRIEF EXERCISE 7-15

- (a) Added to balance per bank statement (1)
- (b) Added to balance per books (3)
- (c) Deducted from balance per books (4)
- (d) Deducted from balance per bank statement (2)
- (e) Deducted from balance per books (4)

**\*BRIEF EXERCISE 7-16**

<b>(b)</b>	<b>Cash.....</b>	<b>31</b>	
	<b>Interest Revenue.....</b>		<b>31</b>
<b>(c)</b>	<b>Office Expense—Bank Charges.....</b>	<b>25</b>	
	<b>Cash.....</b>		<b>25</b>
<b>(e)</b>	<b>Accounts Receivable.....</b>	<b>377</b>	
	<b>Cash.....</b>		<b>377</b>

**Thus, all “Balance per Books” adjustments in the reconciliation require a journal entry.**

# SOLUTIONS TO EXERCISES

## EXERCISE 7-1 (10–15 minutes)

(a) Cash includes the following:

1. Commercial savings account— First National Bank of Yojimbo	\$ 600,000
1. Commercial checking account— First National Bank of Yojimbo	900,000
2. Money market fund—Volonte	5,000,000
5. Petty cash	1,000
11. Commercial Paper (cash equivalent)	2,100,000
12. Currency and coin on hand	<u>7,700</u>
Cash reported on December 31, 2007, balance sheet	<u><b>\$8,608,700</b></u>

(b) Other items classified as follows:

3. Travel advances (reimbursed by employee)\* should be reported as receivable—employee in the amount of \$180,000.
4. Cash restricted in the amount of \$1,500,000 for the retirement of long-term debt should be reported as a noncurrent asset identified as “Cash restricted for retirement of long-term debt.”
6. An IOU from Marianne Koch should be reported as a receivable in the amount of \$190,000.
7. The bank overdraft of \$110,000 should be reported as a current liability.\*\*
8. Certificates of deposits of \$500,000 each should be classified as temporary investments.
9. Postdated check of \$125,000 should be reported as an accounts receivable.
10. The compensating balance requirement does not affect the balance in cash. A note disclosure indicating the arrangement and the amounts involved should be described in the notes.

## EXERCISE 7-1 (Continued)

**\*If not reimbursed, charge to prepaid expense.**

**\*\*If cash is present in another account in the same bank on which the overdraft occurred, offsetting is required.**

## EXERCISE 7-2 (10–15 minutes)

- 1. Cash balance of \$925,000. Only the checking account balance should be reported as cash. The certificates of deposit of \$1,400,000 should be reported as a temporary investment, the cash advance to subsidiary of \$980,000 should be reported as a receivable, and the utility deposit of \$180 should be identified as a receivable from the gas company.**
- 2. Cash balance is \$584,650 computed as follows:**

Checking account balance	\$600,000
Overdraft	(17,000)
Petty cash	300
Coin and currency	<u>1,350</u>
	<u>\$584,650</u>

**Cash held in a bond sinking fund is restricted. Assuming that the bonds are noncurrent, the restricted cash is also reported as noncurrent.**

## EXERCISE 7-2 (Continued)

3. Cash balance is \$599,800 computed as follows:

Checking account balance	\$590,000
Certified check from customer	<u>9,800</u>
	<u>\$599,800</u>

The postdated check of \$11,000 should be reported as a receivable. Cash restricted due to compensating balance should be described in a note indicating the type of arrangement and amount. Postage stamps on hand are reported as part of office supplies inventory or prepaid expenses.

4. Cash balance is \$85,000 computed as follows:

Checking account balance	\$37,000
Money market mutual fund	<u>48,000</u>
	<u>\$85,000</u>

The NSF check received from customer should be reported as a receivable.

5. Cash balance is \$700,900 computed as follows:

Checking account balance	\$700,000
Cash advance received from customer	<u>900</u>
	<u>\$700,900</u>

Cash restricted for future plant expansion of \$500,000 should be reported as a noncurrent asset. Short-term Treasury bills of \$180,000 should be reported as a temporary investment. Cash advance received from customer of \$900 should also be reported as a liability; cash advance of \$7,000 to company executive should be reported as a receivable; refundable deposit of \$26,000 paid to federal government should be reported as a receivable.

### EXERCISE 7-3 (10–15 minutes)

#### Current assets

##### Accounts receivable

##### Customers

Accounts (of which accounts in the amount of \$40,000 have been pledged as security for a bank loan)	\$79,000		
Installment accounts collectible due in 2007	23,000		
Installment accounts collectible due after December 31, 2007*	<u>34,000</u>	\$136,000	
Other** (\$2,640 + \$1,500)		<u>4,140</u>	\$140,140

#### Investments

Advance to subsidiary company			81,000
-------------------------------	--	--	--------

\*This classification assumes that these receivables are collectible within the operating cycle of the business.

\*\*These items could be separately classified, if considered material.

### EXERCISE 7-4 (10–15 minutes)

#### Computation of cost of goods sold:

Merchandise purchased	\$320,000
Less: Ending inventory	<u>90,000</u>
Cost of goods sold	<u>\$230,000</u>

**EXERCISE 7-4 (Continued)**

Selling price = 1.4 (Cost of good sold)  
 = 1.4 (\$230,000)  
 = \$322,000

Sales on account	\$322,000	
Less: Collections	<u>198,000</u>	
Uncollected balance	124,000	
Balance per ledger	<u>82,000</u>	
Apparent shortage	<u>\$ 42,000</u>	—Enough for a new car

**EXERCISE 7-5 (15–20 minutes)**

(a) (1) June 3	Accounts Receivable—Chester.....	3,000	
	Sales .....		3,000
June 12	Cash.....	2,940	
	Sales Discounts (\$3,000 X 2%) .....	60	
	Accounts Receivable—Chester .....		3,000
(2) June 3	Accounts Receivable—Chester.....	2,940	
	Sales (\$3,000 X 98%) .....		2,940
June 12	Cash.....	2,940	
	Accounts Receivable—Chester .....		2,940

**EXERCISE 7-5 (Continued)**

<b>(b)</b>	<b>July 29</b>	<b>Cash .....</b>	<b>3,000</b>	
		<b>    Accounts Receivable—Chester.....</b>		<b>2,940</b>
		<b>    Sales Discounts Forfeited .....</b>		<b>60</b>

**(Note to instructor: Sales discounts forfeited could have been recognized at the time the discount period lapsed. The company, however, would probably not record this forfeiture until final cash settlement.)**

**EXERCISE 7-6 (5–10 minutes)**

<b>July 1</b>	<b>Accounts Receivable.....</b>	<b>20,000</b>	
	<b>    Sales .....</b>		<b>20,000</b>
<b>July 10</b>	<b>Cash .....</b>	<b>19,400*</b>	
	<b>    Sales Discounts .....</b>	<b>600</b>	
	<b>    Accounts Receivable .....</b>		<b>20,000</b>

**\*\$20,000 – (.03 X \$20,000) = \$19,400**

<b>July 17</b>	<b>Accounts Receivable.....</b>	<b>200,000</b>	
	<b>    Sales .....</b>		<b>200,000</b>
<b>July 30</b>	<b>Cash .....</b>	<b>200,000</b>	
	<b>    Accounts Receivable .....</b>		<b>200,000</b>

**EXERCISE 7-7 (10–15 minutes)**

(a) Bad Debt Expense .....	8,500	
Allowance for Doubtful Accounts .....		8,500*

**\*.01 X (\$900,000 – \$50,000) = \$8,500**

(b) Bad Debt Expense .....	3,000	
Allowance for Doubtful Accounts .....		3,000*

**\*Step 1: .05 X \$100,000 = \$5,000 (desired credit balance in Allowance account)**

**Step 2: \$5,000 – \$2,000 = \$3,000 (required credit entry to bring allowance account to \$5,000 credit balance)**

**EXERCISE 7-8 (15–20 minutes)**

(a) Allowance for Doubtful Accounts .....	6,000	
Accounts Receivable .....		6,000

(b) Accounts Receivable	\$800,000
Less: Allowance for Doubtful Accounts	<u>40,000</u>
Net realizable value	<u>\$760,000</u>

(c) Accounts Receivable	\$794,000
Less: Allowance for Doubtful Accounts	<u>34,000</u>
Net realizable value	<u>\$760,000</u>

**EXERCISE 7-9 (8–10 minutes)**

(a)	Bad Debt Expense.....	5,350	
	Allowance for Doubtful Accounts.....		5,350
	(\$90,000 X 4%) + \$1,750 = \$5,350		
(b)	Bad Debt Expense.....	6,800	
	Allowance for Doubtful Accounts.....		6,800
	\$680,000 X 1% = \$6,800		

**EXERCISE 7-10 (10–12 minutes)**

- (a) The direct write-off approach is not theoretically justifiable even though required for income tax purposes. The direct write-off method does not match expenses with revenues of the period, nor does it result in receivables being stated at estimated realizable value on the balance sheet.
- (b) Bad Debt Expense – 2% of Sales = \$44,000 (\$2,200,000 X 2%)  
Bad Debt Expense – Direct Write-Off = \$31,330 (\$7,800 + \$6,700 + \$7,000 + \$9,830)

Net income would be \$12,670 (\$44,000 – \$31,330) lower under the percentage-of-sales approach.

**EXERCISE 7-11 (8–10 minutes)**

Balance 1/1 (\$700 – \$155)	\$ 545	Over one year
4/12 (#2412) (\$1,710 – \$1,000 – \$300*)	410	Eight months and 19 days
11/18 (#5681) (\$2,000 – \$1,250)	<u>750</u>	One month and 13 days
	<b><u>\$1,705</u></b>	

\*( $\$790 - \$490$ )

Inasmuch as later invoices have been paid in full, all three of these amounts should be investigated in order to determine why Hopkins Co. has not paid them. The amounts in the beginning balance and #2412 should be of particular concern.

**EXERCISE 7-12 (15–20 minutes)**

7/1	Accounts Receivable—Harding Co. ....	7,840	
	Sales (\$8,000 X 98%) .....		7,840
7/5	Cash [\$9,000 X (1 – .09)] .....	8,190	
	Loss on Sale of Receivables.....	810	
	Accounts Receivable (\$9,000 X 98%) ...		8,820
	Sales Discounts Forfeited.....		180

(Note: It is possible that the company already recorded the Sales Discounts Forfeited. In this case, the credit to Accounts Receivable would be for \$9,000. The same point applies to the next entry as well.)

**EXERCISE 7-12 (Continued)**

<b>7/9</b>	<b>Accounts Receivable .....</b>	<b>180</b>	
	<b>Sales Discounts Forfeited</b>		
	<b>(\$9,000 – 2%).....</b>		<b>180</b>
	<b>Cash .....</b>	<b>5,640</b>	
	<b>Finance Charge (\$6,000 X 6%) .....</b>	<b>360</b>	
	<b>Notes Payable.....</b>		<b>6,000</b>
<b>7/11</b>	<b>Account Receivable—Harding Co.....</b>	<b>160</b>	
	<b>Sales Discounts Forfeited .....</b>		<b>160</b>
	<b>(\$8,000 X 2%)</b>		

This entry may be made at the next time financial statements are prepared. Also, it may occur on 12/29 when Harding Company’s receivable is adjusted.

<b>12/29</b>	<b>Allowance for Doubtful Accounts.....</b>	<b>7,200</b>	
	<b>Accounts Receivable—Harding Co. ....</b>		<b>7,200</b>
	<b>[\$7,840 + \$160 = \$8,000;</b>		
	<b>\$8,000 – (10% X \$8,000) = \$7,200]</b>		

**EXERCISE 7-13 (10–15 minutes)**

<b>(a)</b>	<b>Cash .....</b>	<b>192,000</b>	
	<b>Finance Charge.....</b>	<b>8,000*</b>	
	<b>Notes Payable.....</b>		<b>200,000</b>

**\*2% X \$400,000 = \$8,000**

<b>(b)</b>	<b>Cash .....</b>	<b>350,000</b>	
	<b>Accounts Receivable.....</b>		<b>350,000</b>

**EXERCISE 7-13 (Continued)**

(c) Notes Payable .....	200,000	
Interest Expense .....	5,000*	
Cash.....		205,000

\*10% X \$200,000 X 3/12 = \$5,000

**EXERCISE 7-14 (15–18 minutes)**

1. Cash .....	22,500	
Loss on Sale of Receivables .....	2,500	
(\$25,000 X 10%)		
Accounts Receivable .....		25,000
2. Cash .....	50,600	
Finance Charge (\$55,000 X 8%).....	4,400	
Notes Payable.....		55,000
3. Bad Debt Expense .....	6,220	
Allowance for Doubtful Accounts.....		6,220
[((\$82,000 X 5%) + \$2,120)]		
4. Bad Debt Expense .....	6,450	
Allowance for Doubtful Accounts.....		6,450
(\$430,000 X 1.5%)		

**EXERCISE 7-15 (10–15 minutes)**

**Computation of net proceeds:**

Cash received	\$160,000
Less: Recourse liability	<u>1,000</u>
Net proceeds	<u>\$159,000</u>

## EXERCISE 7-15 (Continued)

### Computation of gain or loss:

Carrying value	\$200,000
Net proceeds	<u>159,000</u>
Loss on sale of receivables	<u>\$ 41,000</u>

### The following journal entry would be made:

Cash.....	\$160,000	
Loss on Sale of Receivables .....	41,000	
Recourse Liability .....		1,000
Accounts Receivable .....		200,000

## EXERCISE 7-16 (15–20 minutes)

(a) To be recorded as a sale, all of the following conditions would be met:

- (1) The transferred asset has been isolated from the transferor (put beyond reach of the transferor and its creditors).
- (2) The transferees have obtained the right to pledge or to exchange either the transferred assets or beneficial interests in the transferred assets.
- (3) The transferor does not maintain effective control over the transferred assets through an agreement to repurchase or redeem them before their maturity.

(b) Computation of net proceeds:

Cash received (\$175,000 X 94%)	\$164,500	
Due from factor (\$175,000 X 4%)	<u>7,000</u>	\$171,500
Less: Recourse obligation		<u>2,000</u>
Net proceeds		<u>\$169,500</u>

## EXERCISE 7-16 (Continued)

### Computation of gain or loss:

Carrying value	\$175,000
Net proceeds	<u>169,500</u>
Loss on sale of receivables	<u>\$ 5,500</u>

### The following journal entry would be made:

Cash .....	\$164,500	
Due from Factor .....	7,000	
Loss on Sale of Receivables.....	5,500	
Recourse Liability .....		2,000
Accounts Receivable .....		175,000

## EXERCISE 7-17 (10–15 minutes)

(a) July 1	Cash .....	283,500	
	Due from Factor .....	12,000*	
	Loss on Sale of Receivables .....	4,500**	
	Accounts Receivable.....		300,000

\*(4% X \$300,000) = \$12,000

\*\* $(1\frac{1}{2}\% \times \$300,000) = \$4,500$

(b) July 1	Accounts Receivable .....	300,000	
	Due to JFK Corp. ....		12,000
	Financing Revenue .....		4,500
	Cash .....		283,500

**EXERCISE 7-18 (10–15 minutes)**

1.	7/1/07	Notes Receivable.....	1,101,460.00
		Discount on Notes Receivable...	401,460.00
		Land .....	590,000.00
		Gain on Sale of Land .....	110,000.00
		(\$700,000 – \$590,000)	

**Computation of the discount**

\$1,101,460	Face value of note
<u>.63552</u>	Present value of 1 for 4 periods at 12%
\$ 700,000	Present value of note
<u>1,101,460</u>	Face value of note
<u>\$ 401,460</u>	Discount on note receivable

2.	7/1/07	Notes Receivable.....	400,000.00
		Discount on Notes Receivable...	178,836.32
		Service Revenue .....	221,163.68

**Computation of the present value of the note:**

Maturity value		\$400,000.00
Present value of \$400,000 due		
in 8 years at 12%—\$400,000 X .40388	\$161,552.00	
Present value of \$12,000		
payable annually for 8 years		
at 12% annually—\$12,000 X 4.96764	<u>59,611.68</u>	
Present value of the note		<u>221,163.68</u>
Discount on note receivable		<u>\$178,836.32</u>

**EXERCISE 7-19 (20–25 minutes)**

(a) Notes Receivable .....	200,000	
Discount on Notes Receivable .....		34,710
Consulting Revenue .....		165,290*

\*Computation of present value of note:  
 PV of \$200,000 due in 2 years at 10%  
 $\$200,000 \times .82645 = \$165,290$

(b) Discount on Notes Receivable .....	16,529	
Interest Revenue .....		16,529*

\* $\$165,290 \times 10\% = \$16,529$

(c) Discount on Notes Receivable .....	18,181*	
Interest Revenue .....		18,181

\* $\$34,710 - \$16,529$

Cash .....	200,000	
Notes Receivable .....		200,000

**EXERCISE 7-20 (10–15 minutes)**

(a) Accounts Receivable .....	100,000	
Sales .....		100,000
Cash .....	70,000	
Accounts Receivable .....		70,000

**EXERCISE 7-20 (Continued)**

(b) **Accounts Receivable Turnover** =  $\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}}$

$$\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}} = \frac{\$100,000}{(\$15,000 + \$45,000^*)/2} = 3.33 \text{ times}$$

\* $\$15,000 + \$100,000 - \$70,000$

**Average number of days to collect receivables** =  $\frac{365}{3.33} = 110 \text{ days}$

(c) Jones Company's turnover ratio has declined significantly. That is, it is turning receivables 3.33 times a year and collections on receivables took 110 days. In the prior year, the turnover ratio was almost double (6.0) and collections took only 61 days. This is a bad trend in liquidity. Jones should consider offering early payment discounts and/or tightened credit and collection policies.

**EXERCISE 7-21**

(a) Cash [\$25,000 X (1 - .09)] .....	22,750	
Due from Factor .....	1,250	
Loss on Sale of Accounts Receivable .....	2,200	
Accounts Receivable .....		25,000
Recourse Obligation .....		1,200

**Computation of cash received**

Accounts receivable .....	\$25,000	
Less: Due from factor (5% X \$25,000) .....	1,250	
Finance charge (4% X \$25,000) .....	1,000	
Cash received .....		<u>\$22,750</u>

**Computation of net proceeds (cash and other assets received, less any liabilities incurred)**

Cash received .....	\$22,750	
Due from factor .....	<u>1,250</u>	\$24,000
Less: Recourse liability .....		<u>1,200</u>
Net proceeds .....		<u>\$22,800</u>

## EXERCISE 7-21 (Continued)

### Computation of loss

Carrying (Book) value .....	\$25,000
Less: Net proceeds .....	<u>22,800</u>
Loss on sale of receivables .....	<u>\$ 2,200</u>

$$(b) \text{ Accounts Receivable Turnover} = \frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}}$$

$$\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}} = \frac{\$100,000}{(\$15,000 + \$20,000^*)/2} = 5.71 \text{ times}$$

$$^*(\$15,000 + \$100,000 - \$70,000 - \$25,000)$$

$$\text{Average number of days to collect} = \frac{365}{5.71} = 63.92 \text{ days}$$

With the factoring transaction, Jones Company's turnover ratio still declines but by less than in the earlier exercise. While Jones' collections have slowed, by factoring the receivables, Jones is able to convert them to cash. The cost of this approach to converting receivables to cash is captured in the Loss on Sale of Accounts Receivable account.

**\*EXERCISE 7-22 (5–10 minutes)**

1. April 1 Petty Cash.....	200	
Cash .....		200
2. April 10 Transportation-In.....	60	
Supplies Expense.....	25	
Postage Expense.....	33	
Accounts Receivable—Employees .....	17	
Miscellaneous Expense.....	36	
Cash Over and Short.....	2	
Cash (\$200 – \$27).....		173
3. April 20 Petty Cash.....	100	
Cash .....		100

**\*EXERCISE 7-23 (10–15 minutes)**

Accounts Receivable—Employees .....	74.00	
(\$40.00 + \$34.00)		
Nick Fonzarelli, Drawings* .....	170.00	
Repair Expense.....	14.35	
Postage Expense (\$20.00 – \$2.90).....	17.10	
Office Supplies .....	2.90	
Cash Over and Short .....	6.45	
Cash (\$300.00 – \$15.20).....		284.80

**\*Note:** This debit might also be made to the capital account.

**\*EXERCISE 7-24 (15–20 minutes)**

**(a) Angela Lansbury Company  
Bank Reconciliation  
July 31**

<b>Balance per bank statement, July 31</b>		<b>\$8,650</b>
<b>Add: Deposits in transit</b>		<b>2,350<sup>a</sup></b>
<b>Deduct: Outstanding checks</b>		<b><u>(1,100)<sup>b</sup></u></b>
<b>Correct cash balance, July 31</b>		<b><u>\$9,900</u></b>
<b>Balance per books, July 31</b>		<b>\$9,250</b>
<b>Add: Collection of note</b>		<b>1,000</b>
<b>Less: Bank service charge</b>	<b>\$ 15</b>	
<b>NSF check</b>	<b><u>335</u></b>	<b><u>(350)</u></b>
<b>Corrected cash balance, July 31</b>		<b><u>\$9,900</u></b>

**<sup>a</sup>Computation of deposits in transit**

<b>Deposits per books</b>		<b>\$5,810</b>
<b>Deposits per bank in July</b>	<b>\$5,000</b>	
<b>Less deposits in transit (June)</b>	<b><u>(1,540)</u></b>	
<b>Deposits mailed and received in July</b>		<b><u>(3,460)</u></b>
<b>Deposits in transit, July 31</b>		<b><u>\$2,350</u></b>

**<sup>b</sup>Computation of outstanding checks**

<b>Checks written per books</b>		<b>\$3,100</b>
<b>Checks cleared by bank in July</b>	<b>\$4,000</b>	
<b>Less outstanding checks (June)*</b>	<b><u>(2,000)</u></b>	
<b>Checks written and cleared in July</b>		<b><u>(2,000)</u></b>
<b>Outstanding checks, July 31</b>		<b><u>\$1,100</u></b>

**\*Assumed to clear bank in July**

**\*EXERCISE 7-24 (Continued)**

<b>(b) Cash .....</b>	<b>650</b>	
<b>Office Expenses—Bank Service Charge.....</b>	<b>15</b>	
<b>Accounts Receivable.....</b>	<b>335</b>	
<b>Notes Receivable .....</b>		<b>1,000</b>

**\*EXERCISE 7-25 (15–20 minutes)**

**(a) Logan Bruno Company  
Bank Reconciliation, August 31, 2007  
County National Bank**

---

<b>Balance per bank statement, August 31, 2007</b>		<b>\$ 8,089</b>
<b>Add: Cash on hand</b>	<b>\$ 310</b>	
<b>Deposits in transit</b>	<b><u>3,800</u></b>	<b><u>4,110</u></b>
		<b>12,199</b>
<b>Deduct: Outstanding checks</b>		<b><u>1,050</u></b>
<b>Correct cash balance</b>		<b><u>\$11,149</u></b>

<b>Balance per books, August 31, 2007</b>		
<b>(\$10,050 + \$35,000 – \$34,903)</b>		<b>\$10,147</b>
<b>Add: Note (\$1,000) and interest (\$40) collected</b>		<b><u>1,040</u></b>
		<b>11,187</b>
<b>Deduct: Bank service charges</b>	<b>\$ 20</b>	
<b>Understated check for supplies</b>	<b><u>18</u></b>	<b><u>38</u></b>
<b>Correct cash balance</b>		<b><u>\$11,149</u></b>

<b>(b) Cash .....</b>	<b>1,040</b>	
<b>Notes Receivable .....</b>		<b>1,000</b>
<b>Interest Revenue .....</b>		<b>40</b>
<b>(To record collection of note and interest)</b>		

**\*EXERCISE 7-25 (Continued)**

<b>Office Expense—Bank Service Charges .....</b>	<b>20</b>	
<b>    Cash .....</b>		<b>20</b>
<b>        (To record August bank charges)</b>		
<b>Supplies Expense.....</b>	<b>18</b>	
<b>    Cash .....</b>		<b>18</b>
<b>        (To record error in recording check for             supplies)</b>		

**(c) The corrected cash balance of \$11,149 would be reported in the August 31, 2007, balance sheet.**

# TIME AND PURPOSE OF PROBLEMS

**Problem 7-1** (Time 20–25 minutes)

Purpose—to provide the student with an understanding of the balance sheet effect that occurs when the cash book is left open. In addition, the student is asked to adjust the present balance sheet to an adjusted balance sheet, reflecting the proper cash presentation.

**Problem 7-2** (Time 20–25 minutes)

Purpose—to provide the student with the opportunity to determine various items related to accounts receivable and the allowance for doubtful accounts. Five independent situations are provided.

**Problem 7-3** (Time 20–30 minutes)

Purpose—to provide a short problem related to the aging of accounts receivable. The appropriate balance for doubtful accounts must be determined. In addition, the manner of reporting accounts receivable on the balance sheet must be shown.

**Problem 7-4** (Time 25–35 minutes)

Purpose—the student prepares an analysis of the changes in the allowance for doubtful accounts and supports it with an aging schedule. The adjusting entry is prepared.

**Problem 7-5** (Time 20–30 minutes)

Purpose—a short problem that must be analyzed to make the necessary correcting entries. It is not a pencil-pushing problem but requires a great deal of conceptualization. A good problem for indicating the types of adjustments that might occur in the receivables area.

**Problem 7-6** (Time 25–35 minutes)

Purpose—to provide the student with a number of business transactions related to notes and accounts receivable that must be journalized. Recoveries of receivables, and write-offs are the types of transactions presented. The problem provides a good cross section of a number of accounting issues related to receivables.

**Problem 7-7** (Time 25–30 minutes)

Purpose—a short problem involving the reporting problems associated with the assignment of accounts receivable. The student is required to make the journal entries necessary to record an assignment. A straightforward problem.

**Problem 7-8** (Time 30–35 minutes)

Purpose—to provide the student with a problem in the imputation of interest. Our hope is that a good conceptual discussion can develop, related to the proper accounting for this item.

**Problem 7-9** (Time 30–35 minutes)

Purpose—to provide the student with another problem requiring the imputation of interest. The student is required to make journal entries on a series of dates when note installments are collected. A relatively straightforward problem.

**Problem 7-10** (Time 40–50 minutes)

Purpose—the student calculates the current portion of long-term receivables and interest receivable, and prepares the long-term receivables section of the balance sheet. Then the student prepares a schedule showing interest income. The problem includes interest-bearing and zero-interest-bearing notes and an installment receivable.

**Problem 7-11** (Time 20–25 minutes)

Purpose—to provide the student the opportunity to record the sales of receivables with and without recourse and determine the income effects.

### **Time and Purpose of Problems (Continued)**

**\*Problem 7-12** (Time 20–25 minutes)

Purpose—to provide the student the opportunity to do the accounting for petty cash and a bank reconciliation.

**\*Problem 7-13** (Time 20–30 minutes)

Purpose—to provide the student with the opportunity to prepare a bank reconciliation which is reconciled to a corrected balance. Traditional types of adjustments are presented. Journal entries are also required.

**\*Problem 7-14** (Time 20–30 minutes)

Purpose—to provide the student with the opportunity to prepare a bank reconciliation which goes from balance per bank to corrected balance. Traditional types of adjustments are presented such as deposits in transit, bank service charges, NSF checks, and so on. Journal entries are also required.

# SOLUTIONS TO PROBLEMS

## PROBLEM 7-1

(a) December 31

Accounts Receivable (\$17,640 + \$360).....	18,000	
Sales.....	22,000	
Cash.....		39,640
Sales Discounts.....		360

December 31

Cash .....	26,200	
Purchase Discounts.....	250	
Accounts Payable .....		26,450

(b)

	<u>Per balance sheet</u>	<u>After Adjustment</u>
<b>Current assets</b>		
Cash (\$39,000 – \$39,640 + \$26,200)	\$ 39,000	\$ 25,560
Receivables (\$42,000 + \$18,000)	42,000	60,000
Inventories	<u>67,000</u>	<u>67,000</u>
Total	(1) <u>148,000</u>	<u>152,560</u>
<b>Current liabilities</b>		
Accounts payable (\$45,000 + \$26,450)	45,000	71,450
Other current liabilities	<u>14,200</u>	<u>14,200</u>
Total	(2) <u>59,200</u>	<u>85,650</u>
Working capital	(1) – (2) <u>\$ 88,800</u>	<u>\$ 66,910</u>
Current ratio	(1) ÷ (2) 2.5 to 1	1.78 to 1

<b>PROBLEM 7-2</b>
--------------------

<b>1. Net sales</b>		<b>\$1,500,000</b>
Percentage		<u>1 1/2%</u>
Bad debt expense		<u><b>\$ 22,500</b></u>
<b>2. Accounts receivable</b>		<b>\$1,750,000</b>
Amounts estimated to be uncollectible		<u>(180,000)</u>
Net realizable value		<u><b>\$1,570,000</b></u>
<b>3. Allowance for doubtful accounts 1/1/07</b>		<b>\$17,000</b>
Establishment of accounts written off in prior years		<b>8,000</b>
Customer accounts written off in 2007		<b>(30,000)</b>
Bad debt expense for 2007 (\$2,100,000 X 3%)		<u><b>63,000</b></u>
Allowance for doubtful accounts 12/31/07		<u><b>\$58,000</b></u>
<b>4. Bad debt expense for 2007</b>		<b>\$ 84,000</b>
Customer accounts written off as uncollectible during 2006		<u>(24,000)</u>
Allowance for doubtful accounts balance 12/31/07		<u><b>\$ 60,000</b></u>
<b>Accounts receivable, net of allowance for doubtful Accounts</b>		<b>\$ 950,000</b>
Allowance for doubtful accounts balance 12/31/07		<u>60,000</u>
Accounts receivable, before deducting allowance for doubtful accounts		<u><b>\$1,010,000</b></u>
<b>5. Accounts receivable</b>		<b>\$410,000</b>
Percentage		<u>3%</u>
Bad debt expense, before adjustment		<b>12,300</b>
Allowance for doubtful accounts (debit balance)		<u>14,000</u>
Bad debt expense, as adjusted		<u><b>\$ 26,300</b></u>

**PROBLEM 7-3**

- (a) The Allowance for Doubtful Accounts should have a balance of \$50,000 at year-end. The supporting calculations are shown below:

Days Account Outstanding	Amount	Expected Percentage Uncollectible	Estimated Uncollectible
0–15 days	\$300,000	.02	\$ 6,000
16–30 days	100,000	.10	10,000
31–45 days	80,000	.15	12,000
46–60 days	40,000	.25	10,000
61–75 days	20,000	.60	<u>12,000</u>
<b>Balance for Allowance for Doubtful Accounts</b>			<b><u>\$50,000</u></b>

The accounts which have been outstanding over 75 days (\$15,000) and have zero probability of collection would be written off immediately by a debit to allowance for Doubtful Accounts for \$15,000 and a credit to Amounts Receivable for \$15,000. It is not considered when determining the proper amount for the Allowance for Doubtful Accounts.

(b) Accounts receivable (\$555,000 – \$15,000) .....	\$540,000
Less: Allowance for doubtful accounts .....	<u>50,000</u>
Accounts receivable (net) .....	<u>\$490,000</u>

- (c) The year-end bad debt adjustment would decrease before-tax income \$30,000 as computed below:

Estimated amount required in the Allowance for Doubtful Accounts	\$50,000
Balance in the account after write-off of uncollectible accounts but before adjustment (\$35,000 – \$15,000)	<u>20,000</u>
Required charge to expense	<u>\$30,000</u>

**PROBLEM 7-4**

(a) **Blaise Pascal Corporation**  
**Analysis of Changes in the**  
**Allowance for Doubtful Accounts**  
**For the Year Ended December 31, 2007**

<b>Balance at January 1, 2007</b>	<b>\$154,000</b>
<b>Provision for doubtful accounts (\$9,000,000 X 2%)</b>	<b>180,000</b>
<b>Recovery in 2007 of bad debts written off previously</b>	<u><b>15,000</b></u>
	<b>349,000</b>
<b>Deduct write-offs for 2007 (\$95,000 + \$60,000)</b>	<u><b>155,000</b></u>
<b>Balance at December 31, 2007 before change in accounting estimate</b>	<b>194,000</b>
<b>Increase due to change in accounting estimate during 2007 (\$254,600 – \$194,000)</b>	<u><b>60,600</b></u>
<b>Balance at December 31, 2007 adjusted (Schedule 1)</b>	<u><b>\$254,600</b></u>

**Schedule 1**

**Computation of Allowance for Doubtful Accounts**  
**at December 31, 2007**

<b>Aging category</b>	<b>Balance</b>	<b>%</b>	<b>Doubtful accounts</b>
<b>Nov–Dec 2007</b>	<b>\$1,080,000</b>	<b>2</b>	<b>\$ 21,600</b>
<b>July–Oct</b>	<b>650,000</b>	<b>10</b>	<b>65,000</b>
<b>Jan–Jun</b>	<b>420,000</b>	<b>25</b>	<b>105,000</b>
<b>Prior to 1/1/07</b>	<b>90,000 (a)</b>	<b>70</b>	<u><b>63,000</b></u>
			<u><b>\$254,600</b></u>

(a) \$150,000 – \$60,000

**PROBLEM 7-4 (Continued)**

**(b) The journal entry to record this transaction is as follows:**

<b>Bad Debt Expense .....</b>	<b>\$60,600</b>	
<b>    Allowance for Doubtful Accounts .....</b>		<b>\$60,600</b>
<b>(To increase the allowance for doubtful accounts at December 31, 2007, resulting from a change in accounting estimate)</b>		

**PROBLEM 7-5**

Bad Debt Expense .....	2,740.00	
Accounts Receivable .....		2,740.00
(To correct bad debt expense and write off accounts receivable)		
Accounts Receivable .....	4,840.00	
Advance on Sales Contract .....		4,840.00
(To reclassify credit balance in accounts receivable)		
Allowance for Doubtful Accounts .....	4,200.00	
Accounts Receivable .....		4,200.00
(To write off \$4,200 of uncollectible accounts)		

(Note to instructor: Many students will not make this entry at this point. Because \$4,200 is totally uncollectible, a write-off immediately seems most appropriate. The remainder of the solution therefore assumes that the student made this entry.)

Allowance for Doubtful Accounts .....	7,374.64	
Bad Debt Expense.....		7,374.64
(To reduce allowance for doubtful account balance)		
Balance (\$8,750 + \$18,620 – \$2,740 – \$4,200)	\$20,430.00	
Corrected balance (see below)	<u>13,055.36</u>	
Adjustment	<u>\$ 7,374.64</u>	

Age	Balance	Aging Schedule	
Under 60 days	\$172,342	1%	\$ 1,723.42
61–90 days	141,330 (\$136,490 + \$4,840)	3%	4,239.90
91–120 days	37,184 (\$39,924 – \$2,740)	6%	2,231.04
Over 120 days	19,444 (\$23,644 – \$4,200)	25%	4,861.00
			<u>\$13,055.36</u>

## PROBLEM 7-5 (Continued)

If the student did not make the entry to record the \$4,200 write-off earlier, the following would change in the problem. After the adjusting entry for \$7,374.64, an entry would have to be made to write off the \$4,200.

Balance (\$8,750 + \$18,620 – \$2,740)	\$24,630.00
Corrected balance (see below)	<u>17,255.36</u>
Adjustment	<u>\$ 7,374.64</u>

<u>Age</u>	<u>Balance</u>	<u>Aging Schedule</u>	
Under 60 days	\$172,342	1%	\$ 1,723.42
61–90 days	141,330	3%	4,239.90
91–120 days	37,184	6%	2,231.04
Over 120 days	23,644	—	<u>9,061.00*</u>
			<u>\$17,255.36</u>

\*\$4,200 + (25% X \$19,444)

**PROBLEM 7-6**

-1-

<b>Cash</b> .....	<b>137,200*</b>	
<b>Sales Discounts</b> .....	<b>800</b>	
<b>Accounts Receivable</b> .....		<b>138,000</b>

\*[\$138,000 – (\$40,000 X 2%)]

-2-

<b>Accounts Receivable</b> .....	<b>6,300</b>	
<b>Allowance for Doubtful Accounts</b> .....		<b>6,300</b>

<b>Cash</b> .....	<b>6,300</b>	
<b>Accounts Receivable</b> .....		<b>6,300</b>

-3-

<b>Allowance for Doubtful Accounts</b> .....	<b>17,500</b>	
<b>Accounts Receivable</b> .....		<b>17,500</b>

-4-

<b>Bad Debt Expense</b> .....	<b>13,900</b>	
<b>Allowance for Doubtful Accounts</b> .....		<b>13,900</b>

(\$17,300 + \$6,300 – \$17,500 = \$6,100;  
\$20,000 – \$6,100 = \$13,900)

<b>PROBLEM 7-7</b>
--------------------

**July 1, 2007**

Cash .....	79,500	
Finance Charge (.005 X \$100,000).....	500	
Notes Payable (80% X \$100,000).....		80,000

**July 31, 2007**

Notes Payable .....	55,000	
Accounts Receivable .....		55,000
Finance Charge .....	225	
Finance Charge Payable (.005 X \$45,000).....		225

**August 31, 2007**

Notes Payable .....	25,000	
Cash* .....	4,700	
Finance Charge (.005 X [\$100,000 – \$55,000 – \$30,000]).....	75	
Finance Charge Payable.....	225	
Accounts Receivable .....		30,000

*Total cash collection	\$30,000	
Less: Finance charge payable (from previous entry)	(225)	
Finance charge (current month) [(.005 X (\$100,000 – \$55,000 – \$30,000))]	(75)	
Note payable (balance) (\$80,000 – \$55,000)	(25,000)	
Cash collected	<u>\$ 4,700</u>	

<b>PROBLEM 7-8</b>
--------------------

10/1/07	Notes Receivable .....	100,000	
	Sales .....		100,000

12/31/07	Interest Receivable .....	2,000*	
	Interest Revenue .....		2,000

\*\$100,000 X .08 X 3/12 = \$2,000

10/1/08	Cash .....	8,000*	
	Interest Receivable .....		2,000
	Interest Revenue.....		6,000**

\*\$100,000 X .08 = \$8,000

\*\*\$100,000 X .08 X 9/12 = \$6,000

12/31/08	Interest Receivable .....	2,000	
	Interest Revenue.....		2,000

10/1/09	Cash .....	8,000	
	Interest Receivable .....		2,000
	Interest Revenue.....		6,000

	Cash .....	100,000	
	Notes Receivable.....		100,000

**Note:** Entries at 10/1/08 and 10/1/09 assumes reversing entries were not made on January 1, 2008 and January 1, 2009.

**PROBLEM 7-9**

<b>(a)</b>	<b>December 31, 2007</b>		
	Cash .....	36,000.00	
	Notes Receivable .....	72,000.00	
	Discount on Notes Receivable .....		16,155.90
	Revenue from Services .....		91,844.10

To record revenue at the present value of the note plus the immediate cash payment:

PV of \$18,000 annuity @ 11% for	
4 years (\$18,000 X 3.10245)	\$55,844.10
Down payment	<u>36,000.00</u>
Capitalized value of services	<u>\$91,844.10</u>

<b>(b)</b>	<b>December 31, 2008</b>		
	Cash .....	18,000.00	
	Notes Receivable .....		18,000.00
	Discount on Notes Receivable .....	6,142.85	
	Interest Revenue .....		6,142.85

**Schedule of Note Discount Amortization**

Date	Cash Received	Interest Revenue	Carrying Amount of Note
12/31/07	—	—	\$55,844.10
12/31/08	\$18,000.00	\$6,142.85 <sup>a</sup>	43,986.95 <sup>b</sup>
12/31/09	18,000.00	4,838.56	30,825.51
12/31/10	18,000.00	3,390.81	16,216.32
12/31/11	18,000.00	1,783.68 <sup>c</sup>	—

<sup>a</sup>\$6,142.85 = \$55,844.10 X 11%

<sup>b</sup>\$43,986.95 = \$55,844.10 + \$6,142.85 – \$18,000.00

<sup>c</sup>Rounded by \$.12

**PROBLEM 7-9 (Continued)**

<b>(c)</b>	<b>December 31, 2009</b>		
	<b>Cash</b> .....	<b>18,000.00</b>	
	<b>Notes Receivable</b> .....		<b>18,000.00</b>
	<b>Discount on Notes Receivable</b> .....	<b>4,838.56</b>	
	<b>Interest Revenue</b> .....		<b>4,838.56</b>
<b>(d)</b>	<b>December 31, 2010</b>		
	<b>Cash</b> .....	<b>18,000.00</b>	
	<b>Notes Receivable</b> .....		<b>18,000.00</b>
	<b>Discount on Notes Receivable</b> .....	<b>3,390.81</b>	
	<b>Interest Revenue</b> .....		<b>3,390.81</b>
<b>(e)</b>	<b>December 31, 2011</b>		
	<b>Cash</b> .....	<b>18,000.00</b>	
	<b>Notes Receivable</b> .....		<b>18,000.00</b>
	<b>Discount on Notes Receivable</b> .....	<b>1,783.68</b>	
	<b>Interest Revenue</b> .....		<b>1,783.68</b>

<b>PROBLEM 7-10</b>
---------------------

(a) **Connecticut Inc.**  
**Long-Term Receivables Section of Balance Sheet**  
**December 31, 2007**

---

9% note receivable from sale of division, due in annual installments of \$600,000 to May 1, 2009, less current installment	\$ 600,000	(1)
8% note receivable from officer, due Dec. 31, 2009, collateralized by 10,000 shares of Connecticut, Inc., common stock with a fair value of \$450,000	400,000	
Zero-interest-bearing note from sale of patent, net of 12% imputed interest, due April 1, 2009	173,746	(2)
Installment contract receivable, due in annual installments of \$45,125 to July 1, 2011, less current installment	<u>110,275</u>	(3)
<b>Total long-term receivables</b>	<b><u>\$1,284,021</u></b>	

(b) **Connecticut Inc.**  
**Selected Balance Sheet Balances**  
**December 31, 2007**

---

<b>Current portion of long-term receivables:</b>		
Note receivable from sale of division	\$600,000	(1)
Installment contract receivable	<u>29,725</u>	(3)
<b>Total current portion of long-term receivables</b>	<b><u>\$629,725</u></b>	
<b>Accrued interest receivable:</b>		
Note receivable from sale of division	72,000	(4)
Installment contract receivable	<u>7,700</u>	(5)
<b>Total accrued interest receivable</b>	<b><u>\$79,700</u></b>	

**PROBLEM 7-10 (Continued)**

**(c) Connecticut Inc.  
Interest Revenue from Long-Term Receivables  
For the Year Ended December 31, 2007**

---

<b>Interest income:</b>		
<b>Note receivable from sale of division</b>	<b>\$126,000</b>	<b>(6)</b>
<b>Note receivable from sale of patent</b>	<b>14,346</b>	<b>(2)</b>
<b>Note receivable from officer</b>	<b>32,000</b>	<b>(7)</b>
<b>Installment contract receivable from sale of land</b>	<u><b>7,700</b></u>	<b>(5)</b>
<b>Total interest income for year ended 12/31/07</b>	<u><b>\$180,046</b></u>	

**Explanation of Amounts**

<b>(1) Long-term Portion of 9% Note Receivable at 12/31/07</b>	
Face amount, 5/1/06	\$1,800,000
Less: Installment received 5/1/07	<u>600,000</u>
Balance, 12/31/07	1,200,000
Less: Installment due 5/1/08	<u>600,000</u>
Long-term portion, 12/31/07	<u>\$ 600,000</u>
<b>(2) Zero-interest-bearing Note, Net of Imputed Interest at 12/31/07</b>	
Face amount 4/1/07	\$ 200,000
Less: Imputed interest	
[\$200,000 – (\$200,000 X 0.797)]	<u>40,600</u>
Balance, 4/1/07	159,400
Add: Interest earned to 12/31/07	
(\$159,400 X 12% X 9/12)	<u>14,346</u>
Balance, 12/31/07	<u>\$ 173,746</u>

**PROBLEM 7-10 (Continued)**

**(3) Long-term Portion of Installment Contract**

**Receivable at 12/31/07**

Contract selling price, 7/1/07	\$ 200,000
Less: Down payment, 7/1/07	<u>60,000</u>
Balance, 12/31/07	140,000
Less: Installment due, 7/1/08	
[\$45,125 – (\$140,000 X 11%)]	<u>29,725</u>
Long-term portion, 12/31/07	<u>\$ 110,275</u>

**(4) Accrued Interest—Note Receivable, Sale of Division at 12/31/07**

Interest accrued from 5/1 to 12/31/07	
(\$1,200,000 X 9% X 8/12)	<u>\$ 72,000</u>

**(5) Accrued Interest—Installment Contract at 12/31/07**

Interest accrued from 7/1 to 12/31/07	
(\$140,000 X 11% X 1/2)	<u>\$ 7,700</u>

**(6) Interest Revenue—Note Receivable, Sale of Division, for 2007**

Interest earned from 1/1 to 5/1/2007	
(\$1,800,000 X 9% X 4/12)	\$ 54,000
Interest earned from 5/1 to 12/31/07	
(\$1,200,000 X 9% X 8/12)	<u>72,000</u>
Interest income	<u>\$ 126,000</u>

**(7) Interest Revenue—Note Receivable, Officer, for 2007**

Interest earned 1/1/ to 12/31/07	
(\$400,000 X 8%)	<u>\$ 32,000</u>

**PROBLEM 7-11**

**Radisson Company  
INCOME STATEMENT EFFECT  
For the Year Ended December 31, 2007**

---

<b>Expenses resulting from accounts receivable assigned (Schedule 1)</b>	<b>\$22,920</b>
<b>Loss resulting from accounts receivable sold (\$300,000 – \$250,000)</b>	<b><u>50,000</u></b>
<b>Total expenses</b>	<b><u>\$72,920</u></b>

**Schedule 1**

**Computation of Expense  
for Accounts Receivable Assigned**

---

<b>Assignment expense:</b>		
<b>Accounts receivable assigned</b>	<b>\$400,000</b>	
	<b><u>X 85%</u></b>	
<b>Advance by Stickum Finance Company</b>	<b>340,000</b>	
	<b><u>X 3%</u></b>	<b>\$10,200</b>
<b>Interest expense</b>		<b><u>12,720</u></b>
<b>Total expenses</b>		<b><u>\$22,920</u></b>

**\*PROBLEM 7-12**

(a)	Petty Cash.....	250.00	
	Cash .....		250.00
	Postage Expense.....	33.00	
	Supplies.....	75.00	
	Accounts Receivable—Employees .....	30.00	
	Shipping Expense .....	57.45	
	Advertising Expense .....	22.80	
	Misc. Expense .....	15.35	
	Cash (\$250.00 – \$16.40).....		233.60

	Petty Cash.....	50.00	
	Cash .....		50.00

(b)	Balances per bank:		\$6,522
	Add:		
	Cash on hand	\$ 246	
	Deposit in transit	<u>3,000</u>	<u>3,246</u>
			9,768
	Deduct Checks outstanding		<u>(550)</u>
	Correct cash balance, May 31		<u><u>\$9,218</u></u>

	Balance per books:		\$8,315*
	Add: Note receivable (collected with interest)		<u>930</u>
			9,245
	Deduct Service Charge		<u>(27)</u>
	Correct cash balance, May 31		<u><u>\$9,218</u></u>

\*(\$9,150 + \$31,000 – \$31,835)

	Cash .....	930	
	Note Receivable .....		900
	Interest Revenue .....		30
	Office Expense—Bank Charges .....	27	
	Cash .....		27

(c) \$9,218 + \$300 = \$9,518.

<b>*PROBLEM 7-13</b>
----------------------

(a) **Jose Orozco Co.**  
**Bank Reconciliation**  
**June 30, 2007**

<b>Balance per bank, June 30</b>		<b>\$4,150.00</b>
<b>Add: Deposits in transit</b>		<b>2,890.00</b>
<b>Deduct: Outstanding checks</b>		<b>(2,136.05)</b>
<b>Correct cash balance, June 30</b>		<b><u>\$4,903.95</u></b>
<b>Balance per books, June 30</b>		<b>\$3,969.85</b>
<b>Add: Error in recording deposit (\$90 – \$60)</b>	<b>\$ 30.00</b>	
<b>Error on check no. 747</b>		
<b>(\$582.00 – \$58.20)</b>	<b>523.80</b>	
<b>Note collection (\$900 + \$36)</b>	<b><u>936.00</u></b>	<b><u>1,489.80</u></b>
		<b>5,459.65</b>
<b>Deduct: NSF check</b>	<b>453.20</b>	
<b>Error on check no. 742 (\$491 – \$419)</b>	<b>72.00</b>	
<b>Bank service charges (\$25 + \$5.50)</b>	<b><u>30.50</u></b>	<b><u>(555.70)</u></b>
<b>Correct cash balance, June 30</b>		<b><u>\$4,903.95</u></b>

<b>(b)</b>	<b>Cash.....</b>	<b>1,489.80</b>	
	<b>Accounts Receivable .....</b>		<b>30.00*</b>
	<b>Accounts Payable .....</b>		<b>523.80**</b>
	<b>Notes Receivable.....</b>		<b>900.00</b>
	<b>Interest Revenue .....</b>		<b>36.00</b>
	<b>Accounts Receivable .....</b>	<b>453.20</b>	
	<b>Accounts Payable .....</b>	<b>72.00***</b>	
	<b>Office Expense—Bank Charges.....</b>	<b>30.50</b>	
	<b>Cash.....</b>		<b>555.70</b>

\*Assumes sale was on account and not a cash sale.

\*\*Assumes that the purchase of the equipment was recorded at its proper price. If a straight cash purchase, then Equipment should be credited instead of Accounts Payable.

\*\*\*If a straight cash purchase, then Equipment should be debited instead of Accounts Payable.

**\*PROBLEM 7-14**

(a) **Tanizaki Inc.**  
**Bank Reconciliation**  
**November 30**

<b>Balance per bank statement, November 30</b>		<b>\$56,274.20</b>
<b>Add:</b>		
<b>Cash on hand, not deposited</b>		<u><b>1,915.40</b></u>
		<b>58,189.60</b>
 <b>Deduct:</b>		
<b>Outstanding checks</b>		
#1224	\$1,635.29	
#1230	2,468.30	
#1232	3,625.15	
#1233	<u>482.17</u>	<u><b>8,210.91</b></u>
<b>Correct cash balance, Nov. 30</b>		<u><b>\$49,978.69</b></u>
 <b>Balance per books, November 30</b>		<b>\$49,178.22*</b>
<b>Add:</b>		
<b>Bond interest collected by bank</b>		<u><b>1,400.00</b></u>
		<b>50,578.22</b>
 <b>Deduct:</b>		
<b>Bank charges not recorded in books</b>	\$ 27.40	
<b>Customer's check returned NSF</b>	<u>572.13</u>	<u><b>599.53</b></u>
<b>Correct cash balance, Nov. 30</b>		<u><b>\$49,978.69</b></u>

**\*Computation of balance per books,  
November 30**

<b>Balance per books, October 31</b>	<b>\$ 41,847.85</b>
<b>Add receipts for November</b>	<u><b>173,523.91</b></u>
	<b>215,371.76</b>
 <b>Deduct disbursements for November</b>	<u><b>166,193.54</b></u>
<b>Balance per books, November 30</b>	<u><b>\$ 49,178.22</b></u>

**\*PROBLEM 7-14 (Continued)**

<b>(b)</b>	<b>November 30</b>		
<b>Cash</b> .....		<b>1,400.00</b>	
<b>Interest Revenue</b> .....			<b>1,400.00</b>
	<b>November 30</b>		
<b>Office Expense—Bank Charges</b> .....		<b>27.40</b>	
<b>Cash</b> .....			<b>27.40</b>
	<b>November 30</b>		
<b>Accounts Receivable</b> .....		<b>572.13</b>	
<b>Cash</b> .....			<b>572.13</b>

# TIME AND PURPOSE OF CONCEPTS FOR ANALYSIS

## **CA 7-1** (Time 10–15 minutes)

Purpose—to provide the student with the opportunity to discuss the deficiencies of the direct write-off method, the justification for two allowance methods for estimating bad debts, and to explain the accounting for the recoveries of accounts written off previously.

## **CA 7-2** (Time 15–20 minutes)

Purpose—to provide the student with the opportunity to discuss the accounting for cash discounts, trade discounts, and the factoring of accounts receivable.

## **CA 7-3** (Time 25–30 minutes)

Purpose—to provide the student with the opportunity to discuss the advantages and disadvantages of handling reporting problems related to the Allowance for Doubtful Accounts balance. Recommendations must be made concerning whether some type of allowance approach should be employed, how collection expenses should be handled, and finally, the appropriate accounting treatment for recoveries. A very complete case which should elicit a good discussion of this issue.

## **CA 7-4** (Time 25–30 minutes)

Purpose—to ask the student to discuss when interest revenue from a note receivable is reported. In Part 2, the student is asked to contrast the estimation of bad debts based on credit sales with that based on the balance in receivables, and to describe the reporting of the allowance and the bad debts expense.

## **CA 7-5** (Time 25–30 minutes)

Purpose—the student prepares an accounts receivable aging schedule, computes the amount of the adjustment, and prepares the journal entry to adjust the allowance. Then the student is asked to identify steps to improve collection and evaluate each step in terms of risks and costs involved.

## **CA 7-6** (Time 20–25 minutes)

Purpose—to provide the student with a discussion problem related to notes receivable sold without and with recourse.

## **CA 7-7** (Time 20–30 minutes)

Purpose—a zero-interest-bearing note is exchanged for a unique machine. The student must consider valuation, financial statement disclosure, and factoring the note.

## **CA 7-8** (Time 25–30 minutes)

Purpose—the student calculates interest revenue on an interest-bearing note and a zero-interest-bearing note, and tells how the notes should be reported on the balance sheet. The student discusses how to account for collections on assigned accounts receivable and how to account for factored accounts receivable.

## **CA 7-9** (Time 25–30 minutes)

Purpose—to provide the student with a case related to the imputation of interest. One company has overstated its income by not imputing an interest element on the zero-interest-bearing note receivable that it received in the transaction. We have presented a short analysis to indicate what the proper solution should be. It is unlikely that the students will develop a journal entry with dollar amounts, but they should be encouraged to do so.

## **CA 7-10** (Time 25–30 minutes)

Purpose—to provide the student with a case to analyze receivables irregularities, including a shortage. This is a good writing assignment.

## **CA 7-11** (Time 25–30 minutes)

Purpose—to provide the student with a case to analyze ethical issues inherent in bad debt judgments.

# SOLUTIONS TO CONCEPTS FOR ANALYSIS

## CA 7-1

- (a) The direct write-off method overstates the trade accounts receivable on the balance sheet by reporting them at more than their net realizable value. Furthermore, because the write-off often occurs in a period after the revenues were generated, the direct write-off method does not match bad debts expense with the revenues generated by sales in the same period.
- (b) One allowance method estimates bad debts based on credit sales. The method focuses on the income statement and attempts to match bad debts with the revenues generated by the sales in the same period.

The other allowance method estimates bad debts based on the balance in the trade accounts receivable account. The method focuses on the balance sheet and attempts to value the accounts receivable at their net realizable value.

- (c) The company should account for the collection of the specific accounts previously written off as uncollectible as follows:
- Reinstatement of accounts by debiting Accounts Receivable and crediting Allowance for Doubtful Accounts.
  - Collection of accounts by debiting Cash and crediting Accounts Receivable.

## CA 7-2

- (a) 1. Archer should account for the sales discounts at the date of sale using the net method by recording accounts receivable and sales revenue at the amount of sales less the sales discounts available.

Revenues should be recorded at the cash-equivalent price at the date of sale. Under the net method, the sale is recorded at an amount that represents the cash-equivalent price at the date of exchange (sale).

2. There is no effect on Archer's sales revenues when customers do not take the sales discounts. Archer's net income is increased by the amount of interest (discount) earned when customers do not take the sales discounts.
- (b) Trade discounts are neither recorded in the accounts nor reported in the financial statements. Therefore, the amount recorded as sales revenues and accounts receivable is net of trade discounts and represents the cash-equivalent price of the asset sold.
- (c) To account for the accounts receivable factored on August 1, 2007, Archer should decrease accounts receivable by the amount of accounts receivable factored, increase cash by the amount received from the factor, and record a loss. Factoring of accounts receivable on a without recourse basis is equivalent to a sale. The difference between the cash received and the carrying amount of the receivables is a loss.
- (d) Archer should report the face amount of the interest-bearing notes receivable and the related interest receivable for the period from October 1 through December 31 on its balance sheet as noncurrent assets. Both assets are due on September 30, 2009, which is more than one year from the date of the balance sheet.

## CA 7-2 (Continued)

Archer should report interest revenue from the notes receivable on its income statement for the year ended December 31, 2007. Interest revenue is equal to the amount accrued on the notes receivable at the appropriate rate for three months.

Interest revenue is realized with the passage of time. Accordingly, interest revenue should be accounted for as an element of income over the life of the notes receivable.

## CA 7-3

- (1) **Allowances and charge-offs.** Method (a) is recommended. In the case of this company which has a large number of relatively small sales transactions, it is practicable to give effect currently to the probable bad debt expense. Whenever practicable, it is advisable to accrue probable bad debt charges and apply them in the accounting periods in which the related sales are credited. If the percentage is based on actual long-run experience, the allowance balance is usually adequate to bring the accounts receivable in the balance sheet to realizable values. However, the method does not preclude a periodic review of the accounts receivable for the purpose of estimating probable losses in relation to the allowance balance and adjustment for an inadequate or excessive allowance. Therefore method (b) is technically not wrong, but perhaps could be used in conjunction with method (a). Method (b) does not seem as appropriate here because of the probable large number of accounts involved and therefore a percentage of sales basis should provide a better “matching” of expenses with revenues.
- (2) **Collection expenses.** Method (a) or (b) is recommended. In the case of this company, one strong argument for method (a) is that it is advisable to have the bad debt expense account show the full amount of expense relating to efforts to collect and failure to collect balances receivable. On the other hand, an argument can be made to debit the allowance balance on the theory that bad debts (including related expenses) are established at the time the allowance is first established. As a result, the allowance balance already has anticipated these expenses and therefore as they occur they should be charged against the allowance account. It should be noted that there is no “right answer” to this question. It would seem that alternatives (c) and (d) are not good alternatives because the expense is not identified with bad debts, which it should be.
- (3) **Recoveries.** Method (c) is recommended. This method treats the recovery as a correction of a previous write-off. It produces an allowance account that reflects the net experience with bad debts. Method (a) might be acceptable if the provision for bad debts were based on experience with losses without considering recoveries, but in this case it would be advisable to use one account with a specific designation rather than the broad designation “other revenue.” As indicated in the textbook, recoveries are usually handled by reestablishing the receivable and allowance account. The receivable is then written off. Method (c) is basically that approach.

## CA 7-4

### Part 1

Since John Depp Company is a calendar-year company, six months of interest should be accrued on 12/31/07. The remaining interest revenue should be recognized on 6/30/08 when the note is collected. The rationale for this treatment is: the accrual basis of accounting provides more useful information than does the cash basis. Therefore, since interest accrues with the passage of time, interest earned on John Depp’s note receivable should be recognized over the life of the note, regardless of when the cash is received.

## CA 7-4 (Continued)

### Part 2

- (a) The use of the allowance method based on credit sales to estimate bad debts is consistent with the matching principle because bad debts arise from and are a function of making credit sales. Therefore, bad debt expense for the current period should be matched with current credit sales. This is an income statement approach because the balance in the allowance for doubtful accounts is ignored when computing bad debt expense.

The allowance method based on the balance in accounts receivable is not consistent with the matching principle. This method attempts to value accounts receivable at the amount expected to be collected. The method is facilitated by preparing an aging schedule of accounts receivable and plugging bad debt expense with the adjustment necessary to bring the allowance account to the required balance. Alternatively, the ending balance in accounts receivable can be used to determine the required balance in the allowance account without preparing an aging schedule by using a composite percentage. Bad debt expense is determined in the same manner as when an aging schedule is used. However, neither of these approaches associates bad debt expense with the period of sale, especially for sales made in the last month or two of the period.

- (b) On John Depp's balance sheet, the allowance for doubtful accounts is presented as a contra account to accounts receivable with the resulting difference representing the net accounts receivable (i.e., their net realizable value). Bad debt expense would generally be included on John Depp's income statement with the other operating (selling/general and administrative) expenses for the period. However, theoretical arguments can be made for (1) reducing sales revenue by the bad debts adjustment in the same manner that sales returns and allowances and trade discounts are considered reductions of the amount to be received from sales of products or (2) classifying the bad debts expense as a financial expense.

## CA 7-5

(a) **Rosita Arenas Company**  
**Accounts Receivable Aging Schedule**  
**May 31, 2007**

	<b>Proportion of Total</b>	<b>Amount in Category</b>	<b>Probability of Non-Collection</b>	<b>Estimated Uncollectible Amount</b>
Not yet due	.680	\$1,088,000	.010	\$10,880
Less than 30 days past due	.150	240,000	.035	8,400
30 to 60 days past due	.080	128,000	.050	6,400
61 to 120 days past due	.050	80,000	.090	7,200
121 to 180 days past due	.025	40,000	.300	12,000
Over 180 days past due	<u>.015</u>	<u>24,000</u>	.800	<u>19,200</u>
	<u>1.000</u>	<u>\$1,600,000</u>		<u>\$64,080</u>

CA 7-5 (Continued)

(b) **Rosita Arenas Company**  
**Analysis of Allowance for Doubtful Accounts**  
**May 31, 2007**

June 1, 2006 balance	\$ 43,300
Bad debt expense accrual (\$4,000,000 X .04)	<u>160,000</u>
Balance before write-offs of bad accounts	203,300
Write-offs of bad accounts	<u>145,000</u>
Balance before year-end adjustment	58,300
Estimated uncollectible amount	<u>64,080</u>
Additional allowance needed	<u>\$ 5,780</u>

Bad Debt Expense.....	5,780	
Allowance for Doubtful Accounts.....		5,780

(c)           (1) Steps to Improve Accounts Receivable Situation	(2) Risks and Costs Involved
Establish more selective credit-granting policies, such as more restrictive credit requirements or more thorough credit investigations.	This policy could result in lost sales and increased costs of credit evaluation. The company may be all but forced to adhere to the prevailing credit-granting policies of the office equipment and supplies industry.
Establish a more rigorous collection policy either through external collection agencies or by its own personnel.	This policy may offend current customers and thus risk future sales. Increased collection costs could result from this policy.
Charge interest on overdue accounts. Insist on cash on delivery (COD) or cash on order (COO) for new customers or poor credit risks.	This policy could result in lost sales and increased administrative costs.

## CA 7-6

- (a) The appropriate valuation basis of a note receivable at the date of sale is its discounted present value of the future amounts receivable for principal and interest using the customer's market rate of interest, if known or determinable, at the date of the equipment's sale.
- (b) Luzov should increase the carrying amount of the note receivable by the effective interest revenue earned for the period February 1 to May 1, 2007. Luzov should account for the sale of the note receivable without recourse by increasing cash for the proceeds received, eliminating the carrying amount of the note receivable, and recognizing a loss (gain) for the resulting difference.

This reporting is appropriate since the note's carrying amount is correctly recorded at the date it was sold and the sale of a note receivable without recourse has occurred. Thus the difference between the cash received and the carrying amount of the note at the date it is sold is reported as a loss (gain).

- (c)
  - 1. For notes receivable not sold, Luzov should recognize a bad debt expense. The expense equals the adjustment required to bring the balance of the allowance for doubtful accounts equal to the estimated uncollectible amounts less the fair values of recoverable equipment.
  - 2. For notes receivable sold with recourse, at the time of sale, Luzov would have recorded a recourse obligation. This obligation measures the estimated bad debts at the time of the sale and increases the loss on the sale.

## CA 7-7

- (a)
  - 1. It was not possible to determine the machine's fair value directly, so the sales price of the machine is reported at the note's September 30, 2006, fair value. The note's September 30, 2006, fair value equals the present value of the two installments discounted at the buyer's September 30, 2006, market rate of interest.
  - 2. Tiger reports 2006 interest revenue determined by multiplying the note's carrying amount at September 30, 2006, times the buyer's market rate of interest at the date of issue, times three-twelfths. Tiger should recognize that there is an interest factor implicit in the note, and this interest is earned with the passage of time. Therefore, interest revenue for 2006 should include three months' revenue. The rate used should be the market rate established by the original present value, and this is applied to the carrying amount of the note.
- (b) To report the sale of the note receivable with recourse, Tiger should decrease notes receivable by the carrying amount of the note, increase cash by the amount received, record a recourse liability for possible customer defaults and report the difference as a loss or gain as part of income from continuing operations.
- (c) Tiger should decrease cash, increase notes (accounts) receivable past due for all payments caused by the note's dishonor and eliminate the recourse liability. The note (account) receivable should be written down to its estimated recoverable amount (or an allowance for uncollectibles established), and a loss on uncollectible notes should be recorded for the excess of this difference over the amount of the recourse obligation previously recorded.

## CA 7-8

- (a) 1. For the interest-bearing note receivable, the interest revenue for 2007 should be determined by multiplying the principal (face) amount of the note by the note's rate of interest by one half (July 1, 2007 to December 31, 2007). Interest accrues with the passage of time, and it should be accounted for as an element of revenue over the life of the note receivable.
2. For the zero-interest-bearing note receivable, the interest revenue for 2007 should be determined by multiplying the carrying value of the note by the prevailing rate of interest at the date of the note by one third (September 1, 2007 to December 31, 2007). The carrying value of the note at September 1, 2007 is the face amount discounted for two years at the prevailing interest rate from the maturity date of August 31, 2009 back to the issuance date of September 1, 2007. Interest, even if unstated, accrues with the passage of time, and it should be accounted for as an element of revenue over the life of the note receivable.
- (b) The interest-bearing note receivable should be reported at December 31, 2007, as a current asset at its principal (face) amount.

The zero-interest-bearing note receivable should be reported at December 31, 2007, as a non-current asset at its face amount less the unamortized discount on the note at December 31, 2007.

- (c) Because the trade accounts receivable are assigned, Sondergaard should account for the subsequent collections on the assigned trade accounts receivable by debiting Cash and crediting Accounts Receivable. The cash collected should then be remitted to Irene Dunne Finance until the amount advanced by Irene Dunne Finance is settled. The payments to Irene Dunne Finance consist of both principal and interest with interest computed at the rate of 8% on the balance outstanding.
- (d) Because the trade accounts receivable were factored on a without recourse basis, the factor is responsible for collection. On November 1, 2007, Sondergaard should credit Accounts Receivable for the amount of trade accounts receivable factored, debit Cash for the amount received from the factor, debit a Receivable from Factor for 5% of the trade accounts receivable factored, and debit Loss on Sale of Receivables for 3% of the trade accounts receivable factored.

## CA 7-9

The controller of Engone Company cannot justify the manner in which the company has accounted for the transaction in terms of sound financial accounting principles.

Several problems are inherent in the sale of Rocketeer Enterprises stock to Campbell Inc. First, the issue of whether an arm's-length transaction has occurred may be raised. The controller stated that the stock has not been marketable for the past six years. Thus, the recognition of revenue is highly questionable in view of the limited market for the stock; i.e., has an exchange occurred?

Secondly, the collectibility of the note from Campbell is open to question. Campbell appears to have a liquidity problem due to its current cash squeeze. The lack of assurance about collectibility raises the question of whether revenue should be recognized.

Central to the transaction is the issue of imputed interest. If we assume that an arm's-length exchange has taken place, then the zero-interest-bearing feature masks the question of whether a gain, no gain or loss, or a loss occurred.

## CA 7-9 (Continued)

For a gain to occur, the interest imputation must result in an interest rate of about 5% or less. To illustrate:

Present value of an annuity of \$1 at 5% for 10 years = 7.72173; thus the present value of ten payments of \$400,000 is \$3,088,692. The cost of the investment is \$3,000,000; thus, only an \$88,692 gain is recognized at 5%.

Selecting a more realistic interest rate (in spite of the controller's ill-founded statements about "no cost" money since he/she is ignoring the opportunity cost) of 8% finds the present value of the annuity of \$400,000 for ten periods equal to \$2,684,032 ( $\$400,000 \times 6.71008$ ). In this case a loss of \$315,968 must be recognized as illustrated by the following journal entry:

Notes Receivable.....	4,000,000	
Loss on Disposal of Rocketeer Stock.....	315,968	
Investment in Rocketeer Stock.....		3,000,000
Discount on Notes Receivable.....		1,315,968

## CA 7-10

**To: John Castle, Branch Manager**

**From: Accounting Major**

**Date: October 3, 2007**

**Subject: Shortage in the Accounts Receivable Ledger**

While performing a routine test on accounts receivable balances today, I discovered a \$48,000 shortage. I believe that this matter deserves your immediate attention.

To compute the shortage, I determined that the accounts receivable balance should have been based on the amount of inventory which has been sold. When we opened for business this year, we purchased \$360,000 worth of merchandise inventory, and this morning, the balance in this account was \$90,000.

The \$270,000 difference times the 40% markup indicates that sales on account totalled \$378,000 [ $\$270,000 + (\$270,000 \times .40)$ ] to date. I subtracted the payments of \$198,000 made on account this year and calculated the ending balance to be \$180,000. However, the ledger shows a balance of only \$132,000.

I realize that this situation is very sensitive and that we should not accuse any one individual without further evidence. However, in order to protect the company's assets, we must begin an immediate investigation of this disparity.

Aside from me, the only other employee who has access to the accounts receivable ledger is Percy Shelley, the receivables clerk. I will supervise Shelley more closely in the future but suggest that we also employ an auditor to check into this situation.

## CA 7-11

- (a) No, the controller should not be concerned with Santo Company's growth rate in estimating the allowance. The accountant's proper task is to make a reasonable estimate of bad debt expense. In making the estimate, the controller should consider the previous year's write-offs and also anticipate economic factors which might affect the company's industry and influence Santo's current write-off.
- (b) Yes, the controller's interest in disclosing financial information completely and fairly conflicts with the president's economic interest in manipulating income to avoid undesirable demands from the parent company. Such a conflict of interest is an ethical dilemma. The controller must recognize the dilemma, identify the alternatives, and decide what to do.

## FINANCIAL REPORTING PROBLEM

- (a) Under “Cash Equivalents” in its notes to the consolidated financial statements, P&G indicates:

“Highly liquid investments with maturities of three months or less when purchased are considered cash equivalents and recorded at cost.”

- (b) P&G has \$5,469 million in cash and cash equivalents. As disclosed in the Consolidated Statement of Cash Flows, P&G indicates that in 2004 cash was used for capital expenditures (\$ 2,024 million) and acquisitions (\$7,476 million). Cash dividends were paid (\$2,539 million), long-term debt was reduced (\$1,188 million), and treasury stock was purchased (\$4,070).
- (c) As indicated in Note 1, the company’s products are sold primarily through retail operations including mass merchandisers, grocery stores, membership club stores, and drug stores. In fact, in its segment note (Note 12), P&G indicates that 17% of its sales in 2004 were to a single large customer – Wal-mart. Thus, to the extent that its customers have credit profiles similar to Wal-mart, it is reasonable that bad debt expense might not be material.

## FINANCIAL STATEMENT ANALYSIS CASE 1

- (a) Cash may consist of funds on deposit at the bank, negotiable instruments such as money orders, certified checks, cashier's checks, personal checks, bank drafts, and money market funds that provide checking account privileges.**
- (b) Cash equivalents are short-term, highly liquid investments that are both (a) readily convertible to known amounts of cash, and (b) so near their maturity that they present insignificant risk from changes in interest rates. Generally, only investments with original maturities of 3 months or less qualify. Examples of cash equivalents are Treasury bills, commercial paper, and money market funds.**
- (c) A compensating balance is that portion of any cash deposit maintained by an enterprise which constitutes support for existing borrowing arrangements with a lending institution.**

**A compensating balance representing a legally restricted deposit held against short-term borrowing arrangements should be stated separately among cash and cash equivalent items. A restricted deposit held as a compensating balance against long-term borrowing arrangements should be separately classified as a noncurrent asset in either the investments or other assets section.**

- (d) Cash equivalents are short-term, highly liquid investments that are both (1) readily convertible to known amounts of cash, and (2) so near their maturity that they represent insignificant risk of changes in interest rates. Generally, only investments with original maturities of 3 months or less qualify under these definitions. Examples of cash equivalents are Treasury bills, commercial paper, and money market funds purchased with cash that are in excess of immediate needs.**

**Short-term investments are the investments held temporarily in place of cash and can be readily converted to cash when current financing needs make such conversion desirable. Examples of short-term investments include stock, Treasury notes, and other short-term securities.**

## FINANCIAL STATEMENT ANALYSIS CASE 1 (Continued)

The major differences between cash equivalents and short-term investments are (1) cash equivalents typically have shorter maturity (less than three months) whereas short-term investments either have a longer maturity (e.g., short-term bonds) or no maturity date (e.g., stock), and (2) cash equivalents are readily convertible to known amounts of cash whereas a company may have a gain or loss when selling its short-term investments.

Occidental received \$345 million from selling its receivables.

- (e) Occidental would record a loss of \$30,000,000 as revealed in the following entry to record the transaction:

Cash.....	345,000,000	
Loss on Sale of Receivables .....	30,000,000	
Accounts Receivable.....		360,000,000
Recourse Liability.....		15,000,000

- (f) The transaction in (e) will decrease Occidental's liquidity position. Current assets decrease by \$15,000,000 and current liabilities are increased by the \$15,000,000 (for the recourse liability).

## FINANCIAL STATEMENT ANALYSIS CASE 2

### Part 1

(a) **Cash equivalents are short-term, highly liquid investments that can be converted into specific amounts of cash. They include money market funds, commercial paper, bank certificates of deposit, and Treasury bills. Cash equivalents differ in that they are extremely liquid (that is, easily turned into cash) and have very low risk of declining in value while held.**

(b)

(in millions)	Microsoft	Oracle
(1) Current ratio	$\frac{\$70,566}{\$14,969} = 4.7$	$\frac{\$11,336}{\$4,272} = 2.7$
(2) Working capital	$\$70,566 - \$14,969 = \$55,597$	$\$11,336 - \$4,272 = \$7,064$

**Microsoft's current ratio and working capital are both significantly higher than Oracle's. Based on these measures, Microsoft is much more liquid than Oracle.**

(c) **Yes, a company can have too many liquid assets. Liquid assets earn little or no return. Microsoft's investors are accustomed to returns of 30% on their investment. Thus, Microsoft's large amount of liquid assets may eventually create a drag on its ability to meet investor expectations.**

**FINANCIAL STATEMENT ANALYSIS CASE 2 (Continued)**

**Part 2**

$$(a) \text{ Receivable Turnover } \frac{\text{2004 } \$36,835}{(\$5,890 + \$5,196)/2} = \frac{\$36,835}{\$5,543} = 6.65 \text{ times}$$

Or a collection period of 55 days (365 ÷ 6.65).

(b) Bad Debt Expense .....	44	
Allowance for Doubtful Accounts.....		44
 Allowance for Doubtful Accounts .....	120	
Accounts Receivable .....		120

(c) Accounts receivable is reduced by the amount of bad debts in the allowance account. This makes the denominator of the turnover ratio lower, resulting in a higher turnover ratio.

## COMPARATIVE ANALYSIS CASE

**(a) Cash and cash equivalents:**

Coca-Cola, 12/31/04  
\$6,707,000,000

PepsiCo, 12/25/04  
\$1,280,000,000

Coca-Cola classifies cash equivalents as “marketable securities that are highly liquid and have maturities of three months or less at the date of purchase.”

PepsiCo classifies cash equivalents as “funds temporarily invested (with maturities three months or less).”

**(b) Accounts receivable (net):**

Coca-Cola, 12/31/04  
\$2,171,000,000

PepsiCo, 12/25/04  
\$2,999,000,000

**Allowance for doubtful accounts receivable:**

Coca-Cola, 12/31/04  
Balance, \$69,000,000  
Percent of receivables, 3.08%

PepsiCo, 12/25/04  
Balance, \$97,000,000  
Percent of receivables, 3.13%

**(c) Receivables turnover ratio and days outstanding for receivables:**

Coca-Cola

---


$$\frac{\$21,962}{\$2,171 + \$2,091} = 10.3 \text{ times}$$

2

PepsiCo

---


$$\frac{\$29,261}{\$2,999 + \$2,830} = 10 \text{ times}$$

2

$365 \div 10.3 = 35.4 \text{ days}$

$365 \div 10 = 36.5 \text{ days}$

Coca-Cola’s turnover ratio is slightly higher, resulting in fewer days in receivables. It is likely that these companies use similar receivables management practices.

## RESEARCH CASES

### CASE 1

- (a) The 2004 edition reported 138 firms selling receivables, and 17 firms collateralizing receivables.
- (b) The answer depends on the companies selected.

### CASE 2

- (a) Analysts say Americredit's revised accounting method still doesn't give investors a true picture of the company's earnings. This is because gain-on-sale accounting is a very aggressive revenue-recognition policy and it makes a sub-prime lender look a lot better than it really is. Americredit uses gain-on-sale accounting, a method under which companies immediately record expected revenue and profit from their loan sales. But even though the gains are posted on the company's books upfront, they materialize only gradually. So, much of the profits booked in this way are only estimates of expected future profits.

The method has drawn fierce criticism in recent months by investors who say it encourages companies to book lots of loans, with little regard for their quality, as a way to increase profits. What's more, these critics say, the assumptions used to calculate expected future profits—such as anticipated default rates—vary widely and are difficult to predict.

- (b) The Securities and Exchange Commission has indicated that the most aggressive form of gain-on-sale accounting, the "cash-in" method would no longer be permissible. That decision led Americredit, which employed the "cash-in" method, to change its procedure. Under the "cash-in method," companies use a shorter time period to measure

## **RESEARCH CASES (Continued)**

**the value of expected revenue streams. Americredit executives moved last week to convert to a “cash-out” method of gain-on-sale accounting, in which those values are calculated over longer periods of time, tending to result in lower earnings and revenues.**

**Analysts indicate that although the “cash-out” method is not as aggressive as the “cash-in method,” it still increases the potential for gross overstatements of revenue and earnings. They say abandoning gain-on-sale accounting altogether for future securitizations and booking revenue and earnings gradually as actual cash revenue comes in would paint a truer picture of a company’s earnings.**

- (c) Earnings reports that indicate that problem loans—defined as loans in which a customer is more than one month behind on interest payments—climbed to 9.7% of all managed receivables in the first quarter from 8.9% in the fiscal fourth quarter. Thus, analysts look at how Americredit deals with customers that miss payments. For example, Americredit allows a customer who misses a monthly car payment to defer principal payments twice until year end, without being declared delinquent. These deferred loans should be counted as problem loans and Americredit’s percentage of problem loans for the first quarter would have been much higher.**

## PROFESSIONAL RESEARCH: ACCOUNTING AND FINANCIAL REPORTING

Search strings: “transfer”, “recourse”, “collateral”, “accounting for transfers”

- (a) *Statement of Financial Accounting Standards No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities* (September 2000). The prior standard was *Statement of Financial Accounting Standards No. 125, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*.
- (b) *SFAS No. 140*, Appendix E (para. 364) contains a glossary with definitions for the following terms.
  - 1. **Transfer:** The conveyance of a noncash financial asset by and to someone other than the issuer of that financial asset. Thus, a transfer includes selling a receivable, putting it into a securitization trust, or posting it as collateral but excludes the origination of that receivable, the settlement of that receivable, or the restructuring of that receivable into a security in a troubled debt restructuring.
  - 2. **Recourse:** The right of a transferee of receivables to receive payment from the transferor of those receivables for (a) failure of debtors to pay when due, (b) the effects of prepayments, or (c) adjustments resulting from defects in the eligibility of the transferred receivables.
  - 3. **Collateral:** Personal or real property in which a security interest has been given.
- (c) *SFAS No. 140*, Par.2. “Transfers of financial assets take many forms. Accounting for transfers in which the transferor has no continuing involvement with the transferred assets or with the transferee has not been controversial. However, transfers of financial assets often occur in which the transferor has some continuing involvement either with the assets transferred or with the transferee. ***Examples of continuing involvement are recourse, servicing, agreements to reacquire, options written or held, and pledges of collateral.***”

## PROFESSIONAL SIMULATION

### Measurement

Trade Accounts Receivable		Allowance for Doubtful Accounts	
Beginning balance	\$ 40,000	Beginning balance	\$5,500
Credit sales during 2007	550,000	Charge-offs	(2,300)
Collections during 2007	(500,000)	2007 provision	
Factored receivables	<u>(40,000)</u>	(0.8% X \$550,000)	<u>4,400</u>
Ending balance	<u>\$ 50,000</u>	Ending balance	<u>\$7,600</u>

### Financial Statements

#### Current assets

Cash*		\$ 12,900
Trade accounts receivable	\$50,000	
Allowance for doubtful accounts	<u>(7,600)</u>	42,400
Customer receivable (post-dated checks)		2,000
Interest receivable**		2,750
Due from factor***		2,400
Note receivable		50,000
Inventories		80,000
Prepaid postage		<u>100</u>
Total current assets		<u>\$192,550</u>

\*(\$15,000 – \$2,000 – \$100)

\*\*(\$50,000 X 11% X 1/2)

\*\*\*(\$40,000 X 6%)

### Analysis

<u>2006</u>		<u>2007</u>	
Current ratio = (\$139,500* ÷ \$80,000)	= 1.74	(\$192,550 ÷ \$86,000)	= 2.24
Receivables turnover = 10.37 times		<u>\$550,000</u>	= 14.3 times
		(\$34,500 + \$42,400)/2	

\*(\$20,000 + \$40,000 – \$5,500 + \$85,000)

Both ratios indicate that Horn's liquidity has improved relative to the prior year.

## PROFESSIONAL SIMULATION (Continued)

### Explanation

**With a secured borrowing, the receivables would stay on Horn's books and Horn would record a note payable. This would reduce the current ratio and receivables turnover ratio.**