# **CHAPTER 7**

# **Cash and Receivables**

## **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, certificates of deposit, and time deposits fall in this latter category. Unless restrictions on these kinds of deposits are such that they cannot be converted (withdrawn) within one year or the operating cycle of the entity, whichever is longer, they are properly classified as current assets. At the same time, they may well be presented separately from other cash and the restrictions as to convertibility reported.

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

- 2. (a) Cash
  - (b) Investments
  - (c) Temporary investments.
  - (d) Accounts receivable.
  - (e) Accounts receivable, a loss if uncollectible.
  - (f) Other assets if not expendable, cash if expendable for goods and services in the foreign country.
  - (g) Receivable if collection expected within one year; otherwise, other asset.

- (h) Investments, possibly other assets.
- (i) Cash.
- (j) Trading securities.
- (k) Cash.
- (I) Cash.
- (m) Postage expense, or prepaid expense, or supplies inventory.
- (n) Receivable from employee if the company is to be reimbursed; otherwise, prepaid expense.

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: None, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**3.** A compensating balance is that portion of any demand deposit maintained by a corporation that constitutes support for existing borrowing arrangements of a corporation with a lending institution.

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

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

**4.** Restricted cash for debt redemption would be reported in the long-term asset section, probably in the investments section. Another alternative is the other assets section. Given that the debt is long-term, the restricted cash should also be reported as long-term.

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

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.

LO: 2, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication **Questions Chapter 7** (Continued)

- **6.** Two methods of recording accounts receivable are:
  - Record receivables and sales gross.
  - Record receivables and sales net.

The net method is desirable from a theoretical standpoint because it values the receivable at its net realizable value. In addition, recording the sales at net provides a better assessment of the revenue that was recognized 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.

LO: 2, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

When companies sell a product with a sales allowance for possible dissatisfaction or other issues, they should record the accounts receivable and related revenue at the amount of consideration expected to be received. The use of a Sales Returns and Allowances account is helpful to management because it highlights the problems associated with inferior merchandise, inefficiencies in filling orders, or delivery or shipment mistakes. Thus, since management must estimate expected allowances to be granted in the future, which affects the final transaction price, sales allowances result in variable consideration.

LO: 3, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

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.

LO: 3, Bloom: C. Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

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 the net amount expected to be collected. 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.

LO: 3, Bloom: K, Difficulty: Simple, Time: 5-10, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

10. The percentage of receivables method based on an aging schedule calculates each year's debit to the expense account and credit to the allowance account by evaluating the collectibility of open accounts receivable at the close of the year. An analysis of the accounts according to their due dates is a common 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.

#### **Questions Chapter 7** (Continued)

This method of providing for uncollectible accounts is quite accurate for purposes of reporting accounts receivable at the net amount expected to be collected in the balance sheet. 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.

Other methods that companies may use employ estimates based on historical loss ratios for customers with different credit ratings as a basis for estimating uncollectible accounts. Or, a company may utilize a probability-weighted discounted cash flow model (as illustrated in Chapter 6) to estimate expected credit losses.

LO: 3, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

11. A major part of accounting is the measurement of financial data. Estimates of uncollectibility should be recognized so that receivables are reported at the net amount expected to be collected and 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.

LO: 3, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

12. Because estimation of the allowance account balance requires judgment, management could either over-estimate or under-estimate the amount of uncollectible accounts depending on whether a higher or lower earnings number is desired. For example, Sun Trust bank (referred to in the chapter) was having a very profitable year. By over-estimating the amount of bad debts, Sun Trust could record a higher allowance and expense, thereby reducing income in the current year. In a subsequent year, when earnings are low, they could under-estimate the allowance, record less expense and get a boost to earnings.

LO: 3, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

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.

LO: 3, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

#### **Questions Chapter 7** (Continued)

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 accountant would 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.

LO: 3, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

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

Notes Receivable ..... 1,000,000

Discount on Notes Receivable (\$1,000,000 - \$640,000) ..... Sales Revenue.....

360,000 640,000\*

\*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.

LO: 4, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**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.

LO: 4, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

17. The fair value option gives companies the option of using fair value as the measurement basis for financial instruments. The Board 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.

LO: 5, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

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.

LO: 5, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

- 19. The financial components approach is used when receivables are sold but there is continuing involvement by the seller in the receivable. Examples of continuing involvement are recourse provisions or continuing rights to service the receivable. A transfer of receivables should be recorded as a sale when the following three conditions are met:
  - (a) The transferred asset has been isolated from the transferor (put beyond reach of the transferor and its creditors).
  - (b) The transferees have obtained the right to pledge or exchange either the transferred assets or beneficial interests in the transferred assets.
  - (c) The transferor does not maintain effective control over the transferred assets through an agreement to repurchase or redeem them before their maturity.

LO: 5, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**Questions Chapter 7** (Continued)

- **20.** 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 recourse obligation represents continuing involvement by Moon after the sale. Under the financial components model, the estimated fair value of the recourse obligation will be reported as a liability on Moon's balance sheet.
- LO: 5, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication
- **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 has been assigned as security for loans payable)

or the office the poor acciding to the feature payable	
(\$523,000 + \$75,000)	\$598,000
Federal income tax refund receivable	15,500
Advance payments on purchases	61,000
Non-Trade receivables	·
Advance to subsidiary	45,500
Other Assets	,
Travel advance to employees	22,000
Notes receivable past due plus accrued interest	47,000

- LO: 5, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication
- 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.
- LO: 5, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication
- 23. Because the restricted cash cannot 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.
- LO: 5, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication
- \*24. (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.

LO: 6, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

#### **Questions Chapter 7** (Continued)

\*25. A loan 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 loan. If a loan is considered impaired, the loss due to impairment should be measured as the difference between the investment in the loan 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.

LO: 7, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

\*26. Companies commonly evaluate loans (long-term notes receivable) for collectibility based on an analysis of the expected contractual cash flows. They then apply discounted expected cash flow methods to measure the allowance to report the loan at the net amount expected to be collected. The allowance for doubtful accounts and related bad debt expense on a loan or note receivable can be estimated as the difference between the investment in the loan (generally the principal plus accrued interest or amortized cost) and the expected future cash flows discounted at the loan's historical effective-interest rate.

LO: 7, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

## SOLUTIONS TO BRIEF EXERCISES

#### **BRIEF EXERCISE 7.1**

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

LO: 1, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### **BRIEF EXERCISE 7.2**

June 1	Accounts Receivable Sales Revenue	50,000	50,000
June 12	Cash (\$50,000 - \$1,500) Sales Discounts (\$50,000 x .03)	48,500 1,500	
	Accounts Receivable	·	50,000

LO: 2, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### **BRIEF EXERCISE 7.3**

June 1	Accounts Receivable	48,500*	
	Sales Revenue		48,500

# **BRIEF EXERCISE 7.4 (Continued)**

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Sales Returns and Allowance Accounts Receivable	700	700
(c) Sales Returns and Allowances Allowance for Sales Returns and Allowances	200	200
LO: 3, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting	g, AICPA PC: None	
BRIEF EXERCISE 7.5		
Bad Debt Expense Allowance for Doubtful Accounts	17,600	17,600
[(\$250,000 X 8%) - \$2,400]		
LO: 3, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting	յ, AICPA PC: None	
BRIEF EXERCISE 7.6		
(a) Bad Debt Expense	26,900	26,900
(b) Bad Debt Expense	22,200	22,200
LO: 3, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting	g, AICPA PC: None	
BRIEF EXERCISE 7.7		
11/1/20 Notes Receivable Sales Revenue	30,000*	30,000
12/31/20 Interest Receivable Interest Revenue	300	200
(\$30,000* X 6% X 2/12)		300

# **BRIEF EXERCISE 7.7 (Continued)**

5/1/21	Cash (\$30,000 + \$300 + \$600)	30,900	30,000 300 600
LO: 4, Bloom: AP, D	ifficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting	g, AICPA PC: None	
BRIEF EX	ERCISE 7.8		
Dis	eceivable scount on Notes Receivable (\$20,000 - \$16,529 <sup>a</sup> )	20,000	3,471
Cas	sh		16,529 <sup>a</sup>
	t on Notes Receivableerest Revenue (\$16,529° X .10)	1,653 <sup>b</sup>	1,653
Inte	t on Notes Receivable erest Revenue (\$16,529° + \$1,653°) X .10]	1,818	1,818
Cash		20,000	
No	tes Receivable		20,000
LO: 4, Bloom: AP, D	ifficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting	g, AICPA PC: None	
BRIEF EX	ERCISE 7.9		
Chung, Inc	<u>C</u> .		
	<b>7</b> 50,000 - \$20,000)	730,000	
	Expense (\$1,000,000 X .02)tes Payable	20,000	750,000

# Seneca National Bank

Notes Receivable	750,000	
Cash (\$750,000 - \$20,000)		730,000
Interest Revenue (\$1,000,000 X .02)		20,000

LO: 5, Bloom: AP, Difficulty: Moderate, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### **BRIEF EXERCISE 7.10**

# **Wood**

Cash (\$150,000 - \$9,000 - \$3,000)	138,000	
Due from FactorLoss on Sale of ReceivablesAccounts Receivable	9,000* 3,000**	150,000***
*6% X \$150,000*** = <u>\$9,000</u> **2% X \$150,000*** = <u>\$3,000</u>		
<u>Engram</u>		
Accounts Receivable  Due to Customer (Wood)  Interest Revenue  Cash (\$150,000 - \$9,000 - \$3,000)	150,000***	9,000* 3,000** 138,000
LO: 5, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Repo	rting, AICPA PC: None	
BRIEF EXERCISE 7.11		

#### E

# **Wood**

Cash (\$150,000 - \$9,000 - \$3,000)	138,000	
Due from Factor	9,000*	
Loss on Sale of Receivables	10,500**	
Accounts Receivable		150,000
Recourse Liability		7,500

<sup>\*.06</sup> X \$150,000 = <u>\$9,000</u>

LO: 5, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## **BRIEF EXERCISE 7.12**

Cash (\$250,000 – \$12,500 <sup>a</sup> - \$10,000 <sup>b</sup> )	227,500
Due from Factor (\$250,000 X .04)	10,000 <sup>b</sup>
Loss on Sale of Receivables	20,500*
Accounts Receivable	

250,000

<sup>\*\*.02</sup> X \$150,000 =  $\overline{\$3,000}$  + \$7,500 =  $\underline{\$10,500}$ 

Recourse Liability.....

8,000<sup>c</sup>

\*[(\$250,000 X 5%)<sup>a</sup> + \$8,000<sup>c</sup>]

LO: 5, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### **BRIEF EXERCISE 7.13**

The entry for the sale now would be:

Cash (\$250,000 – \$12,500 - \$10,000)	227,500	
Due from Factor (\$250,000 X .04)	10,000	
Loss on Sale of Receivables	16,500*	
Account Receivable		250,000
Recourse Liability		4,000

<sup>\*[(\$250,000</sup> X .05) + \$4,000]

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

LO: 5, Bloom: AP, Difficulty: Moderate, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### **BRIEF EXERCISE 7.14**

The accounts receivable turnover ratio is computed as follows:

The days outstanding (average collection period) for accounts receivable in days is

$$\frac{365 \text{ days}}{\text{Accounts Receivable Turnover}} = \frac{365}{13.34} = 27.36 \text{ days}$$

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

LO: 5, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### \*BRIEF EXERCISE 7.15

Petty Cash	200	
Cash		200
Supplies	94	
Miscellaneous Expense	87	
Cash Over and Short [\$185 – (\$94 + \$87)]	4	
Cash (\$200 – \$15)		185

LO: 6, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### \*BRIEF EXERCISE 7.16

- (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)

LO: 6, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### \*BRIEF EXERCISE 7.17

(b)	Office Expense  Cash	25	25
(c)	Cash	31	
	Interest Revenue		31
(e)	Accounts Receivable Cash	377	377

Thus, all "Balance per books" adjustments in the reconciliation require a journal entry.

LO: 6, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### \*BRIEF EXERCISE 7.18

National American Bank (Creditor):	
Bad Debt Expense	225,000

LO: 7, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## **SOLUTIONS TO EXERCISES**

## EXERCISE 7.1 (10–15 minutes)

# (a) Cash includes the following:

1. Commercial savings account—	
First National Bank of Yojimbo	\$ 600,000
1. Commercial checking account—	
First National Bank of Yojimbo	900,000
2. Money market fund—Volonte	5,000,000
5. Petty cash	1,000
11. Commercial Paper (cash equivalent)	2,100,000
12. Currency and coin on hand	7,700
Cash reported on December 31, 2020, balance sheet	\$8,608,700

#### (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 an account receivable in the amount of \$190,000.
- 7. The bank overdraft of \$110,000 should be reported as a current liability.\*\*
- 8. Certificates of deposits of \$500,000 each should be classified as temporary investments.
- 9. Postdated check of \$125,000 should be reported as an accounts receivable.
- 10. The compensating balance of \$500,000 requirement does not affect the balance in cash. A note disclosure indicating the arrangement and the amounts involved should be described in the notes.

## **EXERCISE 7.1 (Continued)**

\*If not reimbursed, charge to prepaid expense.

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

LO: 1, Bloom: AN, Difficulty: Moderate, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## EXERCISE 7.2 (10–15 minutes)

1. Cash balance of \$925,000. Only the checking account balance should be reported as cash.

The certificate of deposit of \$1,400,000 should be reported as a temporary investment, the cash advance to the subsidiary of \$980,000 should be reported as a non-trade receivable, and the utility deposit of \$180 should be identified as a non-trade receivable from the gas company.

Cash balance is \$584,650 computed as follows: 2.

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

Cash held in a bond sinking fund of \$200,000 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 9,800

\$599,800

The post-dated check of \$11,000 should be reported as an account receivable. Cash restricted due to compensating balance of \$100,000 should be described in a note indicating the type of arrangement and amount. Postage stamps on hand of \$1,620 are reported as part of supplies or prepaid expenses.

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

Checking account balance \$37,000

Money market mutual fund \$48,000

\$85,000

The NSF check received from the customer should be reported as an account receivable.

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

Checking account balance \$700,000

Cash advance received from customer 900
\$700,900

<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 a 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 the federal government should be reported as a receivable.

LO: 1, Bloom: AN, Difficulty: Moderate, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## EXERCISE 7.3 (10-15 minutes)

#### **Current assets**

Accounts receivable

**Customers accounts (of which** 

accounts in the amount of

\$40,000 have been pledged as

security for a bank loan) \$79,000

Installment accounts collectible

due in 2021 23,000

Installment accounts collectible

due after December 31, 2021,\* 34,000 \$136,000

Other\*\* (\$2,640 + \$1,500) 4,140 \$140,140

#### Non-trade receivables

Advance to a subsidiary company

81,000

LO: 2, Bloom: AN, Difficulty: Simple, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

# EXERCISE 7.4 (10–15 minutes)

# Computation of cost of goods sold:

Merchandise purchased	\$320,000
Less: Ending inventory	90,000
	****

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

<sup>\*\*</sup>These items could be separately classified, if considered material.

# **EXERCISE 7.4 (Continued)**

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

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

LO: 2, Bloom: AN, Difficulty: Simple, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

# EXERCISE 7.5 (15-20 minutes)

(a)	(1) June	3 Accounts Receivable—Chester  Sales Revenue	3,000	3,000
	June '	12 Cash (\$3,000 - \$60)	2,940	
		Sales Discounts (\$3,000 X .02)  Accounts Receivable—Chester	60	3,000
	(2) June	3 Accounts Receivable—Chester Sales Revenue (\$3,000 X .98)	2,940	2,940
	June '	12 Cash	2,940	
		Accounts Receivable—Chester		2,940

## **EXERCISE 7.5 (Continued)**

(b)	July 29 Cash	3,000	
	Accounts Receivable—Chester		2,940
	Sales Discounts Forfeited		60*
	*(\$3,000 X .02)		

(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.)

LO: 2, Bloom: AP, Difficulty: Simple, Time: 15-20, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

# EXERCISE 7.6 (5-10 minutes)

July 1	Accounts Receivable Sales Revenue	20,000	20,000
	Sales Returns and Allowances Allowance for Sales	1,300	
	Returns and Allowances		1,300
July 10	Cash (\$20,000 - \$600)	19,400	
	Sales Discounts (\$20,000 X .03)	600	
	Accounts Receivable		20,000
July 17	Accounts Receivable	200,000	
- 3 <b>,</b>	Sales Revenue	,	200,000

July 30	Cash	200,000	200,000	
	Accounts Receivable		200.000	
	ACCOUNTS RECEIVABLE		200,000	

LO: 2, Bloom: AP, Difficulty: Moderate, Time: 5-10, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

# EXERCISE 7.7 (10-15 minutes)

(a) Bad	d Debt Expense 3,000
	Allowance for Doubtful Accounts 3,000
Step 1:	.05 X $$100,000 = $5,000$ (desired credit balance in allowance account)
Step 2:	\$5,000 – \$2,000 = \$3,000 (required credit entry to bring allowance account to \$5,000 credit balance)
(b) Bad	d Debt Expense 6,500
	Allowance for Doubtful Accounts 6,500
Step 1:	.05 X \$100,000 = \$5,000 (desired credit balance in allowance account)
Step 2:	\$5,000 + \$1,500 = \$6,500 (required credit entry to bring allowance account to \$5,000 credit balance)
LO: 3, Bloom: AP, [	Difficulty: Moderate, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

# **EXERCISE 7.8 (5-10 minutes)**

(a)	Allowance for Doubtful Accounts  Accounts Receivable	6,000	6,000
	Accounts Receivable		0,000
(b)	Accounts Receivable		\$800,000
	Less: Allowance for Doubtful Accounts		40,000
	Net amount expected to be collected		<u>\$760,000</u>
(c)	Accounts Receivable (\$800,000 - \$6,000)		\$794,000
	Less: Allowance for Doubtful Accounts		34,000
	(\$40,000 - \$6,000)		
	Net amount expected to be collected		<u>\$760,000</u>

LO: 3, Bloom: AP, Difficulty: Simple, Time: 5-10, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## EXERCISE 7.9 (8-10 minutes)

LO: 3, Bloom: AP, Difficulty: Simple, Time: 8-10, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## 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 (\$77,000 X .12) = \$9,240

  Bad Debt Expense Direct Write-Off = \$31,330 (\$7,800 + \$6,700 + \$7,000 + \$9,830)

Assuming accounts written off were for sales in a prior year, net income would be \$22,090 (\$31,330 - \$9,240) higher under the percentage-of-receivables approach.

LO: 3, Bloom: AP, Difficulty: Simple, Time: 10-12, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

# EXERCISE 7.11 (8-10 minutes)

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

\*(\$790 - \$490)

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

LO: 3, Bloom: AP, Difficulty: Simple, Time: 8-10, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

## **EXERCISE 7.12 (15–20 minutes)**

7/1	Accounts Receivable—Harding Co Sales Revenue (\$8,000 X .98)	7,840	7,840
7/5	Cash [\$9,000 - \$810]	8,190	
	Loss on Sale of Receivables (\$9,000 x .09)	810	
	Accounts Receivable (\$9,000 X .98)		8,820
	Sales Discounts Forfeited (\$9,000 x .02)		180

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

# **EXERCISE 7.12 (Continued)**

7/9	Accounts Receivable	180	
	Sales Discounts Forfeited		
	(\$9,000 X .02)		180
	Cash (\$6,000 - \$360)	5,640	
	Interest Expense (\$6,000 X .06)	360	
	Notes Payable		6,000
7/11	Account Receivable—Harding Co	160	
	Sales Discounts Forfeited		160
	(\$8,000 X .02)		

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

12/29	Allowance for Doubtful Accounts	7,200	
	Accounts Receivable—Harding Co		7,200
	[\$7,840 + \$160 = \$8,000;		
	$8,000 - (.10 \times 8,000) = 7,200$		

LO: 2, 3, 6, Bloom: AP, Difficulty: Simple, Time: 15-20, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

# EXERCISE 7.13 (10-15 minutes)

1.	7/1/20	Notes Receivable		1,101,460	
		Discount on N	otes Receivable.		401,460
		Land			590,000
		Gain on Dispo	sal of Land		110,000
		(\$700,000 –	\$590,000)		
		Computation of the	discount		
		\$1,101,460	Face value of not	е	
		.63552	Present value of	1 for 4 period	ds at 12%
		700,000	Present value of	note	
		<u>1,101,460</u>	Face value of not	е	
		<u>\$ 401,460</u>	Discount on note	s receivable	
2.	7/1/20	Notes Receivable		400,000.00	
		Discount on N	otes Receivable.	·	178,836.32
		Service Reven	ue		221,163.68
	Comput	ation of the present v	/alue of the note:		
	Mat	urity value			\$400,000.00
	Pre	sent value of \$400,00	0 due		
	in	8 years at 12%—\$40	0,000 X .40388	\$161,552.00	
	Pre	sent value of \$12,000	(\$400,000 X .03)		
	pa	ayable annually for 8	years		
	at	12% annually—\$12,0	000 X 4.96764	59,611.68	
	Pre	sent value of the note	<b>)</b>		221,163.68
	Disc	count on notes receiv	/able		<u>\$178,836.32</u>

LO: 4, Bloom: AP, Difficulty: Simple, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

# EXERCISE 7.14 (20-25 minutes)

(a) N	otes Receivable  Discount on Notes Receivable  (\$200,000 - \$165,290*)	200,000	34,710
	Service Revenue		165,290*
PV o	utation of present value of note: f \$200,000 due in 2 years at 10% ,000 X .82645 = \$165,290		
(b) D	iscount on Notes Receivable Interest Revenue	16,529**	16,529
**\$165,	290* X .10 = \$16,529		
(c) D	iscount on Notes Receivable Interest Revenue	18,181***	18,181
***(\$34,	,710 – \$16,529) (or [\$165,290 + \$16,529] X .10)		
C	ash	200,000	
•••	Notes Receivable		200,000
LO: 4, 6, Bloor	m: AP, Difficulty: Moderate, Time: 20-25, AACSB: Analytic, AICPA BB: None, AICPA FC: Ro	eporting, AICPA PC: None	200,000
EXERC	SISE 7.15 (10–15 minutes)		
` '	ash (\$200,000 - \$8,000*) nterest Expense (\$400,000 x .02) Notes Payable	192,000 8,000*	200,000

(b)	Cash Accounts Receivable	350,000	350,000
EXE	RCISE 7.15 (Continued)		,
(c)	Notes Payable	200,000	
` '	Interest Expense	5,000*	
	Cash (\$200,000 + \$5,000)	ŕ	205,000
*(\$2	200,000 X .10 X 3/12 <u>)</u>		
LO: 5, B	oom: AP, Difficulty: Simple, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Repor	ting, AICPA PC: None	
EXE	RCISE 7.16 (15–18 minutes)		
1.	Cash (\$25,000 - \$2,500)	22,500	
	Loss on Sale of Receivables	2,500	
	(\$25,000 X .10)		
	Accounts Receivable		25,000
2.	Cash (\$55,000 - \$4,400)	50,600	
	Interest Expense (\$55,000 X .08)	4,400	
	Notes Payable		55,000
3.	Bad Debt Expense	6,220	
	Allowance for Doubtful Accounts	•	6,220
	[(\$82,000 X .05) + \$2,120]		·
4.	Bad Debt Expense	4,700	
	Allowance for Doubtful Accounts		4,700
	(\$5,800 – \$1,100)		7,700
	(ψο,οοο ψι,ιοο)		

LO: 2, 3, 6, Bloom: AP, Difficulty: Simple, Time: 15-18, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## EXERCISE 7.17 (10-15 minutes)

## Computation of net proceeds:

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

## Computation of gain or loss:

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

## The following journal entry would be made:

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

LO: 5, Bloom: AP, Difficulty: Simple, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

# **EXERCISE 7.18 (15–20 minutes)**

- (a) To be recorded as a sale, all of the following conditions would be met:
  - (1) The transferred asset has been isolated from the transferor (put beyond the reach of the transferor and its creditors).
  - (2) The transferees have obtained the right to pledge or to exchange either the transferred assets or beneficial interests in the transferred assets.
  - (3) The transferor does not maintain effective control over the transferred assets through an agreement to repurchase or redeem them before their maturity.

# **EXERCISE 7.18 (Continued)**

# (b) Computation of net proceeds:

Cash received (\$175,000 X .94)	\$164,500	
Due from factor (\$175,000 X .04)	7,000	\$171,500
Less: Recourse liability		2,000
Net proceeds		\$169.500

# Computation of gain or loss:

Carrying value	\$175,000
Net proceeds	169,500
Loss on sale of receivables	\$ 5.500

# The following journal entry would be made:

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

LO: 5, Bloom: AP, Difficulty: Moderate, Time: 15-20, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

# EXERCISE 7.19 (10-15 minutes)

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

#### **EXERCISE 7.19 (Continued)**

LO: 5, Bloom: AP, Difficulty: Simple, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## EXERCISE 7.20 (10-15 minutes)

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

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

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

Days to collect accounts receivable 
$$= \frac{365}{3.33} = 109.61 \text{ days}$$

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

# EXERCISE 7.21 (10-15 minutes)

(a)	Cash [\$25,000 X (109)]	22,750	
	Due from Factor  Loss on Sale of Accounts Receivable  Accounts Receivable  Recourse Liability	1,250 2,200	25,000 1,200
	Computation of cash received Accounts receivable Less: Due from factor (.05 X \$25,000) Finance charge (.04 X \$25,000)	<b>\$</b> 2	25,000 1,250 <u>1,000</u>
	Cash received	<u>\$2</u>	<u>22,750</u>
	Computation of net proceeds (cash and other assets received, less any liabilities incurred)  Cash received  Due from factor  Less: Recourse liability  Net proceeds		24,000 <u>1,200</u> 22,800
	Computation of loss Carrying (Book) value Less: Net proceeds Loss on sale of receivables	<u> </u>	25,000 22,800 2,200
(b)	Accounts Receivable Turnover = Average To	Net Sales rade Receivables	(net)
	$\frac{\text{Net Sales}}{\text{Average Trade Receivables (net)}} = \frac{\$100}{(\$15,000 + 1)}$	0,000 \$20,000*)/2 = 5.71	times
	*(\$15,000 + \$25,000)	\$100,000 <b>–</b> \$70,00	00 –
	Days to collect accounts receivable = $\frac{365}{5.71}$ = 6	3.92 days	

# **EXERCISE 7.21 (Continued)**

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

LO: 5, 7, Bloom: AP, Difficulty: Moderate, Time: 10-15, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

## **\*EXERCISE 7.22 (5–10 minutes)**

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

LO: 6, Bloom: AP, Difficulty: Simple, Time: 5-10, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

# \*EXERCISE 7.23 (10–15 minutes)

Accounts Receivable—Employees	74.00	
(\$40.00 + \$34.00)		
Owner's Drawings**	170.00	
Office Supplies Expense	14.35	
Postage Expense (\$20.00 – \$2.90)	17.10	
Prepaid Postage	2.90	
Cash Over and Short	6.45*	
Cash (\$300.00 – \$15.20)		284.80
· [/#74.00 - #470.00 - #44.0E - #47.40 - #0.00\ #004.00]		

<sup>\*[(\$74.00 + \$170.00 + \$14.35 + \$17.10 + \$2.90) - \$284.80]</sup> 

LO: 6, Bloom: AP, Difficulty: Simple, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

# \*EXERCISE 7.24 (15–20 minutes)

# (a) Angela Lansbury Company Bank Reconciliation July 31

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

<sup>\*\*</sup>Note: This debit might also be made to the capital account.

# \*EXERCISE 7.24 (Continued)

Computation of deposits in transit		
Deposits per books		\$5,810
Deposits per bank in July	\$5,000	
Less deposits in transit (June)	<u>(1,540</u> )	
Deposits mailed and received in		
July		<u>(3,460</u> )
Deposits in transit, July 31		<u>\$2,350</u>
Computation 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		(2,000)
Outstanding checks, July 31		\$1,100
		<u> </u>

# \*Assumed to clear bank in July

(b)	Cash (\$1,000 - \$15 - \$335)	650	
	Office Expenses—bank service charges	15	
	Accounts Receivable	335	
	Notes Receivable		1,000

LO: 6, Bloom: AP, Difficulty: Moderate, Time: 15-20, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## \*EXERCISE 7.25 (15-20 minutes)

# (a) Logan Bruno Company Bank Reconciliation, August 31, 2020 County National Bank

	\$ 8,089
\$ 310	
3,800	4,110
	12,199
	<u>1,050</u>
	<u>\$11,149</u>
	\$10,147
	1,040
	11,187
\$ 20	
<u> 18</u>	38
	<u>\$11,149</u>
1,040	
	1,000
	40
	\$ 20 

## \*EXERCISE 7.25 (Continued)

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

(c) The correct cash balance of \$11,149 would be reported in the August 31, 2020, balance sheet.

LO: 6, Bloom: AP, Difficulty: Simple, Time: 15-20, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### \*EXERCISE 7.26 (15-25 minutes)

Journal entry to record issuance of loan by Paris Bank: (a) **December 31, 2020** 

Notes Receivable	100,000	
Discount on Notes Receivable	·	37,908
(\$100,000 - \$62,092)		
Cash		62.092

\$100,000<sup>b</sup> X Present value of 1 for 5 periods at 10%  $100,000^{b} X .62092 = 62,092^{a}$ 

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

	Cash Received	Interest Revenue	Increase in Carrying	Carrying Amount of
Date	(0%)	(10%)	Amount	Note
12/31/20				\$62,092
12/31/21	<b>\$0</b>	\$6,209	\$6,209	68,301
12/31/22	0	6,830	6,830	75,131

#### \*EXERCISE 7.26 (Continued)

### Computation of the impairment loss:

Carrying amount of investment (12/31/22)	<b>\$75,131</b>
Less: Present value of \$75,000 due in 3 years	
at 10% (\$75,000 X .75132)	<u>56,349</u>
Loss due to impairment	\$18,782

#### 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.

LO: 7, Bloom: AP, Difficulty: Moderate, Time: 15-25, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## \*EXERCISE 7.27 (15-25 minutes)

## (a) Cash received by Conchita Martinez Company on December 31, 2020:

Present value of principal of \$1,000,000 due	
in 5 years at 12% (\$1,000,000 X .56743)	\$567,430
Present value of interest of \$100,000*	
(\$1,000,000 X .10) due in 5 years at 12%	
(\$100,000 X 3.60478)	<u>360,478</u>
Cash received	\$927,908

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

Date	Cash Received (10%)	Interest Revenue (12%)	Increase in Carrying Amount	Carrying Amount of Note
12/31/20				\$927,908
12/31/21	\$100,000	\$111,349	\$11,349	939,257
12/31/22	100,000	112,711	12,711	951,968

## \*EXERCISE 7.27 (Continued)

## (c) Loss due to impairment:

Carrying amount of loan (12/31/22)		\$951,968 <sup>b</sup>
Less: Present value of \$600,000 due in		
3 years at 12% (\$600,000 X .71178)	\$427,068	
Present value of \$100,000 payable annually		
for 3 years at 12% (\$100,000 X 2.40183)	<b>240,183</b>	667,251
Loss due to impairment		\$284,717

LO: 7, Bloom: AP, Difficulty: Moderate, Time: 15-25, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## **SOLUTIONS TO PROBLEMS**

#### PROBLEM 7.1

(a)	December 31		
` '	Accounts Receivable (\$17,640 + \$360)	18,000	
	Sales Revenue	28,000	
	Cash		45,640
	Sales Discounts		360
	December 31		
	Cash	22,200	
	Purchase Discounts	250	
	Accounts Payable	250	22,450
	Addants i dyddio		22,400
(b)		Per Balance	After
` ,		Sheet	<u>Adjustment</u>
	Current assets		
	Cash (\$39,000 – \$45,640 + \$22,200)	\$ 39,000	\$ 15,560
	Accounts Receivable	10.000	
	(\$42,000 + \$18,000)	42,000	60,000
	Inventory	67,000	67,000 442,560
	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	14,200	14,200
Total	(2) 59,200	81,650
Working capital	$(1) - (2) \frac{$88,800}$	<u>\$ 60,910</u>
Current ratio	(1) ÷ (2) 2.5 to 1	1.75 to 1

LO: 1, Bloom: AN, Difficulty: Simple, Time: 20-25, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

1.	Accounts receivables  Percentage  Allowance needed  Allowance (Dr)  Bad Debt Expense	\$ 53,000
2.	Accounts receivable Amounts estimated to be uncollectible Net realizable value	\$1,750,000 (180,000) <u>\$1,570,000</u>
3.	Allowance for doubtful accounts 1/1/20  Collection of accounts written off in prior years  Customer accounts written off in 2020  Bad debt expense for 2020	\$ 17,000 8,000 (30,000) <u>57,000</u>
	Allowance for doubtful accounts 12/31/20	<u>\$ 52,000</u>
4.	Bad debt expense for 2020  Customer accounts written off as uncollectible during 2020	\$ 84,000 (24,000)
	Allowance for doubtful accounts balance 12/31/20	<u>\$ 60,000</u>
	Accounts receivable, net of allowance for doubtful accounts	\$ 950,000 60,000 \$1,010,000
5.	Accounts receivable	\$ 310,000
	Percentage	3%
	Bad debt expense, before adjustment	9,300
	Allowance for doubtful accounts (debit balance)	14,000
	Bad debt expense, as adjusted	<u>\$ 23,300</u>

LO: 3, Bloom: AP, Difficulty: Moderate, Time: 20-25, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

(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	198 = .02	\$ 6,000
16-30 days	100,000	190 = .10	10,000
31–45 days	80,000	185 = .15	12,000
46-60 days	40,000	180 = .20	8,000
61–75 days	20,000	155 = .45	9,000
Balance for Allov	vance for Doub	tful Accounts	\$45,000°

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. These accounts are 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)	25,000
Required charge to expense	\$20,000

LO: 3, Bloom: AP, Difficulty: Moderate, Time: 20-30, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

#### (a) FORTNER CORPORATION

## **Analysis of Changes in the Allowance for Doubtful Accounts** For the Year Ended December 31, 2020

Balance at January 1, 2020	\$130,000
Provision for doubtful accounts	180,000
Recovery in 2020 of bad debts written off previously	<u>15,000</u>
	325,000
Deduct write-offs for 2020 (\$90,000 + \$60,000)	<u> 150,000</u>
Balance at December 31, 2020, before change in accounting estimate	175,000
Increase due to change in accounting estimate during 2020 (\$263,600 – \$175,000)	88,600
Balance at December 31, 2020, adjusted (Schedule 1)	<u>\$263,600*</u>

## Schedule 1 **Computation of Allowance for Doubtful Accounts** at December 31, 2020

Aging Category	Balance	%	Doubtful Accounts
NovDec.	\$1,080,000	2	\$ 21,600
July-Oct.	650,000	10	65,000
JanJune	420,000	25	105,000
Prior to 1/1/20	90,000(a)	80	72,000
	, , ,		\$263,600*

### (a) \$150,000 - \$60,000

## (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,		
2020, resulting from a change		
in accounting estimate)		

LO: 3, Bloom: AP, Difficulty: Moderate, Time: 25-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

Bad Debt Expense	3,240	3,240
Accounts Receivable  Unearned Sales Revenue  (To reclassify credit balance in accounts receivable)	4,840	4,840
Allowance for Doubtful Accounts  Accounts Receivable  (To write off \$3,700 of uncollectible accounts)	3,700	3,700

(<u>Note to instructor</u>: Many students will not make this entry at this point. Because \$3,700 is totally uncollectible, a write-off immediately seems most appropriate. The remainder of the solution, therefore, assumes that the student made this entry.)

7,279.64	7,279.64
\$20,430.00 13,150.36 \$ 7,270.64	
	\$20,430.00

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
-	-		\$13,150.36

### **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	<b>\$</b> 7,279.64

Age	Balance	Aging Schedule	
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> *
-			<b>\$16,850.36</b>

<sup>\*\$3,700 + (25%</sup> X \$19,944)

LO: 3, Bloom: AP, Difficulty: Moderate, Time: 20-30, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

-1- Cash (\$138,000 - \$1,200) Sales Discounts (\$60,000 X.02) Accounts Receivable	136,800 1,200	138,000
-2- Accounts Receivable Allowance for Doubtful Accounts	5,300	5,300
Cash Accounts Receivable	5,300	5,300
-3- Allowance for Doubtful Accounts Accounts Receivable	17,500	17,500
-4- Bad Debt Expense	14,900	14,900*

LO: 2, 3, Bloom: AP, Difficulty: Moderate, Time: 25-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

10/1/20	Notes ReceivableSales Revenue	120,000	120,000
12/31/20	Interest Receivable Interest Revenue	2,400*	2,400
*\$120,000	X .08 X 3/12 = \$2,400		
10/1/21	Cash Interest Receivable Interest Revenue	9,600*	2,400 7,200**
	0 X .08 = <u>\$9,600</u> 0 X .08 X 9/12 = <u>\$7,200</u>		
12/31/21	Interest Receivable Interest Revenue	2,400	2,400
10/1/22	Cash Interest Receivable Interest Revenue	9,600	2,400 7,200
	Cash Notes Receivable	120,000	120,000

Note: Entries at 10/1/21 and 10/1/22 assume reversing entries were not made on January 1, 2021, and January 1, 2022.

LO: 4, Bloom: AP, Difficulty: Moderate, Time: 30-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

(a) December 31, 2020 Schedule of Note Discount Amortization

Date	Cash Received	Interest Revenue	Decrease Carrying <u>Amount</u>	Carrying Amof Note	ount
	(1)	(2)	(1) - (2)		
12/31/20	_	_		\$62,049	
12/31/21	\$20,000	\$6,825 <sup>a</sup>	\$13,175	48,874 <sup>1</sup>	ŧ
12/31/22	20,000	5,376	14,624	34,250	
12/31/23	20,000	3,768	16,232	18,018	
12/31/24	20,000	1,982		<u> </u>	
	325 = \$62,049 X .1 874 = \$62,049 + \$6				
	Cash			40,000	
	Notes Receivable			80,000	
		Notes Receivabl	e		17,951
	•	0 - \$62,049)		,	102 040
	Service Reve	enue			102,049
-	To record revenue	at the present va	lue of the		
	PV of \$20,00	mediate cash pay 0 annuity at 11% 20,000 X 3.10245)	for	,049	
		ent		<u>,000</u>	
	Capitalized v	/alue of services	<u>\$102</u>	<u>,049</u>	
(b)		Decemb	er 31, 2021		
•	Cash			,	
	Notes Recei	vable		· <b>·</b>	20,000
I	Discount on Note			•	
	Interest Rev	enue			6,825

## **PROBLEM 7.8 (Continued)**

(c)	December 31, 2022		
	Notes Receivable	20,000	20,000
	Discount on Notes Receivable Interest Revenue	5,376	5,376
(d)	December 31, 2023		
	Notes Receivable	20,000	20,000
	Discount on Notes Receivable Interest Revenue	3,768	3,768
(e)	December 31, 2024		
	Notes Receivable	20,000	20,000
	Discount on Notes Receivable	1,982	1 002
	Interest Revenue		1,982

LO: 4, Bloom: AP, Difficulty: Moderate, Time: 30-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

# (a) BRADDOCK INC. Long-Term Receivables Section of Balance Sheet December 31, 2020

9% note receivable from sale of division, due in annual installments of \$500,000 to		
May 1, 2022, less current installment	\$ 500,000	(1)
8% note receivable from officer, due Dec. 31,		
2022, collateralized by 10,000 shares		
of Braddock, Inc., common stock		
with a fair value of \$450,000 (10,000 X \$45)	400,000	
Zero-interest-bearing note from sale of patent,		
net of 12% imputed interest, due		
April 1, 2022	86,873	(2)
Installment contract receivable, due in annual	<b>,</b>	( )
installments of \$45,125 to July 1, 2021,		
less current installment	110,275	(3)
Total long-term receivables	\$1,097,148	(0)
rotal long torm rotal vabios	<u>Ψ1,001,140</u>	
(b) BRADDOCK INC.		
Selected Balance Sheet Bala	inces	
December 31, 2020		
Current portion of long-term receivables:		
Note receivable from sale of division	\$500,000	(1)
Installment contract receivable	29,725	(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	7,700	(5)
Total accrued interest receivable	<u>\$ 67,700</u>	

## **PROBLEM 7.9 (Continued)**

## (c) **BRADDOCK INC.** Interest Revenue from Long-Term Receivables For the Year Ended December 31, 2020

	erest revenue:		
No	te receivable from sale of division	\$105,000	(6)
No	te receivable from sale of patent	7,173	(2)
No	te receivable from officer	32,000	(7)
Ins	stallment contract receivable from sale of land	7,700	(5)
	Total interest revenue for year ended 12/31/20.	<u>\$151,873</u>	(-)
	<b>Explanation of Amounts</b>		
(1)	Long-term Portion of 9% Note Receivable at 12/3	31/20	
	Face amount, 5/1/19	\$1,50	00,000
	Less: Installment received 5/1/20	<u>50</u>	00,000
	Balance, 12/31/20	1,00	00,000
	Less: Installment due 5/1/21	<u>50</u>	00,000
	Long-term portion, 12/31/20	<u>\$ 50</u>	<u>00,000</u>
(2)	Zero-interest-bearing Note, Net of Imputed Interest 12/31/20	est	
	Face amount 4/1/20	\$ 10	20 000
		Ф 10	00,000
	Less: Imputed interest		200
	[\$100,000 – (\$100,000 X 0.797)]		20,300 70,700
	Balance, 4/1/20Add: Interest earned to 12/31/20		79,700
			7 470
	(\$79,700 X .12 X 9/12)		7,173
	Balance, 12/31/20	<u>\$</u>	<u> 36,873</u>

## **PROBLEM 7.9 (Continued)**

(3)	Long-term Portion of Installment Contract Receivable at 12/31/20	
	Contract selling price, 7/1/20	\$ 200,000
	Less: Down payment, 7/1/20	60,000
	Balance, 12/31/20	140,000
	Less: Installment due, 7/1/21	1 10,000
	[\$45,125 – (\$140,000 X .11)]	29,725
	Long-term portion, 12/31/20	\$ 110,275
(4)	Accrued Interest—Note Receivable, Sale of Division at 12/31/20	
	Interest accrued from 5/1 to 12/31/20	
	(\$1,000,000 X .09 X 8/12)	<u>\$ 60,000</u>
(5)	Accrued Interest—Installment Contract at 12/31/20 Interest accrued from 7/1 to 12/31/20	
	(\$140,000 X .11 X 1/2)	<b>\$</b> 7,700
<b>(6)</b>	Interest Devenue - Nete Dessiveble - Sale of	
(6)	Interest Revenue—Note Receivable, Sale of Division, for 2020	
	Interest earned from 1/1 to 5/1/20	
	(\$1,500,000 X.09 X 4/12)	\$ 45,000
	Interest earned from 5/1 to 12/31/20	·
	(\$1,000,000 X .09 X 8/12)	60,000
	Interest income	<u>\$ 105,000</u>
(7)	Interest Revenue—Note Receivable, Officer, for 2020	
	Interest earned 1/1 to 12/31/20	
	(\$400,000 X .08)	<b>\$ 32,000</b>

LO: 4, Bloom: AP, Difficulty: Complex, Time: 40-50, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

July 1, 2020	110.250	
Cash (\$120,000 - \$750)	119,250 750	120,000
July 31, 2020		
Notes PayableAccounts Receivable	80,000	80,000
Interest Expense	350	350
August 31, 2020		
Notes Payable (\$120,000 - \$80,000)	40,000 9,550	
Interest Expense [.005 X (\$150,000 –	400	
\$80,000 – \$50,000)] Interest Payable	100 350	
Accounts Receivable		50,000
*Total analysis a	¢50,000	
*Total cash collectionLess: Interest payable (from previous entry)	\$50,000 (350)	
Interest expense (current month) [.005 X	, ,	
(\$150,000 - \$80,000 - \$50,000)]	(100)	
Notes payable (balance) (\$120,000 – \$80,000)  Cash collected	<u>(40,000)</u> \$ 9,550	

LO: 5, Bloom: AP, Difficulty: Moderate, Time: 25-30, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## SANDBURG COMPANY Income Statement Effects For the Year Ended December 31, 2020

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

#### Schedule 1

# **Computation of Expense for Accounts Receivable Assigned**

Assignment expense:		
Accounts receivable assigned	\$400,000	)
	X .80	<u>)</u>
Advance by Keller Finance Company	320,000	<u></u>
	X .03	<b>3</b> \$ 9,600
Interest expense		12,720
Total expenses		\$22,320

LO: 5, 7, Bloom: AP, Difficulty: Moderate, Time: 20-25, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

(a)	Petty Cash	250.00	
	Cash		250.00
	Postage Expense	33.00	
	Supplies	65.00	
	Accounts Receivable (Employees)	30.00	
	Freight-Out	57.45	
	Advertising Expense	22.80	
	Miscellaneous Expense	15.35	
	Cash (\$250.00 – \$26.40)		223.60
	Petty Cash	50.00	
	Cash		50.00
(b)	Balances per bank:Add:		\$6,522
	Cash on hand	\$ 246	
	Deposit in transit	3,000	3,246
	•		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)		930
	(		8,945
	Deduct: Bank service charges		27
	Correct cash balance, May 31		<u>\$8,918</u>
	*(\$8,850 + \$31,000 - \$31,835)		
	Cash	930	
	Notes Receivable		900
	Interest Revenue		30
	Office Expense (bank charges)	27	
	Cash		27
(c)	\$8,918 + \$300 = \$9,218.		

LO: 6, Bloom: AP, Difficulty: Moderate, Time: 20-25, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

(a)

### AGUILAR CO. Bank Reconciliation June 30, 2020

Balance per bank, June 30  Add: Deposits in transit  Deduct: Outstanding checks  Correct cash balance, June 30		\$4,150.00 3,390.00 (2,136.05) \$5,403.95
Balance per books, June 30		\$3,969.85
Add: Error in recording deposit (\$90 – \$60) Error on check no. 747	\$ 30.00	
(\$582.00 – \$58.20)	523.80	
Note collection (\$1,200 + \$36)	1,236.00	1,789.80
		5,759.65
Deduct: NSF check	253.20	
Error on check no. 742 (\$491 – \$419)	72.00	
Bank service charges (\$25 + \$5.50)	30.50	<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

<sup>\*</sup>Assumes sale was on account and not a cash sale.

LO: 6, Bloom: AP, Difficulty: Moderate, Time: 20-30, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

<sup>\*\*</sup>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.

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

#### (a) HASELHOF INC. **Bank Reconciliation November 30**

Balance per bank statement, November 30 Add:		\$56,274.20
Cash on hand, not deposited		1,915.40
		58,189.60
Deduct:		
Outstanding checks		
#1224	\$ 1,635.29	
#1230	2,468.30	
#1232	2,125.15	
#1233	482.17	6,710.91
Correct cash balance, Nov. 30		\$51,478.69
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	372.13	399.53
Correct cash balance, Nov. 30		\$51,478.69
*Computation of balance per books,		
November 30		
Balance per books, October 31	\$ 41,847.85	
Add receipts for November	173,523.91	
Add receipts for Novellinei		
De Lat Palance of the N	215,371.76	
Deduct disbursements for November	<u>164,893.54</u>	
Balance per books, November 30 0	<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

LO: 6, Bloom: AP, Difficulty: Moderate, Time: 20-30, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

The entries for the issuance of the note on January 1, 2020: (a)

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

## **Botosan Company (Debtor):**

Cash	816,700	
Discount on Notes Payable	383,300	
Notes Payable	•	1,200,000

#### **National Organization Bank (Creditor):**

lotes Receivable 1,200,000	
Discount on Notes Receivable	383,300
Cash	816,700

#### 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
1/1/20				\$ 816,700
12/31/20	<b>\$0</b>	\$ 65,336*	\$ 65,336	882,036**
12/31/21	0	70,563	70,563	952,599
12/31/22	0	76,208	76,208	1,028,807
12/31/23	0	82,305	82,305	1,111,112
12/31/24	<u> </u>	88,888	88,888	1,200,000
Total	<u>\$0</u>	\$383,300	<u>\$383,300</u>	. ,

<sup>\*\$816,700</sup> X .08 = \$65,336.

<sup>\*\*\$816,700 + \$65,336 = \$882,036.</sup> 

#### \*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 Ioan (12/31/21)	\$952,599 <sup>a</sup>
	Less: Present value of \$800,000 due	
	in 3 years at 8%	635,064 <sup>b</sup>
	Loss due to impairment	\$317,535

<sup>&</sup>lt;sup>a</sup>See amortization schedule from answer (b).

**December 31, 2021** 

**National Organization Bank (Creditor):** 

Allowance for Doubtful Accounts .....

317,535

Note: Botosan Company (Debtor) has no entry.

LO: 7, Bloom: N/A, Difficulty: Moderate, Time: 30-40, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

 $<sup>^{</sup>b}$800,000 X .79383 = $635,064.$ 

### **SOLUTIONS TO CONCEPTS FOR ANALYSIS**

#### **CA 7.1**

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

LO: 3, Bloom: AN, Difficulty: Simple, Time: 10-15, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

#### **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 (transaction) 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, 2020, 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 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 balance sheet as noncurrent assets. Both assets are due on September 30, 2022, which is more than one year from the date of the balance sheet.

#### CA 7.2 (Continued)

Kimmel should report interest revenue from the notes receivable on its income statement for the year ended December 31, 2020. 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.

LO: 4, 6, Bloom: AN, Difficulty: Simple, Time: 15-20, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Measurement, Reporting, AICPA PC: Communication

#### **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 and to report receivables at net realizable value. Whenever practicable, it is advisable to accrue probable bad debt charges and apply them in the accounting periods in which credit quality decreases. 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.
- (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 and then payment recorded. Method (c) is basically that approach.

LO: 3, Bloom: AN, Difficulty: Moderate, Time: 25-30, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

#### **CA 7.4**

#### Part 1

Since Wallace Company is a calendar-year company, six months of interest should be accrued on 12/31/20. The remaining interest revenue should be recognized on 6/30/21 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 allowance method based on the balance in accounts receivable is consistent with the expense recognition principle. It attempts to value accounts receivable at the amount expected to be collected and records bad debt expense in periods when credit quality decreases. 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.
- (b) On Wallace's balance sheet, the allowance for doubtful accounts is presented as a contra account to accounts receivable with the resulting difference representing the net accounts receivable (i.e., the net amount expected to be collected). 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 debt expense as a financial expense.

LO: 2, 4, Bloom: AN, Difficulty: Moderate, Time: 25-30, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

#### **CA 7.5**

- (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 recognized for the period February 1 to May 1, 2020. Corrs should account for the sale of the note receivable without recourse by increasing cash for the proceeds received, eliminating the carrying amount of the note receivable, and recognizing a loss (gain) for the resulting difference.
  - This reporting is appropriate since the note's carrying amount is correctly recorded at the date it was sold and the sale of a note receivable without recourse has occurred. Thus the difference between the cash received and the carrying amount of the note at the date it is sold is reported as a loss (gain).
- (c) 1. For notes receivable not sold, Corrs should recognize bad debt expense possibly using an aging analysis or a discounted cash flow estimation. The expense equals the adjustment required to bring the balance of the allowance for doubtful accounts equal to the estimated uncollectible amounts less the fair values of recoverable equipment.
  - 2. For notes receivable sold with recourse, at the time of sale, Corrs would have recorded a recourse liability. This liability measures the estimated bad debts at the time of the sale and increases the loss on the sale.

LO: 5, Bloom: AN, Difficulty: Moderate, Time: 20-25, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

#### **CA 7.6**

- (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, 2019, fair value. The note's September 30, 2019, fair value equals the present value of the two installments discounted at the buyer's September 30, 2019 market rate of interest.
  - 2. Rolen reports 2019 interest revenue determined by multiplying the note's carrying amount at September 30, 2019 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 recognized with the passage of time. Therefore, interest revenue for 2019 should include three months' revenue. The rate used should be the market rate established by the original present value, and this is applied to the carrying amount of the note.
- (b) To report the sale of the note receivable with recourse, Rolen should decrease notes receivable by the carrying amount of the note, increase cash by the amount received, record a recourse liability for possible customer defaults (the recourse liability is reported on the balance sheet at 12/31/20) and report the difference as a loss or gain 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 recourse liability. The note (accounts) receivable should be written down to its estimated recoverable amount (or an allowance for doubtful accounts established), and a loss on uncollectible notes should be recorded for the excess of this difference over the amount of the recourse liability previously recorded.

LO: 4, Bloom: AN, Difficulty: Moderate, Time: 20-30, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

#### **CA 7.7**

- (a) 1. For the interest-bearing note receivable, the interest revenue for 2020 should be determined by multiplying the principal (face) amount of the note by the note's rate of interest by one half (July 1, 2020, to December 31, 2020). 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 2020 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, 2020, to December 31, 2020). The carrying value of the note at September 1, 2020, is the face amount discounted for two years at the prevailing interest rate from the maturity date of August 31, 2022, back to the issuance date of September 1, 2020. 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, 2020, as a current asset at its principal (face) amount.
  - The zero-interest-bearing note receivable should be reported at December 31, 2020, as a non-current asset at its face amount less the unamortized discount on the note at December 31, 2020.
- (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.

#### CA 7.7 (Continued)

(d) Because the trade accounts receivable were factored on a without recourse basis, the factor is responsible for collection. On November 1, 2020, 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.

LO: 4, 6, Bloom: AN, Difficulty: Moderate, Time: 20-30, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

#### **CA 7.8**

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.

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 Investment	315,968	
Equity Investment (Henderson Stock)		3,000,000
Discount on Notes Receivable (\$4,000,000 - \$2,684,032)		1,315,968

LO: 4, Bloom: AN, Difficulty: Moderate, Time: 25-30, AACSB: Analytic, Communication, Reflective Thinking, AICPA BB: Problem Solving, AICPA FC: Reporting, AICPA PC: Communication

#### **CA 7.9**

To: Mark Price, Branch Manager

From: Accounting Major

Date: October 3, 2020

**Subject:** Discrepancy in the Accounts Receivable Account

While performing a routine test on accounts receivable balances today, I discovered a \$2,000 discrepancy. I believe that this matter deserves your immediate attention.

To compute the overage, 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 (\$360,000 - \$90,000) difference plus the 40% markup indicates that sales on account totaled \$378,000 [\$270,000 + (\$270,000 X .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 \$192,000.

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.

<u>Note to Instructors</u>: This situation could result from 1) Collins colluding with a customer, or 2) a lack of segregation of duties where Collins is also involved with collections.

LO: 2, Bloom: AN, Difficulty: Moderate, Time: 25-30, AACSB: Analytic, Communication, Reflective Thinking, AICPA BB: Problem Solving, Professional Demeanor, AICPA FC: Reporting, AICPA PC: Communication

#### **CA 7.10**

(a) (1) Steps to Improve
Accounts Receivable Situation

Establish more selective creditgranting policies, such as more restrictive credit requirements or more thorough credit investi-gations.

#### (2) Risks and Costs Involved

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 industry.

#### CA 7.10 (Continued)

## (1) Steps to Improve Accounts Receivable Situation

Establish a more rigorous col-lection policy either through external collection agencies or by its own personnel.

Charge interest on overdue ac-counts. Insist on cash on deliv-ery (COD) or cash on order (COO) for new customers or poor credit risks.

#### (2) Risks and Costs Involved

This policy may offend current customers and thus risk future sales. Increased collection costs could result from this policy.

This policy could result in lost sales and increased administrative costs.

- (b) 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 uncollectible accounts. 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.
- (c) 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.

LO: 2, Bloom: AN, Difficulty: Moderate, Time: 25-30, AACSB: Analytic, Communication, Reflective Thinking, AICPA BB: Problem Solving, Professional Demeanor, AICPA FC: Reporting, AICPA PC: Communication