

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, 20, 23, 24, 25	1	1, 2	1	
2. Accounts receivable: recognition and valuation.	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 21, 23, 24, 25	2, 3, 4, 5, 8	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15	2, 3, 4, 5, 6	1, 2, 3, 4, 5, 10, 11
3. Notes receivable: recognition and valuation.	14, 15, 16, 17, 26	6, 7, 9	13, 19, 20	8, 9, 10	6, 7, 8, 9
4. Assignment and factoring of accounts receivable.	18, 19, 20	10, 11, 12, 13, 14	12, 14, 15, 16, 17, 18, 22	7, 11	4, 6, 8
5. Analysis of receivables.	22	15	21, 22	1	
6. Convergence.	27, 28				
*7. Petty cash and bank reconciliations.	27	16, 17, 18	23, 24, 25, 26	12, 13, 14	
*8. Loan impairments.	12, 28	19	27, 28	15	

*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 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	3, 4, 5, 6, 12	6
5. Explain accounting issues related to valuation of accounts receivable.	4, 5, 8	7, 8, 9, 10, 11, 12, 15	2, 3, 4, 5, 6
6. Explain accounting issues related to recognition of notes receivable.	6, 7	19, 20	8, 9, 10
7. Explain accounting issues related to valuation of notes receivable.		19, 20	10
8. Understand special topics related to receivables.	9, 10, 11, 12, 13, 14	12, 13, 14, 15, 16, 17, 18, 22	7, 11
9. Describe how to report and analyze receivables.	15	21, 22	11
*10. Explain common techniques employed to control cash.	16, 17, 18	23, 24, 25, 26	12, 13, 14
*11. Describe the accounting for a loan impairment.	19	27, 28	15

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E7-1	Determine 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	Recording 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	Fair value option.	Moderate	10–15
E7-14	Assigning accounts receivable.	Simple	10–15
E7-15	Journalizing various receivable transactions.	Simple	15–18
E7-16	Transfer of receivables with guarantee.	Simple	10–15
E7-17	Transfer of receivables with guarantee.	Moderate	15–20
E7-18	Transfer of receivables without guarantee.	Simple	10–15
E7-19	Notes transactions at unrealistic interest rates.	Simple	10–15
E7-20	Notes receivable with unrealistic interest rate.	Moderate	20–25
E7-21	Analysis of receivables.	Moderate	10–15
E7-22	Transfer of receivables.	Moderate	10–15
*E7-23	Petty cash.	Simple	5–10
*E7-24	Petty cash.	Simple	10–15
*E7-25	Bank reconciliation and adjusting entries.	Moderate	15–20
*E7-26	Bank reconciliation and adjusting entries.	Simple	15–20
*E7-27	Impairments.	Moderate	15–25
*E7-28	Impairments.	Moderate	15–25
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
*P7-15	Loan impairment entries.	Moderate	30–40

ASSIGNMENT CHARACTERISTICS TABLE (Continued)

Item	Description	Level of Difficulty	Time (minutes)
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.	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 also be presented separately from other cash with the restrictions on convertibility reported.

2.

(a) Cash	(h) Cash.
(b) Trading securities.	(i) Trading securities.
(c) Temporary investments.	(j) Cash.
(d) Accounts receivable.	(k) Cash.
(e) Other assets if not expendable, cash if expendable for goods and services in the foreign country.	(l) Postage expense, or prepaid expense, or office supplies inventory.
(f) Receivable if collection expected within one year; otherwise, other asset.	(m) Receivable from employee if the company is to be reimbursed; otherwise, prepaid expense.
(g) Investments, possibly other assets.	

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 non-current borrowing arrangements should be separately classified as a non-current asset in either the investments or other assets section.

4. Restricted cash for debt redemption would be reported in the non-current 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 non-current.

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.

Questions Chapter 7 (Continued)

6. Two methods of recording accounts receivable are:
- (1) Record receivables and sales gross.
 - (2) Record receivables and sales net.

The net method is desirable from a theoretical standpoint because it values the receivable at its cash 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. Amortized cost is the receivable amount measured at the date of acquisition, adjusted for any principal payments, amortization of any premium or discount, and reduced by any impairment or estimated uncollectibility.
8. 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.
9. 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 cash 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.

10. **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 cash 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.

Questions Chapter 7 (Continued)

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.

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 cash realizable value in the statement of financial position. From the stand-point 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.

11. 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.

12. A receivable is considered impaired when a loss event indicates a negative impact on the estimated future cash flows to be received from the customer. The IASB requires that the impairment assessment should be performed as follows.
 - (1) Receivables that are individually significant should be considered for impairment separately. If impaired, the company recognizes it. Receivables that are not individually significant may also be assessed individually, but it is not necessary to do so.
 - (2) Any receivable individually assessed that is not considered impaired should be included with a group of assets with similar credit-risk characteristics and collectively assessed for impairment.
 - (3) Any receivables not individually assessed should be collectively assessed for impairment.

Questions Chapter 7 (Continued)

13. The receivable due from Bernstein Company should be written off to an appropriately named loss account and reported in the income statement as part of income from operations. 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 Bernstein 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.

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.

14. 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 company will 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.

15. The journal entry on Lombard's books would be:

Notes Receivable.....	1,000,000	
Discount on Notes Receivable		360,000
Sales Revenue		640,000*

*Assumes that seller is a dealer in this property. If not, the property might be credited, and a loss on sale of \$50,000 would be recognized.

16. 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.

17. The fair value option gives companies the option of using fair value as the measurement basis for financial instruments. The IASB believes that fair value measurement for financial instruments provides more relevant and understandable information than historical cost. If companies choose the fair value option, the receivables are recorded at fair value, with unrealized gains or losses reported as part of net income.
18. 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.
19. The risks and rewards approach is used when receivables are sold with or without recourse. A transfer of receivables should be recorded as a sale when the seller has transferred substantially all the risks and rewards of ownership of the financial asset. If the substantially all of the risks and rewards are not transferred, the company treats the transfer as a secured borrowing.

Questions Chapter 7 (Continued)

20. Full guarantee (recourse) is a guarantee from Moon that if any of the sold receivables are uncollectible, Moon will pay the factor for the amount of the uncollectible account. This guarantee represents continuing involvement by Moon after the sale. Under the risks and rewards model, the face value of the receivables factored will be reported as a liability on Moon's statement of financial position.
21. 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
Tax refund receivable.....	15,500
Advance payments on purchases.....	61,000
Investments	
Advance to subsidiary	45,500
Other Assets	
Travel advance to employees.....	22,000
Notes receivable past due plus accrued interest.....	47,000

22. 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.
23. Because the restricted cash can not be used by Woodlawn 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.
24. Both the IASB and the FASB have indicated that they believe that financial statements would be more transparent and understandable if companies recorded and reported all financial instruments at fair value. The Boards have adopted a piecemeal approach in which disclosure of fair value information in the notes is the first step. The second step is the fair value option which permits companies to record fair values in the financial statements. The fair value option for recording financial instruments such as receivables is an important step in moving closer to fair value recording.
25. **Key similarities relate to** (1) the definition used for cash equivalents, (2) accounting and reporting issues related to recognition and measurement of receivables, such as the use of allowance accounts, how to record trade and sales discounts, use of percentage of sales and receivables methods, pledging, and factoring, and (3) both Boards are working to implement fair value measurement for all financial instruments but both Boards have faced bitter opposition from various factions.

Key differences relate to (1) IFRS has no guidance for segregation of receivables with different characteristics, (2) IFRS and U.S. GAAP standards on the fair value option are similar but not identical. The international standard related to the fair value option is subject to certain qualifying criteria not in the U.S. standard. In addition, there is some difference in the financial instruments covered, (3) IFRS and U.S. GAAP differ in the criteria used to derecognize a receivable. IFRS is a combination of a risks and rewards and a loss of control approach. U.S. GAAP uses loss of control as the primary criterion. In addition, IFRS permits partial derecognition—U.S. GAAP does not.

Questions Chapter 7 (Continued)

26. Simonis makes the following entry to record the impairment.

Impairment Loss.....	5,000	
Notes Receivable (or Allowance for Doubtful Accounts).....		5,000

Under IFRS, Simonis may record recovery of losses on prior impairments. Under U.S. GAAP, reversal of impairment is not permitted. Rather the balance on the receivable after the impairment becomes the new basis for the receivable.

- *27. (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.
- *28. A receivable is considered impaired when it is probable that the creditor will be unable to collect all amounts due (both principal and interest) according to the contractual terms of the receivable. If a receivable is considered impaired, the loss due to impairment should be measured as the difference between the carrying amount and the expected future cash flows discounted at the loan's historical effective-interest rate. The loss is recorded on the books of the creditor. The debtor would not be aware of the entry made by the creditor and would not make an entry until settlement or if a modification of terms resulted.

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 7-1

Cash in bank—savings account	\$68,000
Cash on hand	9,300
Checking account balance.....	<u>17,000</u>
Cash to be reported.....	<u>\$94,300</u>

BRIEF EXERCISE 7-2

June 1	Accounts Receivable	50,000	
	Sales.....		50,000
June 12	Cash.....	48,500*	
	Sales Discounts.....	1,500	
	Accounts Receivable.....		50,000

*\$50,000 – (\$50,000 X .03) = \$48,500

BRIEF EXERCISE 7-3

June 1	Accounts Receivable	48,500*	
	Sales.....		48,500
June 12	Cash.....	48,500	
	Accounts Receivable.....		48,500

*\$50,000 – (\$50,000 X .03) = \$48,500

BRIEF EXERCISE 7-4

Bad Debt Expense	28,000	
Allowance for Doubtful Accounts		
(€1,400,000 X 2%)		28,000

BRIEF EXERCISE 7-5

(a) Bad Debt Expense	22,600	
Allowance for Doubtful Accounts		
[(10% X €250,000) – €2,400]		22,600

(b) Bad Debt Expense	22,200	
Allowance for Doubtful Accounts		
(€24,600 – €2,400)		22,200

BRIEF EXERCISE 7-6

11/1/10	Notes Receivable	30,000	
	Sales		30,000

12/31/10	Interest Receivable	300	
	Interest Revenue		
	(\$30,000 X 6% X 2/12)		300

5/1/11	Cash	30,900	
	Notes Receivable		30,000
	Interest Receivable		300
	Interest Revenue		
	(\$30,000 X 6% X 4/12)		600

BRIEF EXERCISE 7-7

Notes Receivable	16,529	
Cash		16,529
Notes Receivable	1,653	
Interest Revenue		
\$16,529 X 10%		1,653
Notes Receivable	1,818	
Interest Revenue		
(\$16,529 + \$1,653) X 10%		1,818
Cash.....	20,000	
Notes Receivable.....		20,000

BRIEF EXERCISE 7-8

Initial face value.....		€22,000
Less: Payments received	€3,000	
Provision for uncollectibility	<u>5,000</u>	<u>8,000</u>
Amortized cost.....		<u>€14,000</u>

BRIEF EXERCISE 7-9

1.	Fair value of note	\$17,500	
	Carrying value	<u>(16,000)</u>	
	Unrealized holding gain	<u>\$ 1,500</u>	
2.	Notes Receivable	1,500	
	Unrealized Holding Gain/Loss-Income		1,500

BRIEF EXERCISE 7-10

Chung, Inc.

Cash	730,000	
Finance Charge (¥1,000,000 X 2%)	20,000	
Notes Payable		750,000

Seneca National Bank

Notes Receivable	750,000	
Cash		730,000
Financing Revenue (¥1,000,000 X 2%).....		20,000

BRIEF EXERCISE 7-11

Wood

Cash.....	138,000	
Due from Factor.....	9,000*	
Loss on Sale of Receivables	3,000**	
Accounts Receivable		150,000

*6% X \$150,000 = \$9,000

**2% X \$150,000 = \$3,000

Engram

Accounts Receivable	150,000	
Due to Wood.....		9,000
Financing Revenue		3,000
Cash.....		138,000

BRIEF EXERCISE 7-12

Wood

Cash.....	138,000	
Due from Factor.....	9,000*	
Finance Charge.....	3,000**	
Liability to Engram Factors.....		150,000

*6% X \$150,000 = \$9,000

**2% X \$150,000 = \$3,000

BRIEF EXERCISE 7-13

Cash \$250,000 – [\$250,000 X (.05 + .04)]	227,500	
Due from Factor (\$250,000 X .04)	10,000	
Loss on Sale of Receivables	12,500*	
Accounts Receivable		250,000

*(\$250,000 X .05)

BRIEF EXERCISE 7-14

The entry for the sale now would be:

Cash \$250,000 – [(\$250,000 X (.05 + .04))].....	227,500	
Due from Factor (\$250,000 X .04)	10,000	
Finance Charge	12,500*	
Liability to Commercial Factors.....		250,000

*(\$250,000 X .05)

Arness's financial statements would include a liability (Liability to Commercial Factors) since the receivables were sold with a full guarantee for credit losses.

BRIEF EXERCISE 7-15

The accounts receivable turnover ratio is computed as follows:

$$\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}} = \frac{\text{€10,799}}{\frac{\text{€1,459} + \text{€1,624}}{2}} = 7.0 \text{ times}$$

BRIEF EXERCISE 7-15 (Continued)

The average collection period for accounts receivable in days is

$$\frac{365 \text{ days}}{\text{Accounts Receivable Turnover}} = \frac{365}{7.01} = 52.01 \text{ days}$$

*BRIEF EXERCISE 7-16

Petty Cash	200	
Cash		200
Office Supplies.....	94	
Miscellaneous Expense	87	
Cash Over and Short.....	4	
Cash (£200 – £15)		185

*BRIEF EXERCISE 7-17

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

***BRIEF EXERCISE 7-18**

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

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

***BRIEF EXERCISE 7-19**

National Bank (Creditor):

Bad Debt Expense.....	225,000	
Allowance for Doubtful Accounts		225,000

SOLUTIONS TO EXERCISES

EXERCISE 7-1 (10–15 minutes)

(a) Cash includes the following:

1. Commercial savings account—	
First National Bank of Olathe	\$ 600,000
1. Commercial checking account—	
First National Bank of Olathe	800,000
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, 2010, balance sheet	<u>\$8,508,700</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 \$150,000.
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.

EXERCISE 7-1 (Continued)

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.

***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 \$484,650 computed as follows:

Checking account balance	\$500,000
Overdraft.....	(17,000)
Petty cash.....	300
Coin and currency	<u>1,350</u>
	<u>\$484,650</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 \$90,000 computed as follows:

Checking account balance	\$42,000
Money market mutual fund.....	<u>48,000</u>
	<u>\$90,000</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
have been pledged as security**

for a bank loan) €89,000

Installment accounts due in 2011 23,000

Installment accounts due after

December 31, 2011* 34,000 €146,000

Other (€2,640 + €1,500)..... 4,140 €150,140**

Investments

Advance to subsidiary company..... 91,000

***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..... 70,000

Cost of goods sold..... \$250,000

EXERCISE 7-4 (Continued)

Selling price = 1.4 (Cost of good sold)
 = 1.4 (\$250,000)
 = \$350,000

Sales on account.....	\$350,000	
Less: Collections	<u>198,000</u>	
Uncollected balance.....	152,000	
Balance per ledger.....	<u>117,000</u>	
Apparent shortage.....	<u>\$ 35,000</u>	—Enough for a new car

EXERCISE 7-5 (15–20 minutes)

(a) 1. June 3	Accounts Receivable—Arquette.....	2,000	
	Sales		2,000
	June 12 Cash	1,960	
	Sales Discounts (£2,000 X 2%).....	40	
	Accounts Receivable—Arquette		2,000
2. June 3	Accounts Receivable—Arquette.....	1,960	
	Sales (£2,000 X 98%).....		1,960
	June 12 Cash	1,960	
	Accounts Receivable—Arquette		1,960

EXERCISE 7-5 (Continued)

(b)	July 29	Cash	2,000	
		 Accounts Receivable—Arquette		1,960
		 Sales Discounts Forfeited		40

(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)

July 1	Accounts Receivable	30,000	
	 Sales		30,000

July 10	Cash	29,100*	
	 Sales Discounts	900	
	 Accounts Receivable		30,000

***\$30,000 – (.03 X \$30,000) = \$29,100**

July 17	Accounts Receivable	250,000	
	 Sales		250,000

July 30	Cash	250,000	
	 Accounts Receivable		250,000

EXERCISE 7-7 (10–15 minutes)

(a)	Bad Debt Expense.....	7,500	
	Allowance for Doubtful Accounts		7,500*

*.01 X (€800,000 – €50,000) = €7,500

(b)	Bad Debt Expense.....	6,000	
	Allowance for Doubtful Accounts		6,000*

*Step 1: .05 X €160,000 = €8,000 (desired credit balance in Allowance account)

Step 2: €8,000 – €2,000 = €6,000 (required credit entry to bring allowance account to €8,000 credit balance)

EXERCISE 7-8 (5–10 minutes)

(a)	Allowance for Doubtful Accounts.....	8,000	
	Accounts Receivable.....		8,000

(b)	Accounts Receivable	\$900,000
	Less: Allowance for Doubtful Accounts.....	<u>40,000</u>
	Net realizable value	<u>\$860,000</u>

(c)	Accounts Receivable	\$892,000
	Less: Allowance for Doubtful Accounts.....	<u>32,000</u>
	Net realizable value	<u>\$860,000</u>

EXERCISE 7-9 (8–10 minutes)

(a)	Bad Debt Expense	4,950	
	Allowance for Doubtful Accounts		
	(\$80,000 X 4%) + \$1,750 = \$4,950.....		4,950
(b)	Bad Debt Expense	5,800	
	Allowance for Doubtful Accounts		
	\$580,000 X 1% = \$5,800.....		5,800

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 = \$48,000 (\$2,400,000 X 2%)**
Bad Debt Expense – Direct Write-Off = \$34,330 (\$7,800 + \$9,700 + \$7,000 + \$9,830)

Net income would be \$13,670 (\$48,000 – \$34,330) lower under the percentage-of-sales approach.

EXERCISE 7-11 (8–10 minutes)

Balance 1/1 (\$700 – \$255)	\$ 445	Over one year
4/12 (#2412) (\$1,710 – \$1,000 – \$400*)	310	Eight months and 19 days
11/18 (#5681) (\$2,000 – \$1,250)	<u>750</u>	One month and 13 days
	<u>\$1,505</u>	

*((\$890 – \$490))

Inasmuch as later invoices have been paid in full, all three of these amounts should be investigated in order to determine why Alstott 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—Legler Co.	9,800	
	Sales (€10,000 X 98%).....		9,800
7/5	Cash [€12,000 X (1 – .09)].....	10,920	
	Loss on Sale of Receivables	1,080	
	Accounts Receivable (€12,000 X 98%).....		11,760
	Sales Discounts Forfeited.....		240

(Note: It is possible that the company already recorded the Sales Discounts Forfeited. In this case, the credit to Accounts Receivable would be for €12,000. The same point applies to the next entry as well.)

EXERCISE 7-12 (Continued)

7/9	Accounts Receivable	180	
	Sales Discounts Forfeited		
	(€9,000 X 2%)		180
	Cash	5,640	
	Finance Charge (€6,000 X 6%)	360	
	Notes Payable		6,000
7/11	Accounts Receivable—Legler Co.	200	
	Sales Discounts Forfeited		
	(€10,000 X 2%)		200

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

12/29	Allowance for Doubtful Accounts	9,000	
	Accounts Receivable—Legler Co.		
	[€9,800 + €200 = €10,000;		
	€10,000 – (10% X €10,000) = €9,000]		9,000
12/31	Bad Debt Expense	75,000	
	Allowance for Doubtful Accounts		
	(€350,000 – €275,000)		75,000

EXERCISE 7-13 (10–15 minutes)

(a) 12/31/10 No entry (Carrying Value = Fair Value)

12/31/11	Unrealized Holding Gain/Loss- Income.....	1,500	
	Notes Receivable (¥44,000 – ¥42,500)		1,500

12/31/12	Notes Receivable [(¥38,000 – ¥36,000)] + ¥1,500]	3,500	
	Unrealized Holding Gain/Loss -Income.....		3,500

(b) The note will be reported at ¥42,500 on Kobiashi’s 2011 statement of financial position.

(c) Kobiashi’s 2012 income is ¥3,500 higher since the change in fair value is reported as part of net income.

EXERCISE 7-14 (10–15 minutes)

(a)	Cash	290,000	
	Finance Charge	10,000*	
	Notes Payable		300,000

*2% X \$500,000 = \$10,000

(b)	Cash	350,000	
	Accounts Receivable.....		350,000

EXERCISE 7-14 (Continued)

(c) Notes Payable	300,000	
Interest Expense	7,500*	
Cash.....		307,500

*10% X \$300,000 X 3/12 = \$7,500

EXERCISE 7-15 (15–18 minutes)

1. Cash.....	18,000	
Loss on Sale of Receivables (¥20,000 X 10%)	2,000	
Accounts Receivable.....		20,000
2. Cash	50,600	
Finance Charge (¥55,000 X 8%).....	4,400	
Notes Payable.....		55,000
3. Bad Debt Expense.....	5,850	
Allowance for Doubtful Accounts [(¥82,000 X 5%) + ¥1,750].....		5,850
4. Bad Debt Expense.....	6,450	
Allowance for Doubtful Accounts (¥430,000 X 1.5%)		6,450

EXERCISE 7-16 (10–15 minutes)

Cash.....	190,000	
Finance Charge	10,000	
Liability to Warren Company.....		200,000

EXERCISE 7-17 (15–20 minutes)

(a) According to the IASB, determining whether receivables that are transferred can be accounted for as a sale is based on an evaluation of whether the seller has transferred substantially all the risks and rewards of ownership of the receivables. If substantially all the risks and rewards of ownership of the receivables are transferred, then they are derecognized (accounted for as a sale). This is likely the case here because there is no guarantee.

(b) The following journal entry would be made:

Cash.....	235,000	
Due from Factor (€250,000 X 4%).....	10,000	
Loss on Sale (€250,000 X 2%)	5,000	
Accounts Receivable		250,000

EXERCISE 7-18 (10–15 minutes)

(a) July 1	Cash	378,000	
	Due from Factor.....	16,000*	
	Loss on Sale of Receivables.....	6,000**	
	Accounts Receivable		400,000

*(4% X ¥400,000) = ¥16,000

** $(1\frac{1}{2}\% \times ¥400,000) = ¥6,000$

(b) July 1	Accounts Receivable.....	400,000	
	Due to SEK Corp.		16,000
	Financing Revenue.....		6,000
	Cash.....		378,000

EXERCISE 7-19 (10–15 minutes)

1.	7/1/10	Notes Receivable	900,000	
		Land.....		590,000
		Gain on Sale of Land		
		(£900,000 – £590,000)		310,000

Computation of total interest

£1,416,163	Face value of note
<u>.63552</u>	Present value of 1 for 4 periods at 12%
£ 900,000	Present value of note
<u>1,416,163</u>	Face value of note
<u>£ 516,163</u>	Total interest on notes receivable

2.	7/1/10	Notes Receivable	221,163.88	
		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>
Total interest on notes receivable	<u>£178,836.32</u>

EXERCISE 7-20 (20–25 minutes)

(a)	Notes Receivable.....	247,935	
	Consulting Revenue		247,935*

***Computation of present value of note:
 PV of \$300,000 due in 2 years at 10%
 \$300,000 X .82645 = \$247,935**

(b)	Notes Receivable.....	24,794	
	Interest Revenue.....		24,794*

***\$247,935 X 10% = \$24,794**

(c)	Discount on Notes Receivable.....	27,271*	
	Interest Revenue.....		27,271

***\$52,065 – \$24,794**

	Cash.....	300,000	
	Notes Receivable		300,000

(d)	Notes Receivable.....	47,271	
	Unrealized Holding Gain or Loss—Income		47,271*

*Note Receivable, net:.....	\$247,935
Amortization, 12/31/10.....	<u>24,794</u>
Book Value, 12/31/10	<u>272,729</u>

Fair Value:	\$320,000
Carrying Value:.....	<u>(272,729)</u>
Unrealized Gain	<u>\$ 47,271</u>

EXERCISE 7-21 (10–15 minutes)

(a) Accounts Receivable	100,000	
Sales.....		100,000
Cash	80,000	
Accounts Receivable.....		80,000

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

$\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}} = \frac{\text{€100,000}}{(\text{€15,000} + \text{€35,000}^*)/2} = 4.0 \text{ times}$

$^*\text{€15,000} + \text{€100,000} - \text{€80,000}$

Average number of days to collect receivables = $\frac{365}{4.0} = 91 \text{ days}$

(c) Grant Company's turnover ratio has declined significantly. That is, it is turning receivables 4.0 times a year and collections on receivables took 91 days. In the prior year, the turnover ratio was almost double (7.0) and collections took only 52 days. This is a bad trend in liquidity. Grant should consider offering early payment discounts and/or tightened credit and collection policies.

EXERCISE 7-22 (10–15 minutes)

(a) Cash [\$10,000 X (1 – .09)]	9,100	
Due from Factor.....	500	
Loss on Sale of Receivables.....	400	
Accounts Receivable		10,000

Computation of cash received

Accounts receivable.....	€10,000
Less: Due from factor (5% X €10,000)	500
Finance charge (4% X €10,000)	400
Cash received.....	<u>€ 9,100</u>

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

$$\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}} = \frac{\$100,000}{(\text{€}15,000 + \text{€}25,000^*)/2} = 5.0 \text{ times}$$

$$^*(\text{€}15,000 + \text{€}100,000 - \text{€}80,000 - \text{€}10,000)$$

$$\text{Average number of days to collect} = \frac{365}{5.0} = 73 \text{ days}$$

With the factoring transaction, Grant Company's turnover ratio still declines but by less than in the earlier exercise. While Grant's collections have slowed, by factoring the receivables, Grant 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 Receivables account.

***EXERCISE 7-23 (5–10 minutes)**

1. April 1 Petty Cash	200	
Cash		200
2. April 10 Inventory (Transportation in)	60	
Supplies Expense	25	
Postage Expense	40	
Accounts Receivable—Employees	17	
Miscellaneous Expense	36	
Cash Over and Short	10	
Cash (\$200 – \$12)		188
3. April 20 Petty Cash	100	
Cash		100

***EXERCISE 7-24 (10–15 minutes)**

Accounts Receivable—Employees		
(\$40.00 + \$34.00)	74.00	
Nick Teasdale, Drawings	170.00	
Maintenance Expense	14.35	
Postage Expense (\$20.00 – \$7.90)	12.10	
Office Supplies	7.90	
Cash Over and Short	11.45	
Cash (\$300.00 – \$10.20)		289.80

***EXERCISE 7-25 (15–20 minutes)**

(a)

**KIPLING COMPANY
Bank Reconciliation
July 31**

Balance per bank statement, July 31		£ 8,650
Add: Deposits in transit		2,850^a
Deduct: Outstanding checks		<u>1,100^b</u>
Correct cash balance, July 31		<u>£10,400</u>
Balance per books, July 31		£ 9,250
Add: Collection of note		1,500
Less: Bank service charge	£ 15	
NSF check	<u>335</u>	<u>350</u>
Corrected cash balance, July 31		<u>£10,400</u>

^aComputation of deposits in transit

Deposits per books		£5,810
Deposits per bank in July	£ 4,500	
Less deposits in transit (June)	<u>1,540</u>	
Deposits mailed and received in July		<u>(2,960)</u>
Deposits in transit, July 31		<u>£2,850</u>

^bComputation of outstanding checks

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

***Assumed to clear bank in July**

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

(b) Cash	1,150	
Office Expenses—Bank Charges	15	
Accounts Receivable	335	
Notes Receivable		1,500

***EXERCISE 7-26 (15–20 minutes)**

(a) ARAGON COMPANY
Bank Reconciliation, August 31, 2011
County National Bank

Balance per bank statement, August 31, 2011		\$ 8,089
Add: Cash on hand	\$ 310	
Deposits in transit	<u>3,800</u>	<u>4,110</u>
		12,199
Deduct: Outstanding checks		<u>1,550</u>
Correct cash balance		<u>\$10,649</u>
Balance per books, August 31, 2011		
(\$10,050 + \$35,000 – \$35,403)		\$ 9,647
Add: Note (\$1,000) and interest (\$40) collected		<u>1,040</u>
		10,687
Deduct: Bank service charges	\$ 20	
Understated check for supplies	<u>18</u>	<u>38</u>
Correct cash balance		<u>\$10,649</u>

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

***EXERCISE 7-26 (Continued)**

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

(c) The corrected cash balance of \$10,649 would be reported in the August 31, 2011, balance sheet.

***EXERCISE 7-27 (15-25 minutes)**

(a) Journal entry to record issuance of loan by Paris Bank:
December 31, 2010

Notes Receivable.....	100,000	
Discount on Notes Receivable		37,908
Cash		62,092

€100,000 X Present value of 1 for 5 periods at 10%

€100,000 X .62092 = €62,092

(b) Note Amortization Schedule
(Before Impairment)

Date	Cash Received (0%)	Interest Revenue (10%)	Increase in Carrying Amount	Carrying Amount of Note
12/31/10				€62,092
12/31/11	€0	€6,209	€6,209	68,301
12/31/12	0	6,830	6,830	75,131

***EXERCISE 7-27 (Continued)**

Computation of the impairment loss:

Carrying amount of investment (12/31/12)	€75,131
Less: Present value of €75,000 due in 3 years at 10% (€75,000 X .75132)	<u>56,349</u>
Loss due to impairment.....	<u>€18,782</u>

The entry to record the loss by Paris Bank is as follows:

Bad Debt Expense.....	18,782	
Allowance for Doubtful Accounts		18,782

Note: Iva Majoli Company, the debtor, makes no entry because it still legally owes €100,000.

***EXERCISE 7-28 (15-25 minutes)**

(a) Cash received by Conchita Martinez Company on December 31, 2010:

Present value of principal (\$1,000,000 X .56743).....	\$567,430
Present value of interest (\$100,000 X 3.60478).....	<u>360,478</u>
Cash received	<u>\$927,908</u>

(b) **Note Amortization Schedule
(Before Impairment)**

Date	Cash Received (10%)	Interest Revenue (12%)	Increase in Carrying Amount	Carrying Amount of Note
12/31/10				\$927,908
12/31/11	\$100,000	\$111,349	\$11,349	939,257
12/31/12	100,000	112,711	12,711	951,968

***EXERCISE 7-28 (Continued)**

(c) Loss due to impairment:

Carrying amount of loan (12/31/12)		\$951,968
Less: Present value of \$600,000 due in 3 years ($\$600,000 \times .71178$)	427,068	
Present value of \$100,000 payable annually for 3 years ($\$100,000 \times 2.40183$)	240,183	<u>667,251</u>
Loss due to impairment		<u>\$284,717</u>

TIME AND PURPOSE OF PROBLEMS

Problem 7-1 (Time 20–25 minutes)

Purpose—to provide the student with an understanding of the statement of financial position effect that occurs when the cash book is left open. In addition, the student is asked to adjust the present statement of financial position to an adjusted statement of financial position, 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 statement of financial position 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 simple note receivable problem with no imputation of interest.

Problem 7-9 (Time 30–35 minutes)

Purpose—to provide the student with a 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 statement of financial position. 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 guarantee (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.

***Problem 7-15** (Time 30–40 minutes)

Purpose—to provide the student with a loan impairment situation that requires entries by both the debtor and the creditor and an analysis of the loss on impairment.

SOLUTIONS TO PROBLEMS

PROBLEM 7-1

(a) **December 31**

Accounts Receivable (€17,640 + €360)	18,000	
Sales	28,000	
Cash		45,640
Sales Discounts		360

December 31

Cash	22,200	
Purchase Discounts	250	
Accounts Payable.....		22,450

(b)

	<u>Per Balance</u> <u>Sheet</u>	<u>After</u> <u>Adjustment</u>
Current assets		
Inventories	€ 67,000	€ 67,000
Receivables (€42,000 + €18,000)	42,000	60,000
Cash (€39,000 – €45,640 + €22,200).....	<u>39,000</u>	<u>15,560</u>
Total	(1) <u>148,000</u>	<u>142,560</u>
Current liabilities		
Accounts payable		
(€45,000 + €22,450).....	45,000	67,450
Other current liabilities.....	<u>14,200</u>	<u>14,200</u>
Total	(2) <u>59,200</u>	<u>81,650</u>
Working capital	(1) – (2) <u>€88,800</u>	<u>€60,910</u>
Current ratio	(1) ÷ (2) 2.5 to 1	1.75 to 1

PROBLEM 7-2

1.	Net sales.....	\$1,200,000
	Percentage	X 1 1/2%
	Bad debt expense	<u>\$ 18,000</u>
2.	Accounts receivable	\$1,750,000
	Amounts estimated to be uncollectible.....	<u>(180,000)</u>
	Net realizable value	<u>\$1,570,000</u>
3.	Allowance for doubtful accounts 1/1/10.....	\$ 17,000
	Establishment of accounts written off in prior years.....	8,000
	Customer accounts written off in 2010.....	(30,000)
	Bad debt expense for 2010 (\$2,400,000 X 3%).....	<u>72,000</u>
	Allowance for doubtful accounts 12/31/10	<u>\$ 67,000</u>
4.	Bad debt expense for 2010	\$ 84,000
	Customer accounts written off as uncollectible during 2010	<u>(24,000)</u>
	Allowance for doubtful accounts balance 12/31/10.....	<u>\$ 60,000</u>
	Accounts receivable, net of allowance for doubtful Accounts.....	\$ 950,000
	Allowance for doubtful accounts balance 12/31/10.....	<u>60,000</u>
	Accounts receivable, before deducting allowance for doubtful accounts.....	<u>\$1,010,000</u>
5.	Accounts receivable	\$ 310,000
	Percentage	X 3%
	Bad debt expense, before adjustment	9,300
	Allowance for doubtful accounts (debit balance)	<u>14,000</u>
	Bad debt expense, as adjusted	<u>\$ 23,300</u>

PROBLEM 7-3

- (a) The Allowance for Doubtful Accounts should have a balance of \$45,000 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	.20	8,000
61–75 days	20,000	.45	<u>9,000</u>
Balance for Allowance for Doubtful Accounts			<u>\$45,000</u>

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 Accounts 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>45,000</u>
Accounts receivable (net).....	<u>\$495,000</u>

- (c) The year-end bad debt adjustment would decrease before-tax income \$20,000 as computed below:

Estimated amount required in the Allowance for Doubtful Accounts.....	\$45,000
Balance in the account after write-off of uncollectible accounts but before adjustment (\$40,000 – \$15,000)	<u>25,000</u>
Required charge to expense	<u>\$20,000</u>

PROBLEM 7-4

(a)

FORTNER CORPORATION
Analysis of Changes in the
Allowance for Doubtful Accounts
For the Year Ended December 31, 2010

Balance at January 1, 2010	£130,000
Provision for doubtful accounts (£9,000,000 X 2%)	180,000
Recovery in 2010 of bad debts written off previously	<u>15,000</u>
	325,000
Deduct write-offs for 2010 (£90,000 + £60,000)	<u>150,000</u>
Balance at December 31, 2010 before change in accounting estimate	175,000
Increase due to change in accounting estimate during 2010 (£263,600 – £175,000)	<u>88,600</u>
Balance at December 31, 2010 adjusted (Schedule 1)	<u>£263,600</u>

Schedule 1

Computation of Allowance for Doubtful Accounts
at December 31, 2010

Aging Category	Balance	%	Doubtful Accounts
Nov–Dec 2010	£1,080,000	2	£ 21,600
July–Oct	650,000	10	65,000
Jan–Jun	420,000	25	105,000
Prior to 1/1/10	90,000(a)	80	<u>72,000</u>
			<u>£263,600</u>

(a) £150,000 – £60,000

PROBLEM 7-4 (Continued)

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

Bad Debt Expense.....	88,600	
 Allowance for Doubtful Accounts		88,600
(To increase the allowance for doubtful accounts at December 31, 2010, resulting from a change in accounting estimate)		

PROBLEM 7-5

Bad Debt Expense	3,240	
Accounts Receivable		3,240
(To correct bad debt expense and write off accounts receivable)		
Accounts Receivable	4,840	
Advance on Sales Contract		4,840
(To reclassify credit balance in accounts receivable)		
Allowance for Doubtful Accounts	3,700	
Accounts Receivable		3,700
(To write off \$3,700 of uncollectible accounts)		
Allowance for Doubtful Accounts	7,279.64	
Bad Debt Expense		7,279.64
(To reduce allowance for doubtful account balance)		
Balance (\$8,750 + \$18,620 – \$3,240 – \$3,700)	\$20,430.00	
Corrected balance (see below)	(13,150.36)	
Adjustment	<u>\$ 7,279.64</u>	

Age	Balance	Aging Schedule	
Under 60 days	\$172,342	1%	\$ 1,723.42
60–90 days	141,330 (\$136,490 + \$4,840)	3%	4,239.90
91–120 days	36,684 (\$39,924 – \$3,240)	6%	2,201.04
Over 120 days	19,944 (\$23,644 – \$3,700)	25%	4,986.00
			<u>\$13,150.36</u>

PROBLEM 7-5 (Continued)

If the student did not make the entry to record the \$3,700 write-off earlier, the following would change in the problem. After the adjusting entry for \$7,279.64, an entry would have to be made to write off the \$3,700.

Balance (\$8,750 + \$18,620 – \$3,240).....	\$24,130.00
Corrected balance (see below)	<u>(16,850.36)</u>
Adjustment	<u>\$ 7,279.64</u>

<u>Age</u>	<u>Balance</u>	<u>Aging Schedule</u>	
Under 60 days	\$172,342	1%	\$ 1,723.42
60–90 days	141,330	3%	4,239.90
91–120 days	36,684	6%	2,201.04
Over 120 days	23,644	—	<u>8,686.00*</u>
			<u>\$16,850.36</u>

*\$3,700 + (25% X \$19,944)

PROBLEM 7-6

-1-

Cash	136,800*	
Sales Discounts	1,200	
Accounts Receivable		138,000

*[\$138,000 – (\$60,000 X 2%)]

-2-

Accounts Receivable	5,300	
Allowance for Doubtful Accounts		5,300

Cash	5,300	
Accounts Receivable		5,300

-3-

Allowance for Doubtful Accounts	17,500	
Accounts Receivable		17,500

-4-

Bad Debt Expense	14,900	
Allowance for Doubtful Accounts		14,900*

*(\$17,300 + \$5,300 – \$17,500 = \$5,100;
\$20,000 – \$5,100 = \$14,900)

PROBLEM 7-7

(000's omitted)

July 1, 2010

Cash	119,250	
Finance Charge (.005 X ¥150,000).....	750	
Notes Payable (80% X ¥150,000).....		120,000

July 31, 2010

Notes Payable.....	80,000	
Accounts Receivable.....		80,000
Finance Charge	350	
Finance Charge Payable (.005 X ¥70,000).....		350

August 31, 2010

Notes Payable.....	40,000	
Cash*	9,550	
Finance Charge (.005 X [¥150,000 – ¥80,000 – ¥50,000])	100	
Finance Charge Payable	350	
Accounts Receivable.....		50,000

*Total cash collection.....	¥50,000	
Less: Finance charge payable (from previous entry)	350	
Finance charge (current month) [(.005 X (¥150,000 – ¥80,000 – ¥50,000)]	100	
Note payable (balance) (¥120,000 – ¥80,000)	<u>40,000</u>	
Cash collected.....	<u>¥ 9,550</u>	

PROBLEM 7-8

10/1/10	Notes Receivable	120,000	
	Sales		120,000
12/31/10	Interest Receivable.....	2,400*	
	Interest Revenue		2,400
	*\$120,000 X .08 X 3/12 = <u>\$2,400</u>		
10/1/11	Cash	9,600*	
	Interest Receivable.....		2,400
	Interest Revenue		7,200**
	*\$120,000 X .08 = <u>\$9,600</u>		
	**\$120,000 X .08 X 9/12 = <u>\$7,200</u>		
12/31/11	Interest Receivable.....	2,400	
	Interest Revenue		2,400
10/1/12	Cash	9,600	
	Interest Receivable.....		2,400
	Interest Revenue		7,200
	Cash	120,000	
	Notes Receivable		120,000

Note: Entries at 10/1/11 and 10/1/12 assumes reversing entries were not made on January 1, 2011 and January 1, 2012.

PROBLEM 7-9

(a)	December 31, 2010		
	Cash	40,000	
	Notes Receivable	62,049	
	Service Revenue		102,049

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

PV of \$20,000 annuity @ 11% for 4 years (\$20,000 X 3.10245).....	\$ 62,049
Down payment	<u>40,000</u>
Capitalized value of services	<u>\$102,049</u>

(b)	December 31, 2011		
	Cash	20,000	
	Notes Receivable		20,000
	 Notes Receivable	 6,825	
	Interest Revenue		6,825

Schedule of Note Discount Amortization

Date	Cash Received	Interest Revenue	Carrying Amount of Note
12/31/10	—	—	\$62,049
12/31/11	\$20,000	\$6,825 ^a	48,874 ^b
12/31/12	20,000	5,376	34,250
12/31/13	20,000	3,768	18,018
12/31/14	20,000	1,982	—

^a\$6,825 = \$62,049 X 11%

^b\$48,874 = \$62,049 + \$6,825 – \$20,000

PROBLEM 7-9 (Continued)

(c)	December 31, 2012		
	Cash	20,000	
	Notes Receivable.....		20,000
	Notes Receivable	5,376	
	Interest Revenue.....		5,376
(d)	December 31, 2013		
	Cash	20,000	
	Notes Receivable.....		20,000
	Notes Receivable	3,768	
	Interest Revenue.....		3,768
(e)	December 31, 2014		
	Cash	20,000	
	Notes Receivable.....		20,000
	Notes Receivable	1,982	
	Interest Revenue.....		1,982

PROBLEM 7-10

(a) BRADDOCK INC.
Long-Term Receivables Section of Statement of Financial Position
December 31, 2010

<hr/>		
9% note receivable from sale of division, due in annual installments of \$500,000 to May 1, 2012, less current installment.....	\$ 500,000	(1)
8% note receivable from officer, due Dec. 31, 2012, collateralized by 10,000 shares of Braddock, 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, 2012	86,873	(2)
Installment contract receivable, due in annual installments of \$45,125 to July 1, 2014, less current installment.....	<u>110,275</u>	(3)
Total long-term receivables	<u>\$1,097,148</u>	

(b) BRADDOCK INC.
Partial Statement of Financial Position Balances
December 31, 2010

<hr/>		
Current portion of long-term receivables:		
Note receivable from sale of division.....	\$500,000	(1)
Installment contract receivable	<u>29,725</u>	(3)
Total current portion of long-term receivables.....	<u>\$529,725</u>	
Accrued interest receivable:		
Note receivable from sale of division.....	60,000	(4)
Installment contract receivable	<u>7,700</u>	(5)
Total accrued interest receivable	<u>\$ 67,700</u>	

PROBLEM 7-10 (Continued)

(c)

BRADDOCK INC.

Interest Revenue from Long-Term Receivables

For the Year Ended December 31, 2010

Interest income:

Note receivable from sale of division	\$105,000	(6)
Note receivable from sale of patent	7,173	(2)
Note receivable from officer	32,000	(7)
Installment contract receivable from sale of land	<u>7,700</u>	(5)
Total interest income for year ended 12/31/10.....	<u>\$151,873</u>	

Explanation of Amounts

(1) Long-term Portion of 9% Note Receivable at 12/31/10

Face amount, 5/1/09	\$1,500,000
Less: Installment received 5/1/10.....	<u>500,000</u>
Balance, 12/31/10	1,000,000
Less: Installment due 5/1/11	<u>500,000</u>
Long-term portion, 12/31/10	<u>\$ 500,000</u>

**(2) Zero-interest-bearing Note, Net of Imputed Interest
at 12/31/10**

Face amount 4/1/10	\$ 100,000
Less: Imputed interest	
[\$100,000 – (\$100,000 X 0.797)].....	<u>20,300</u>
Balance, 4/1/09.....	79,700
Add: Interest earned to 12/31/10	
(\$79,700 X 12% X 9/12).....	<u>7,173</u>
Balance, 12/31/10	<u>\$ 86,873</u>

PROBLEM 7-10 (Continued)

(3) Long-term Portion of Installment Contract

Receivable at 12/31/10

Contract selling price, 7/1/10	\$ 200,000
Less: Down payment, 7/1/10	<u>60,000</u>
Balance, 12/31/10	140,000
Less: Installment due, 7/1/12	
[\$45,125 – (\$140,000 X 11%)]	<u>29,725</u>
Long-term portion, 12/31/11	<u>\$ 110,275</u>

(4) Accrued Interest—Note Receivable, Sale of Division at 12/31/10

Interest accrued from 5/1 to 12/31/10	
(\$1,000,000 X 9% X 8/12)	<u>\$ 60,000</u>

(5) Accrued Interest—Installment Contract at 12/31/10

Interest accrued from 7/1 to 12/31/10	
(\$140,000 X 11% X 1/2)	<u>\$ 7,700</u>

(6) Interest Revenue—Note Receivable, Sale of Division, for 2010

Interest earned from 1/1 to 5/1/2010	
(\$1,500,000 X 9% X 4/12)	\$ 45,000
Interest earned from 5/1 to 12/31/10	
(\$1,000,000 X 9% X 8/12)	<u>60,000</u>
Interest income	<u>\$ 105,000</u>

(7) Interest Revenue—Note Receivable, Officer, for 2010

Interest earned 1/1/ to 12/31/10	
(\$400,000 X 8%)	<u>\$ 32,000</u>

PROBLEM 7-11

SANDBURG COMPANY
Income Statement Effects
For the Year Ended December 31, 2010

Expenses resulting from accounts receivable assigned (Schedule 1).....	€22,320
Loss resulting from accounts receivable sold (€300,000 – €270,000).....	<u>30,000</u>
Total expenses	<u>€52,320</u>

Schedule 1

**Computation of Expense
for Accounts Receivable Assigned**

Assignment expense:			
Accounts receivable assigned.....		€400,000	
	X	<u>80%</u>	
Advance by Keller Finance Company.....		320,000	
	X	<u>3%</u>	€ 9,600
Interest expense.....			<u>12,720</u>
Total expenses.....			<u>€22,320</u>

***PROBLEM 7-12**

(a)	Petty Cash	250.00	
	Cash		250.00
	Postage Expense	33.00	
	Supplies	65.00	
	Accounts Receivable—Employees	30.00	
	Shipping Expense.....	57.45	
	Advertising Expense.....	22.80	
	Misc. Expense	15.35	
	Cash (£250.00 – £26.40).....		223.60
	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>850</u>
	Correct cash balance, May 31		<u>£8,918</u>
	Balance per books:		£8,015*
	Add: Note receivable (collected with interest).....		<u>930</u>
			8,945
	Deduct: Bank Service Charges		<u>27</u>
	Correct cash balance, May 31		<u>£8,918</u>
	*(£8,850 + £31,000 – £31,835)		
	Cash.....	930	
	Note Receivable		900
	Interest Revenue.....		30
	Office Expense—Bank Charges.....	27	
	Cash.....		27
(c)	£8,918 + £300 = £9,218.		

***PROBLEM 7-13**

(a)

**AGUILAR CO.
Bank Reconciliation
June 30, 2010**

Balance per bank, June 30.....	\$4,150.00
Add: Deposits in transit.....	3,390.00
Deduct: Outstanding checks	<u>2,136.05</u>
Correct cash balance, June 30	<u>\$5,403.95</u>

Balance per books, June 30		\$3,969.85
Add: Error in recording deposit (\$90 – \$60).....	\$ 30.00	
Error on check no. 747		
(\$582.00 – \$58.20).....	523.80	
Note collection (\$1,200 + \$36)	<u>1,236.00</u>	<u>1,789.80</u>
		5,759.65

Deduct: NSF check.....	253.20	
Error on check no. 742 (\$491 – \$419).....	72.00	
Bank service charges (\$25 + \$5.50)	<u>30.50</u>	<u>355.70</u>

Correct cash balance, June 30	<u>\$5,403.95</u>
-------------------------------------	-------------------

(b) Cash	1,789.80	
Accounts Receivable		30.00*
Accounts Payable		523.80**
Notes Receivable		1,200.00
Interest Revenue		36.00

Accounts Receivable.....	253.20	
Accounts Payable.....	72.00***	
Office Expense—Bank Charges	30.50	
Cash.....		355.70

*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) HASELHOF INC.
Bank Reconciliation
November 30**

Balance per bank statement, November 30	\$56,274.20
Add:	
Cash on hand, not deposited	<u>1,915.40</u>
	58,189.60

Deduct:	
Outstanding checks	
#1224	\$1,635.29
#1230	2,468.30
#1232	2,125.15
#1233	<u>482.17</u>
	<u>6,710.91</u>
Correct cash balance, Nov. 30	<u>\$51,478.69</u>

Balance per books, November 30	\$50,478.22*
Add:	
Bond interest collected by bank	<u>1,400.00</u>
	51,878.22

Deduct:	
Bank charges not recorded in books	\$ 27.40
Customer's check returned NSF	<u>372.13</u>
	<u>399.53</u>
Correct cash balance, Nov. 30	<u>\$51,478.69</u>

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

Balance per books, October 31	\$ 41,847.85
Add receipts for November	<u>173,523.91</u>
	215,371.76
Deduct disbursements for November	<u>164,893.54</u>
Balance per books, November 30	<u>\$ 50,478.22</u>

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

(b)	November 30		
Cash		1,400.00	
Interest Revenue.....			1,400.00

	November 30		
Office Expense—Bank Charges.....		27.40	
Cash.....			27.40

	November 30		
Accounts Receivable		372.13	
Cash.....			372.13

***PROBLEM 7-15**

(a) The entries for the issuance of the note on January 1, 2010:

The present value of the note is: $\$1,200,000 \times .68058 = \$816,700$
(Rounded by \$4).

Botosan Company (Debtor):

Cash.....	816,700	
Note Payable		816,700

National Organization Bank (Creditor):

Notes Receivable.....	816,700	
Cash		816,700

(b) The amortization schedule for this note is:

**SCHEDULE FOR INTEREST AND DISCOUNT AMORTIZATION—
EFFECTIVE-INTEREST METHOD
\$1,200,000 Note Issued to Yield 8%**

Date	Cash Paid	Interest Expense	Discount Amortized	Carrying Amount of Note
1/1/10				\$ 816,700
12/31/10	\$0	\$ 65,336*	\$ 65,336	882,036**
12/31/11	0	70,563	70,563	952,599
12/31/12	0	76,208	76,208	1,028,807
12/31/13	0	82,305	82,305	1,111,112
12/31/14	0	88,888	88,888	1,200,000
Total	<u>\$0</u>	<u>\$383,300</u>	<u>\$383,300</u>	

* $\$816,700 \times 8\% = \$65,336$.

** $\$816,700 + \$65,336 = \$882,036$.

***PROBLEM 7-15 (Continued)**

(c) The note can be considered to be impaired only when it is probable that, based on current information and events, National Organization Bank will be unable to collect all amounts due (both principal and interest) according to the contractual terms of the loan.

(d) The loss is computed as follows:

Carrying amount of loan (12/31/11)	\$952,599 ^a
Less: Present value of \$800,000 due in 3 years at 8%.....	<u>(635,064)^b</u>
Loss due to impairment.....	<u>\$317,535</u>

^aSee amortization schedule from answer (b).

^b\$800,000 X .79383 = \$635,064.

December 31, 2011

National Organization Bank (Creditor):

Bad Debt Expense	317,535
Allowance for Doubtful Accounts.....	317,535

Note: Botosan Company (Debtor) has no entry.

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 provide the student the opportunity 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 account and the bad debts expense.

CA 7-5 (Time 25–30 minutes)

Purpose—to provide the student the opportunity to prepare an accounts receivable aging schedule, compute the amount of the adjustment, and prepare 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—to provide the student the opportunity to account for 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—to provide the student the opportunity to calculate interest revenue on an interest-bearing note and a zero-interest-bearing note, and indicate how the notes should be reported on the statement of financial position. 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 statement of financial position by reporting them at more than their cash 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 statement of financial position 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) Kimmel 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 Kimmel's sales revenues when customers do not take the sales discounts. Kimmel'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, 2010, Kimmel 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 guarantee (recourse) basis is equivalent to a sale. The difference between the cash received and the carrying amount of the receivables is a loss.
- (d) Kimmel 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 statement of financial position as noncurrent assets. Both assets are due on September 30, 2012, which is more than one year from the date of the statement of financial position.

CA 7-2 (Continued)

Kimbel should report interest revenue from the notes receivable on its income statement for the year ended December 31, 2010. 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 account on the theory that bad debts (including related expenses) are established at the time the allowance is first established. As a result, the allowance account 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 Wallace Company is a calendar-year company, six months of interest should be accrued on 12/31/10. The remaining interest revenue should be recognized on 6/30/11 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 Wallace’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 expense recognition 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 expense recognition 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 Wallace's statement of financial position, 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 Wallace'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)

VALASQUEZ COMPANY Accounts Receivable Aging Schedule May 31, 2011

	Proportion of Total	Amount in Category	Probability of Non-Collection	Estimated Uncollectible Amount
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>

(b) **VALASQUEZ COMPANY**
Analysis of Allowance for Doubtful Accounts
May 31, 2011

June 1, 2010 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) Corrs should increase the carrying amount of the note receivable by the effective-interest revenue earned for the period February 1 to May 1, 2010. Corrs should account for the sale of the note receivable without guarantee (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, Corrs should recognize 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 guarantee (recourse), at the time of sale, Corrs would have recorded a liability to the factor.

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, 2009, fair value. The note's September 30, 2009, fair value equals the present value of the two installments discounted at the buyer's September 30, 2009, market rate of interest.
 - 2. Rolen reports 2009 interest revenue determined by multiplying the note's carrying amount at September 30, 2009, times the buyer's market rate of interest at the date of issue, times three-twelfths. Rolen 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 2009 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 guarantee, Rolen should increase a liability to the factor by the carrying amount of the note, increase cash by the amount received, record a receivable from the factor for the proceeds retained by the factor to cover sales returns and allowances and report the difference as a finance charge as part of income from continuing operations.
- (c) Rolen should decrease cash, increase notes (accounts) receivable past due for all payments caused by the note's dishonor and eliminate the liability to the factor and the original note receivable. 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.

CA 7-8

- (a) 1. For the interest-bearing note receivable, the interest revenue for 2010 should be determined by multiplying the principal (face) amount of the note by the note's rate of interest by one half (July 1, 2010 to December 31, 2010). 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 2010 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, 2010 to December 31, 2010). The carrying value of the note at September 1, 2010 is the face amount discounted for two years at the prevailing interest rate from the maturity date of August 31, 2012 back to the issuance date of September 1, 2010. 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, 2010 as a current asset at its principal (face) amount.

The zero-interest-bearing note receivable should be reported at December 31, 2010 as a non-current asset at its face amount less the unamortized discount on the note at December 31, 2010.

- (c) Because the trade accounts receivable are assigned, Moresan 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 Indigo Finance until the amount advanced by Indigo is settled. The payments to Indigo 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, 2010, Moresan 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 Henderson Enterprises stock to Bimini 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 Bimini is open to question. Bimini 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 X 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 Henderson Stock	315,968	
Investment in Henderson Stock.....		3,000,000
Discount on Notes Receivable.....		1,315,968

CA 7-10

To: Mark Price, Branch Manager

From: Accounting Major

Date: October 3, 2010

Subject: Shortage in the Accounts Receivable Account

While performing a routine test on accounts receivable balances today, I discovered a \$58,000 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 \$188,000 made on account this year and calculated the ending balance to be \$190,000. 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 Kelly Collins, the receivables clerk. I will supervise Collins 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 Marvin 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 Marvin'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) M&S's cash and cash equivalents include short-term deposits with banks and other financial institutions, with an initial maturity of three months or less and credit card debtors receivable within 48 hours. The carrying amount of these assets approximates their fair value.**
- (b) As of March 29, 2008, M&S had 318 million pounds in cash and cash equivalents. The major uses of cash were capital expenditure and financial investment, other equity financing, and equity dividends paid.**
- (c) M&S reports trade receivables of 87.9 million pounds and 84.6 million pounds (net) in 2008. M&S has trade receivables of 12.6 million pounds that were past due but not impaired.**

COMPARATIVE ANALYSIS CASE

	<u>Cadbury</u>	<u>Nestlé</u>	
(a)	<p>251 million pounds Cash and cash equivalents 12/31/08</p> <p>Cash and cash equivalents comprise cash on hand and demand deposits.</p>	<p>5,835 million CHF</p>	<p>Cash and cash equivalents 12/31/08</p> <p>Cash and cash equivalents are cash balances, deposits at sight as well as time deposits and placements in commercial paper the maturities of which are three months or less at inception.</p>
(b)	<p>1,067 million pounds Trade and other receivables 12/31/08</p> <p>46 million pounds Provision for impairment of receivables</p> <p>4.13% Percentage of gross receivable</p> <p>Nestlé has the greater allowance amount (without factoring in exchange rates), but Cadbury has the greater allowance as a percentage of gross receivables</p>	<p>13,442 million CHF</p> <p>444 million CHF</p> <p>3.20%</p>	<p>Trade and other receivables</p> <p>12/31/08 allowance for doubtful receivables</p> <p>Percentage of gross receivable</p>
(c)	<p>5,384 million pounds Revenue for 2008</p> <p>4.8 (5,384 ÷ 1,132) Receivables turnover ratio for 2008</p> <p>76.0 Days outstanding for receivables</p> <p>Nestlé's receivables are outstanding by about 29 days less than Cadbury's receivables, which shows that Nestlé is able to collect its receivables about a month earlier than Cadbury can. Perhaps Cadbury has looser credit policies, or Nestlé may have stricter credit policies.</p>	<p>109,908 million CHF</p> <p>7.8 (109,908 ÷ 14,166)</p> <p>46.8</p>	<p>Sales for 2008</p> <p>Receivables turnover ratio for 2008</p> <p>Days outstanding for receivables</p>

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) 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.

- (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)	addidas	Puma
(1) Current ratio	$\frac{€4,934}{€3,645} = 1.4$	$\frac{€1,362.1}{€614.8} = 2.2$
(2) Working capital	$€4,934 - €3,645 = €1,289$	$€1,362.1 - €614.8 = €747.3$

Puma's current ratio is significantly higher than addidas's, but its working capital is €542 million less. Based on these measures, Puma would be considered more liquid than addidas since the current ratio is a better comparison measure.

(c) Yes, a company can have too many liquid assets. Liquid assets earn little or no return. Thus, addidas'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

$$(a) \text{ Receivable Turnover } \frac{\text{2008}}{\frac{\text{€10,799}}{(\text{€1,624} + \text{€1,459})/2}} = \frac{\text{€10,799}}{\text{€1,541.5}} = 7.01 \text{ times}$$

Or a collection period of 52 days ($365 \div 7.01$).

(b) Bad Debt Expense	53	
Allowance for Doubtful Accounts.....		53
 Allowance for Doubtful Accounts	45	
Accounts Receivable		45

- (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.

ACCOUNTING

(a) Accounts Receivable:

Beginning balance	\$ 46,000
Credit sales during 2011	255,000
Collections during 2011	(228,000)
Factored receivables	<u>(10,000)</u>
Ending balance	<u>\$ 63,000</u>

Allowance for Doubtful Accounts:

Beginning balance	\$ 550
Write-offs	(1,600)
2011 Bad debt expense	<u>2,625*</u>
Ending balance (\$63,000 X 2.5%).....	<u>\$ 1,575</u>

*2011 Bad Debt Expense is the amount needed to make the ending balance in the Allowance for Doubtful Accounts equal to \$1,575. In other words, \$550 – \$1,600 + Bad debt expense = \$1,575. Therefore, Bad debt expense = \$1,575 + \$1,600 – \$550 = \$2,625.

(b) Current assets section of December 31, 2011 Flatiron Pub statement of financial position

Accounts receivable (net of \$1,575 allowance for uncollectibles	\$61,425
Interest receivable	50
Due from factor	200
Note receivable	5,000
Postage stamps	110
Other	3,925
Cash	<u>5,575</u>
Total current assets	<u>\$76,285</u>

Calculations:

Cash = \$5,575 = \$1,575 + \$4,000

Account receivable, net = \$61,425 = \$63,000 – \$1,575

Interest receivable = \$50 = (\$5,000 X 0.12)(1/12)

Due from factor = \$200 = (\$2,000 X 0.10)

ACCOUNTING, ANALYSIS, AND PRINCIPLES (Continued)

ANALYSIS

- (a) 2010 current ratio = $(\$2,000 + \$46,000 - \$550 + \$8,500) \div \$37,000 = 1.51$
2011 current ratio = $\$76,285 \div \$44,660 = 1.71$

$$\text{2011 Accounts Receivable turnover} = \$255,000 \div [(\$46,000 - \$550 + \$61,425) \div 2] = \$255,000 \div \$53,437.5 = 4.77$$

Both the current ratio and the accounts receivable turnover ratio suggest that Flatiron's liquidity has improved relative to 2010.

- (b) With a secured borrowing, the receivables would stay on The Flatiron's books and a note payable would be recorded. This would reduce both the current ratio and accounts receivable turnover ratio.

PRINCIPLES

The expense recognition principle requires that bad debt expense be recorded in the period of the sale. Otherwise, income will be overstated by the amount of bad debt expense. In addition, reporting the receivables net of the allowance provides a more representationally faithful reporting (at net realizable value) of this asset.

- (a) IAS 39, paragraphs 18-28 addresses derecognition of financial assets.
- (b) According to paragraph 19, “An entity transfers a financial asset if, and only if, it either:
 - a. transfers the contractual rights to receive the cash flows of the financial asset; or
 - b. retains the contractual rights to receive the cash flows of the financial asset, but assumes a contractual obligation to pay the cash flows to one or more recipients in an arrangement that meets the conditions in paragraphs 19.”

(c) **Definitions:**

1. *Derecognition* is the removal of a previously recognised financial asset or financial liability from an entity’s statement of financial position.
2. The *amortised cost of a financial asset or financial liability* is the amount at which the financial asset or financial liability is measured at initial recognition minus principal repayments, plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, and minus any reduction (directly or through the use of an allowance account) for impairment or uncollectibility.

(d) **Continuing involvement in transferred assets:**

If an entity neither transfers nor retains substantially all the risks and rewards of ownership of a transferred asset, and retains control of the transferred asset, the entity continues to recognise the transferred asset to the extent of its continuing involvement. The extent of the entity’s continuing involvement in the transferred asset is the extent to which it is exposed to changes in the value of the transferred asset. For example:

- a. When the entity’s continuing involvement takes the form of guaranteeing the transferred asset, the extent of the entity’s continuing involvement is the lower of (i) the amount of the asset and (ii) the maximum amount of the consideration received that the entity could be required to repay (‘the guarantee amount’).

PROFESSIONAL RESEARCH (Continued)

- b. When the entity's continuing involvement takes the form of a written or purchased option (or both) on the transferred asset, the extent of the entity's continuing involvement is the amount of the transferred asset that the entity may repurchase. However, in case of a written put option on an asset that is measured at fair value, the extent of the entity's continuing involvement is limited to the lower of the fair value of the transferred asset and the option exercise price (see paragraph AG48).**
- c. When the entity's continuing involvement takes the form of a cash-settled option or similar provision on the transferred asset, the extent of the entity's continuing involvement is measured in the same way as that which results from non-cash settled options as set out in (b) above.**

When an entity continues to recognise an asset to the extent of its continuing involvement, the entity also recognises an associated liability. Despite the other measurement requirements in this Standard, the transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the entity has retained. The associated liability is measured in such a way that the net carrying amount of the transferred asset and the associated liability is:

- a. the amortised cost of the rights and obligations retained by the entity, if the transferred asset is measured at amortised cost; or**
- b. equal of the fair value of the rights and obligations retained by the entity when measured on a stand-alone basis, if the transferred asset is measured at fair value.**

The entity shall continue to recognise any income arising on the transferred asset to the extent of its continuing involvement and shall recognise any expense incurred on the associated liability.

PROFESSIONAL RESEARCH (Continued)

For the purpose of subsequent measurement, recognized changes in the fair value of the transferred asset and the associated liability are accounted for consistently with each other in accordance with paragraph 55, and shall not be offset.

If an entity's continuing involvement is in only a part of a financial asset (e.g., when an entity retains an option to repurchase part of a transferred asset, or retains a residual interest that does not result in the retention of substantially all the risks and rewards of ownership and the entity retains control), the entity allocates the previous carrying amount of the financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer. For this purpose, the requirements of paragraph 28 apply. The difference between:

- a. the carrying amount allocated to the part that is no longer recognised; and**
- b. the sum of (i) the consideration received for the part no longer recognised and (ii) any cumulative gain or loss allocated to it that had been recognised in other comprehensive income (see paragraph 55(b))**

shall be recognised in profit or loss. A cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair value of those parts.

PROFESSIONAL SIMULATION

Measurement

Trade Accounts Receivable		Allowance for Doubtful Accounts	
Beginning balance	\$ 40,000	Beginning balance	\$ 5,500
Credit sales during 2011	550,000	Charge-offs	(2,300)
Collections during 2011	(500,000)	2011 provision	
Change-offs	(2,300)	(0.8% X \$550,000)	<u>4,400</u>
Factored receivables	<u>(47,700)</u>	Ending balance	<u>\$ 7,600</u>
Ending balance	<u>\$ 40,000</u>		

Financial Statements

Current assets

Inventories		\$ 80,000
Prepaid postage		100
Trade accounts receivable	\$40,000	
Allowance for doubtful accounts.....	<u>(7,600)</u>	32,400
Customer receivable (post-dated checks)		2,000
Interest receivable**		2,750
Due from factor***		2,400
Notes receivable		50,000
Cash*		<u>12,900</u>
Total current assets		<u>\$182,550</u>

*(\$15,000 – \$2,000 – \$100)

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

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

Analysis

<u>2010</u>	<u>2011</u>	
Current ratio = (\$139,500* ÷ \$80,000) = 1.74	(\$182,550 ÷ \$86,000) = 2.12	
Receivables turnover = 10.37 times	<u>\$550,000</u>	= 16.4 times
	(\$34,500 + \$32,400)/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 both the current ratio and the receivables turnover ratio.

