## CHAPTER 8

## Accounting for Receivables

## ASSIGNMENT CLASSIFICATION TABLE

| Learning Objectives |  | Questions | Brief Exercises | Do It! | Exercises | A <br> Problems | B <br> Problems |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Identify the different types of receivables. | 1, 2 | 1 |  |  |  |  |
| 2. | Explain how companies recognize accounts receivable. | 3 | 2 |  | 1, 2 | $\begin{aligned} & 1 \mathrm{~A}, 3 \mathrm{~A}, 4 \mathrm{~A} \\ & 6 \mathrm{~A}, 7 \mathrm{~A} \end{aligned}$ | $\begin{aligned} & \text { 1B, 3B, 4B, } \\ & \text { 6B, 7B } \end{aligned}$ |
| 3. | Distinguish between the methods and bases companies use to value accounts receivable. | $\begin{aligned} & 4,5,6, \\ & 7,8 \end{aligned}$ | $\begin{aligned} & 3,4,5, \\ & 6,7 \end{aligned}$ | 1 | $3,4,5,6$ | $\begin{aligned} & 1 \mathrm{~A}, 2 \mathrm{~A}, 3 \mathrm{~A} \\ & 4 \mathrm{~A}, 5 \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 1 \mathrm{~B}, 2 \mathrm{~B}, 3 \mathrm{~B}, \\ & 4 \mathrm{~B}, 5 \mathrm{~B} \end{aligned}$ |
| 4. | Describe the entries to record the disposition of accounts receivable. | 9, 10, 11 | 8 | 2 | 7, 8, 9 | 6A, 7A | 6B, 7B |
| 5. | Compute the maturity date of and interest on notes receivable. | $\begin{aligned} & 12,13,14, \\ & 15,16 \end{aligned}$ | 9, 10 | 3 | $\begin{aligned} & 10,11,12, \\ & 13 \end{aligned}$ | 6A, 7A | 6B, 7B |
| 6. | Explain how companies recognize notes receivable. |  | 11 |  | 10, 11, 12 | 7A | 7B |
| 7. | Describe how companies value notes receivable. |  |  |  |  | 7A | 7B |
| 8. | Describe the entries to record the disposition of notes receivable. | 17 |  | 3 | 12, 13 | 6A, 7A | 6B, 7B |
| 9. | Explain the statement presentation and analysis of receivables. | 18, 19 | 3, 12 | 4 | 14 | 1A, 6A | 1B, 6B |

## ASSIGNMENT CHARACTERISTICS TABLE

| Problem <br> Number | Description | Difficulty Level | Time Allotted (min.) |
| :---: | :---: | :---: | :---: |
| 1A | Prepare journal entries related to bad debt expense. | Simple | 15-20 |
| 2A | Compute bad debt amounts. | Moderate | 20-25 |
| 3A | Journalize entries to record transactions related to bad debts. | Moderate | 20-30 |
| 4A | Journalize transactions related to bad debts. | Moderate | 20-30 |
| 5A | Journalize entries to record transactions related to bad debts. | Moderate | 20-30 |
| 6A | Prepare entries for various notes receivable transactions. | Moderate | 40-50 |
| 7A | Prepare entries for various receivable transactions. | Complex | 50-60 |
| 1B | Prepare journal entries related to bad debt expense. | Simple | 15-20 |
| 2B | Compute bad debt amounts. | Moderate | 20-25 |
| 3B | Journalize entries to record transactions related to bad debts. | Moderate | 20-30 |
| 4B | Journalize transactions related to bad debts. | Moderate | 20-30 |
| 5B | Journalize entries to record transactions related to bad debts. | Moderate | 20-30 |
| 6B | Prepare entries for various notes receivable transactions. | Moderate | 40-50 |
| 7B | Prepare entries for various receivable transactions. | Complex | 50-60 |

## WEYGANDT FINANCIAL ACCOUNTING, IFRS Edition, 2e CHAPTER 8 <br> ACCOUNTING FOR RECEIVABLES

| Number | LO | BT | Difficulty | Time (min.) |
| :---: | :---: | :---: | :---: | :---: |
| BE1 | 1 | C | Simple | 1-2 |
| BE2 | 2 | AP | Simple | 5-7 |
| BE3 | 3, 9 | AN | Simple | 4-6 |
| BE4 | 3 | AP | Simple | 4-6 |
| BE5 | 3 | AP | Simple | 4-6 |
| BE6 | 3 | AP | Simple | 2-4 |
| BE7 | 3 | AN | Simple | 4-6 |
| BE8 | 4 | AP | Simple | 6-8 |
| BE9 | 5 | AP | Simple | 8-10 |
| BE10 | 5 | AP | Moderate | 8-10 |
| BE11 | 6 | AP | Simple | 2-4 |
| BE12 | 9 | AP | Simple | 4-6 |
| DI1 | 3 | AP | Simple | 2-4 |
| DI2 | 4 | AP | Simple | 4-6 |
| DI3 | 5, 8 | AP | Simple | 6-8 |
| DI4 | 9 | AN | Simple | 4-6 |
| EX1 | 2 | AP | Simple | 8-10 |
| EX2 | 2 | AP | Simple | 8-10 |
| EX3 | 3 | AN | Simple | 8-10 |
| EX4 | 3 | AN | Simple | 6-8 |
| EX5 | 3 | AP | Simple | 6-8 |
| EX6 | 3 | AP | Simple | 6-8 |
| EX7 | 4 | AP | Simple | 4-6 |
| EX8 | 4 | AP | Simple | 6-8 |
| EX9 | 4 | AP | Simple | 6-8 |
| EX10 | 5,6 | AN | Simple | 8-10 |
| EX11 | 5,6 | AN | Simple | 6-8 |
| EX12 | 5, 6, 8 | AP | Moderate | 10-12 |
| EX13 | 5, 8 | AP | Simple | 8-10 |
| EX14 | 9 | AP | Simple | 8-10 |

## ACCOUNTING FOR RECEIVABLES (Continued)

| Number | LO | BT | Difficulty | Time (min.) |
| :---: | :---: | :---: | :---: | :---: |
| P1A | 2, 3, 9 | AN | Simple | 15-20 |
| P2A | 3 | AN | Moderate | 20-25 |
| P3A | 2, 3 | AN | Moderate | 20-30 |
| P4A | 2, 3 | AN | Moderate | 20-30 |
| P5A | 3 | AN | Moderate | 20-30 |
| P6A | 2, 4, 5, 8, 9 | AN | Moderate | 40-50 |
| P7A | 2, 4-8 | AP | Complex | 50-60 |
| P1B | 2, 3, 9 | AN | Simple | 15-20 |
| P2B | 3 | AN | Moderate | 20-25 |
| P3B | 2, 3 | AN | Moderate | 20-30 |
| P4B | 2, 3 | AN | Moderate | 20-30 |
| P5B | 3 | AN | Moderate | 20-30 |
| P6B | 2, 4, 5, 8, 9 | AN | Moderate | 40-50 |
| P7B | 2, 4-8 | AP | Complex | 50-60 |
| BYP1 | 3 | E | Moderate | 20-25 |
| BYP2 | 9 | AN, E | Simple | 10-15 |
| BYP3 | 8 | AP | Simple | 10-15 |
| BYP4 | 4 | AN | Moderate | 20-30 |
| BYP5 | 3 | E | Simple | 10-15 |
| BYP6 | 3 | E | Simple | 10-15 |

## BLOOM'S TAXONOMY TABLE

Correlation Chart between Bloom's Taxonomy, Learning Objectives and End-of-Chapter Exercises and Problems

| Learning Objective | Knowledge | Comprehension | Application | Analysis | Synthesis | Evaluation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Identify the different types of receivables. | Q8-2 | Q8-1 BE8-1 |  |  |  |  |
| 2. Explain how companies recognize accounts receivable. |  |  | Q8-3 E8-2 <br> BE8-2 P8-7A <br> E8-1 P8-7B | P8-1A P8-4A P8-3B <br> P8-3A P8-6A P8-4B <br>  P8-1B P8-6B |  |  |
| 3. Distinguish between the methods and bases companies used to value accounts receivable. | Q8-8 | $\begin{aligned} & \text { Q8-4 } \\ & \text { Q8-5 } \\ & \text { Q8-6 } \end{aligned}$ | BE8-4 BE8-5 BE8-6 DI8-1 E8-5 | Q8-7 P8-1A P8-1B <br> BE8-3 P8-2A P8-2B <br> BE8-7 P8-3A P8-3B <br> E8-3 P8-4A P8-4B <br> E8-4 P8-5A P8-5B |  |  |
| 4. Describe the entries to record the disposition of accounts receivable. | Q8-9 | Q8-10 | Q8-11 E8-8 <br> BE8-8 E8-9 <br> DI8-2 P8-7A <br> E8-7 P8-7B | $\begin{array}{\|l} \text { P8-6A } \\ \text { P8-6B } \end{array}$ |  |  |
| 5. Compute the maturity date of and interest on notes receivable. | Q8-13 | $\begin{array}{\|l} \text { Q8-12 } \\ \text { Q8-16 } \end{array}$ | Q8-14 E8-12 <br> Q8-15 E8-13 <br> BE8-9 P8-7A <br> BE8-10 P8-7B <br> DI8-3  | $\begin{aligned} & E 8-10 \\ & E 8-11 \\ & P 8-6 A \\ & P 8-6 B \end{aligned}$ |  |  |
| 6. Explain how companies recognize notes receivable. |  |  | $\left\lvert\, \begin{array}{lr} \text { BE8-11 } & \text { P8-7B } \\ \text { P8-7A } & \text { E8-12 } \end{array}\right.$ | $\begin{array}{\|c} \text { E8-10 } \\ \text { E8-11 } \end{array}$ |  |  |
| 7. Describe how companies value notes receivable. |  |  | $\begin{array}{\|l} \text { P8-7A } \\ \text { P8-7B } \end{array}$ |  |  |  |
| 8. Describe the entries to record the disposition of notes receivable. |  | Q8-17 | DI8-3 P8-7A <br> E8-12 P8-7B <br> E8-13  | $\begin{array}{\|l} \text { P8-6A } \\ \text { P8-6B } \end{array}$ |  |  |
| 9. Explain the statement presentation and analysis of receivables. | Q8-18 |  | $\begin{array}{\|l} \text { Q8-19 } \\ \text { Q8-20 } \\ \text { BE8-12 } \\ \text { E8-14 } \end{array}$ | BE8-3 P8-1B <br> DI8-4 P8-6B <br> P8-1A  <br> P8-6A  |  |  |
| Broadening Your Perspective |  |  | Real-World Focus | Decision-Making Across the Organization Comparative Analysis |  | Financial Reporting Comparative Analysis Ethics Case Communication |

## ANSWERS TO QUESTIONS

1. Accounts receivable are amounts owed by customers on account. They result from the sale of goods and services. Notes receivable represent claims that are evidenced by formal instruments of credit.
2. Other receivables include nontrade receivables such as interest receivable, loans to company officers, advances to employees, and income taxes refundable.
3. Accounts Receivable 40
Interest Revenue 40
4. The essential features of the allowance method of accounting for bad debts are:
(1) Uncollectible accounts receivable are estimated and matched against revenue in the same accounting period in which the revenue occurred.
(2) Estimated uncollectibles are debited to Bad Debt Expense and credited to Allowance for Doubtful Accounts through an adjusting entry at the end of each period.
(3) Actual uncollectibles are debited to Allowance for Doubtful Accounts and credited to Accounts Receivable at the time the specific account is written off.
5. Roger Holloway should realize that the decrease in cash realizable value occurs when estimated uncollectibles are recognized in an adjusting entry. The write-off of an uncollectible account reduces both accounts receivable and the allowance for doubtful accounts by the same amount. Thus, cash realizable value does not change.
6. The two bases of estimating uncollectibles are: (1) percentage-of-sales and (2) percentage-ofreceivables. The percentage-of-sales basis establishes a percentage relationship between the amount of credit sales and expected losses from uncollectible accounts. This method emphasizes the matching of expenses with revenues. Under the percentage-of-receivables basis, the balance in the allowance for doubtful accounts is derived from an analysis of individual customer accounts. This method emphasizes cash realizable value.
7. The adjusting entry under the percentage-of-sales basis is:

Bad Debt Expense
370,000
Allowance for Doubtful Accounts
370,000
The adjusting entry under the percentage-of-receivables basis is:
Bad Debt Expense
260,000
Allowance for Doubtful Accounts (NT\$580,000 - NT\$320,000) ...
260,000
8. Under the direct write-off method, bad debt losses are not estimated and no allowance account is used. When an account is determined to be uncollectible, the loss is debited to Bad Debt Expense. The direct write-off method makes no attempt to match bad debts expense to sales revenues or to show the cash realizable value of the receivables in the statement of financial position.
9. From its own credit cards, the Freida Company may realize financing charges from customers who do not pay the balance due within a specified grace period. National credit cards offer the following advantages:
(1) The credit card issuer makes the credit investigation of the customer.
(2) The issuer maintains individual customer accounts.

## Questions Chapter 8 (Continued)

(3) The issuer undertakes the collection process and absorbs any losses from uncollectible accounts.
(4) The retailer receives cash more quickly from the credit card issuer than it would from individual customers.
10. The reasons companies are selling their receivables are:
(1) Receivables may be sold because they may be the only reasonable source of cash.
(2) Billing and collection are often time-consuming and costly. It is often easier for a retailer to sell the receivables to another party with expertise in billing and collection matters.

12. A promissory note gives the holder a stronger legal claim than one on an accounts receivable. As a result, it is easier to sell to another party. Promissory notes are negotiable instruments, which means they can be transferred to another party by endorsement. The holder of a promissory note also can earn interest.
13. The maturity date of a promissory note may be stated in one of three ways: (1) on demand, (2) on a stated date, and (3) at the end of a stated period of time.
14. The maturity dates are: (a) March 13 of the next year, (b) August 4, (c) July 20, and (d) August 30.
15. The missing amounts are: (a) €15,000, (b) €9,000, (c) $12 \%$, and (d) four months.
16. If a financial institution uses 360 days rather than 365 days, it will receive more interest revenue. The reason is that the denominator is smaller, which makes the fraction larger and, therefore, the interest revenue larger.
17. When Jana Company has dishonored a note, the ledger can set up a receivable equal to the face amount of the note plus the interest due. It will then try to collect the balance due, or as much as possible. If there is no hope of collection it will write-off the receivable.
18. Each of the major types of receivables should be identified in the statement of financial position or in the notes to the financial statements. Both the gross amount of receivables and the allowance for doubtful accounts should be reported. If collectible within a year or the operating cycle, whichever is longer, these receivables are reported as current assets immediately above short-term investments.
19. Net credit sales for the period are $8.14 \times £ 400,000=\$ 3,256,000$.

## SOLUTIONS TO BRIEF EXERCISES

## BRIEF EXERCISE 8-1

(a) Accounts receivable.
(b) Notes receivable.
(c) Other receivables.

## BRIEF EXERCISE 8-2

(a) Accounts Receivable .......................................... 17,200

Sales Revenue $\qquad$ 17,200
(b) Sales Returns and Allowances .......................... 3,800

Accounts Receivable $\qquad$
(c) Cash (\$13,400 - \$268)

13,132
Sales Discounts (\$13,400 X 2\%) 268
Accounts Receivable (\$17,200 - \$3,800).......
13,400

## BRIEF EXERCISE 8-3

(a) Bad Debt Expense............................................... 31,000

Allowance for Doubtful Accounts
31,000
(b) Current assets

Prepaid insurance ....................................... \$ 7,500
Inventory 118,000
Accounts receivable.................................... \$ \$600,000
Less: Allowance for doubtful Accounts

31,000
569,000
Cash.
Total current assets
90,000
\$784,500
(a) Allowance for Doubtful Accounts ..... 6,200Accounts Receivable-Marcello6,200
(b)
(1) Before Write-Off
(2) After Write-Off

Accounts receivable Allowance for doubtful accounts
Cash realizable value
£700,000

54,000
£646,000
£693,800

47,800
£646,000

## BRIEF EXERCISE 8-5

Accounts Receivable-Marcello ..... 6,200
Allowance for Doubtful Accounts ..... 6,200
Cash ..... 6,200
Accounts Receivable-Marcello ..... 6,200
BRIEF EXERCISE 8-6
Bad Debt Expense [(\$800,000 - \$38,000) X 2\%] ..... 15,240
Allowance for Doubtful Accounts ..... 15,240
BRIEF EXERCISE 8-7
(a) Bad Debt Expense [(£420,000 X 1\%) - £1,500] ..... 2,700
Allowance for Doubtful Accounts ..... 2,700
(b) Bad Debt Expense [(£420,000 X 1\%) + £740] = £4,940
BRIEF EXERCISE 8-8
(a) Cash (€175-€7) ..... 168
Service Charge Expense ( $€ 175 \times 4 \%$ ) ..... 7Sales Revenue175
(b) Cash ( $€ 70,000-€ 2,100$ ) ..... 67,900
Service Charge Expense (€70,000 X 3\%) ..... 2,100
Accounts Receivable ..... 70,000

| Interest | Maturity Date |  |
| :---: | :---: | :---: |
| (a) \$800 A | August 9 |  |
| (b) \$1,120 O | October 12 |  |
| (c) \$200 J | July 11 |  |
| BRIEF EXERCISE 8-10 |  |  |
| Maturity Date | Annual Interest Rate | Total Interest |
| (a) May 31 | 5\% | \$5,000 |
| (b) August 1 | 8\% | \$ 600 |
| (c) September 7 | 7 10\% | \$6,000 |

## BRIEF EXERCISE 8-11

| Jan. 10 | Accounts Receivable $\qquad$ Sales Revenue $\qquad$ | 11,600 | 11,600 |
| :---: | :---: | :---: | :---: |
| Feb. 9 | Notes Receivable. | 11,600 |  |
|  | Accounts Receivable.. |  | 11,600 |

BRIEF EXERCISE 8-12
Accounts Receivable Turnover Ratio:
$\frac{\$ 20 B}{(\$ 2.7 B+\$ 2.8 B) \div 2}=\frac{\$ 20 B}{\$ 2.75 B}=7.3$ times

Average Collection Period for Accounts Receivable:

```
365 days
```


## SOLUTIONS FOR DO IT! REVIEW EXERCISES

## DO IT! 8-1

The following entry should be prepared to increase the balance in the Allowance for Doubtful Accounts from $\mathbf{R} \$ 4,700$ credit to $\mathbf{R} \$ 15,500$ credit (5\% X R\$310,000):
Bad Debt Expense .............................................................. 10,800
Allowance for Doubtful Accounts............
(To record estimate of uncollectible
accounts)

## DO IT! 8-2

To speed up the collection of cash, Paltrow could sell its accounts receivable to a factor. Assuming the factor charges Paltrow a 3\% service charge, it would make the following entry:

Cash 970,000
Service Charge Expense Accounts Receivable 30,000
(To record sale of receivables to factor)
(a) The maturity date is September 30. When the life of a note is expressed in terms of months, you find the date it matures by counting the months from the date of issue. When a note is drawn on the last day of a month, it matures on the last day of a subsequent month.
(b) The interest to be received at maturity is $\mathbf{\$ 1 8 6}$ :

Face X Rate X Time $=$ Interest
\$6,200 X 9\% X 4/12 = \$186
The entry recorded by Karbon Wholesalers at the maturity date is:
Cash 6,386
Notes Receivable ..... 6,200
Interest Revenue ..... 186(To record collection of Bazaar note)
(a)

$$
\begin{aligned}
& \text { Net credit sales } \div \begin{array}{c}
\text { Average net } \\
\text { accounts receivable }
\end{array}=\quad \begin{array}{c}
\text { Accounts receivable } \\
\text { turnover }
\end{array} \\
& \$ 1,480,000 \div \frac{\$ 112,000+\$ 108,000}{2}=13.5 \text { times }
\end{aligned}
$$

(b)

| Days in year | $\div$Accounts receivable <br> turnover | $=$ | Average collection <br> period in days |
| :---: | :---: | :---: | :---: |
| 365 | $\div 13.5$ times | $=$ | 27 days |

## SOLUTIONS TO EXERCISES

## EXERCISE 8-1

March 1 Accounts Receivable—Lynda Company..... 3,800
Sales Revenue ..... 3,800
3 Sales Returns and Allowances ..... 500
Accounts Receivable- LyndaCompany500
9 Cash ..... 3,234
Sales Discounts ..... 66
Accounts Receivable- LyndaCompany3,300
15 Accounts Receivable ..... 200
Sales Revenue ..... 200
31 Accounts Receivable ..... 3

$\qquad$Interest Revenue.
$\qquad$3
EXERCISE 8-2
(a) Jan. 6 Accounts Receivable—Jackie Inc ..... 7,000
Sales Revenue ..... 7,000
16 Cash (\$7,000 - \$140) ..... 6,860
Sales Discounts (2\% X \$7,000) ..... 140
Accounts Receivable-Jackie Inc

$\qquad$
(b) Jan. 10 Accounts Receivable-C. Bybee ..... 9,000
Sales Revenue ..... 9,000
Feb. 12 Cash ..... 6,000
Accounts Receivable-C. Bybee ..... 6,000
Mar. 10 Accounts Receivable-C. Bybee ..... 60
Interest Revenue [2\% X (\$9,000 - \$6,000)]60

## (a)

 Dec. 31 Bad Debt Expense1,400
Accounts Receivable-T.Thum ...... 1,400
(b) (1) Dec. 31 Bad Debt Expense [(€840,000 - €28,000) X 1\%]............. 8,120

Allowance for Doubtful
Accounts
8,120
(2) Dec. 31 Bad Debt Expense .............................. 8,900

Allowance for Doubtful Accounts $[(€ 110,000 \times 10 \%)-€ 2,100]$..... 8,900
(c) (1) Dec. 31 Bad Debt Expense [(€840,000 - €28,000) X .75\%].......... 6,090

Allowance for Doubtful
Accounts
6,090
(2) Dec. 31 Bad Debt Expense

6,800
Allowance for Doubtful Accounts [(€110,000 X 6\%) + €200]

6,800

EXERCISE 8-4

Allowance for Doubtful Accounts ..... 14,100Accounts Receivable
$\qquad$14,100
Accounts Receivable ..... 1,800
Allowance for Doubtful Accounts

$\qquad$1,800
Cash ..... 1,800
Accounts Receivable

$\qquad$
16,300
Bad Debt ExpenseAllowance for Doubtful Accounts[£19,000 - (£15,000 - £14,100 + £1,800)]16,300
EXERCISE 8-6
December 31, 2013
Bad Debt Expense (2\% X \$360,000) ..... 7,200
Allowance for Doubtful Accounts
$\qquad$7,200
May 11, 2014
Allowance for Doubtful Accounts ..... 1,100
Accounts Receivable-Vetter
...................................
June 12, 2014
Accounts Receivable-Vetter ..... 1,100
Cash

Allowance for Doubtful Accounts

Allowance for Doubtful Accounts

Allowance for Doubtful Accounts

$\qquad$

$\qquad$

Accounts Receivable-Vetter

Accounts Receivable-Vetter

Accounts Receivable-Vetter .....  ..... 1,100 .....  ..... 1,100 .....  ..... 1,1001,1001,1001,100
EXERCISE 8-7
(a) Mar. 3 Cash ( $\mathbf{W} 620,000,000$ -W18,600,000)601,400,000
Service Charge Expense(3\% X $\ddagger 620,000,000$ ).................... 18,600,000Accounts Receivable.
620,000,000
(b) May 10 Cash (W3,500,000 - W175,000) ..... 3,325,000 Service Charge Expense (5\% X W3,500,000) ..... 175,000
Sales Revenue ..... 3,500,000
(a) Apr. 2 Accounts Receivable-J. Keiser ..... 1,500
Sales Revenue ..... 1,500
May 3 Cash ..... 900
Accounts Receivable-J. Keiser900
June 1 Accounts Receivable-J. Keiser ..... 6
Interest Revenue [(\$1,500 - \$900) X 1\%] ..... 6
(b) July 4 Cash ..... 194
Service Charge Expense (3\% X \$200) ..... 6
Sales Revenue ..... 200
EXERCISE 8-9
(a) Jan. 15 Accounts Receivable ..... 18,000Sales Revenue.18,000
20 Cash (HK\$4,800 - HK\$96) ..... 4,704
Service Charge Expense (HK\$4,800 X 2\%) ..... 96Sales Revenue4,800
Feb. 10 Cash ..... 10,000Accounts Receivable10,000
15 Accounts Receivable (HK\$8,000 X 1.5\%) ..... 120 Interest Revenue ..... 120
(b) Interest Revenue is reported under other income and expense. Service Charge Expense is a selling expense.
(a) ..... 2014
Nov. 1 Notes Receivable ..... 15,000
Cash ..... 15,000
Dec. 11 Notes Receivable ..... 6,750
Sales Revenue ..... 4,400
Accounts Receivable-Russo
277
31 Interest Receivable
Interest Revenue* ..... 277
*Calculation of interest revenue:
Jeanne's note: $\quad \$ 15,000 \times 19 \times \quad 2 / 12=\$ 225$
Sharbo's note: $6,750 \times 8 \% \times 20 / 360=30$Russo's note: $\quad 4,400 \times 12 \% \times 15 / 360=\quad 22$
Total accrued interest ..... $\$ 277$
(b) 2015
Nov. 1 Cash ..... 16,350
Interest Receivable

$\qquad$Interest Revenue*.
$\qquad$Notes Receivable
$\qquad$*(\$15,000 X 9\% X 10/12)
EXERCISE 8-11
2014
May 1 Notes Receivable ..... 7,500
Accounts Receivable- Monroe ..... 7,500
Dec. 31 Interest Receivable ..... 450Interest Revenue(€7,500 X 9\% X 8/12)450
31 Interest Revenue ..... 450
Income Summary ..... 450
2015
May 1 Cash ..... 8,175
Notes Receivable ..... 7,500
Interest Receivable ..... 450
Interest Revenue
(€7,500 X 9\% X 4/12) ..... 225
EXERCISE 8-12
5/1/14 Notes Receivable. ..... 16,000
Accounts Receivable-Crane ..... 16,000
7/1/14 Notes Receivable. ..... 25,000
Cash25,000
12/31/14 Interest Receivable ..... 1,280Interest Revenue(\$16,000 X 12\% X 8/12)........................ 1,280
Interest Receivable ..... 1,250Interest Revenue
(\$25,000 X 10\% X 6/12) ..... 1,250
4/1/15 Accounts Receivable-Howard ..... 26,875
Notes Receivable ..... 25,000
Interest Receivable ..... 1,250
Interest Revenue
(\$25,000 X 10\% X 3/12 = \$625) ..... 625
5/1/15 Cash ..... 17,920
Notes Receivable ..... 16,000
Interest Receivable ..... 1,280
Interest Revenue
(\$16,000 X 12\% X 4/12 = \$640) ..... 640
(a) May 2 Notes Receivable................................. 7,600,000 Cash............................................... 7,600,000
(b) Nov. 2 Accounts Receivable—Cortland Inc...................................................... 7,904,000
Notes Receivable......................... 7,600,000
Interest Revenue
( $¥ 7,600,000 \times 8 \% \times 1 / 2$ ).............. 304,000
(To record the dishonor of
Cortland Inc. note with expectation of collection)
(c) Nov. 2 Allowance for Doubtful Accounts.......... 7,600,000
Notes Receivable............................ 7,600,000
(To record the dishonor of Cortland Inc. note with no expectation of collection)

EXERCISE 8-14
(a) Beginning accounts receivable........................................ \$ 100,000

Net credit sales ................................................................ 1,000,000
Cash collections $(920,000)$
Accounts written off $(30,000)$
Ending accounts receivable
$\$ \quad 150,000$
(b) $\$ 1,000,000 /[(\$ 100,000+\$ 150,000) / 2]=\underline{\underline{8}}$
(c) $365 / 8=45.6$ days

## SOLUTIONS TO PROBLEMS

## PROBLEM 8-1A

(a) 1. Accounts Receivable

3,315,000
Sales Revenue
3,315,000
2. Sales Returns and Allowances ................. 50,000

Accounts Receivable $\qquad$ 50,000
3. Cash

2,810,000
Accounts Receivable
2,810,000
4. Allowance for Doubtful Accounts. $\qquad$ 90,000 Accounts Receivable $\qquad$ 90,000
5. Accounts Receivable

29,000
Allowance for Doubtful Accounts $\qquad$ 29,000
Cash .......................................................... 29,000
Accounts Receivable
29,000
(b)

| Accounts Receivable |  |  |  |
| :--- | ---: | ---: | ---: |
| Bal. | 960,000 | $(2)$ | 50,000 |
| (1) | $3,315,000$ | $(3)$ | $2,810,000$ |
| (5) | 29,000 | $(4)$ | 90,000 |
|  |  | $(5)$ | 29,000 |
| Bal. | $1,325,000$ |  |  |


| Allowance for Doubtful Accounts |  |  |
| :--- | :--- | ---: |
| $\mathbf{( 4 )} \quad 90,000$ | Bal. | 70,000 |
|  | (5) | 29,000 |
|  |  |  |
|  | Bal. | 9,000 |

## PROBLEM 8-1A (Continued)


The journal entry would therefore be as follows:
Bad Debt Expense........................................... 116,000
Allowance for Doubtful Accounts........
116,000
(d) $\frac{\mathrm{R} \$ 3,315,000-\mathrm{R} \$ 50,000}{(\mathrm{R} \$ 890,000+\mathrm{R} \$ 1,200,000) \div 2}=\frac{\mathrm{R} \$ 3,265,000}{\mathrm{R} \$ 1,045,000}=3.12$ times

## PROBLEM 8-2A

(a) $£ 66,000$.
(b) $£ 75,000(£ 2,500,000 \times 3 \%)$.
(c) $£ 64,900$ [(£970,000 $\times 7 \%)-£ 3,000]$.
(d) $£ 70,900$ [(£970,000 $\times 7 \%)+£ 3,000]$.
(e) The weakness of the direct write-off method is two-fold. First, it does not match expenses with revenues. Second, the accounts receivable are not stated at cash realizable value at the statement of financial position date.

## PROBLEM 8-3A

| (a) Dec. $31 \quad \begin{array}{c}\text { Bad Debt Expense.................................. } \\ \text { Allowance for Doubtful Accounts } \\ (\$ 41,730-\$ 9,000) . . . . . . . . . . . . . . . . . . . . . . . . ~\end{array}$ |  |  |
| :--- | :--- | :--- | :--- |
|  | 32,730 |  |

(a) \& (b)

Bad Debt Expense

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 2014 |  |  |  |  |  |
| Dec. 31 | Adjusting |  | 32,730 |  | 32,730 |

Allowance for Doubtful Accounts

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :--- | :--- | :--- | ---: |
| 2014 |  |  |  |  |  |
| Dec. 31 | Balance |  |  | 32,730 | 41,730 |
| 31 | Adjusting |  |  |  |  |
| 2015 |  | 1,000 |  | 40,730 |  |
| Mar. 31 |  |  | 1,000 | 41,730 |  |
| May 31 |  |  |  |  |  |

$$
\text { (b) } 2015
$$

(1)

Mar. 31 Allowance for Doubtful Accounts .......... 1,000 Accounts Receivable
(2)

$$
\begin{gathered}
\text { May } 31 \text { Accounts Receivable .............................. } 1,000 \\
\text { Allowance for Doubtful Accounts .... }
\end{gathered}
$$

## 31 Cash

1,000
Accounts Receivable
(c) 2015

> Dec. 31 Bad Debt Expense................................... 32,400 Allowance for Doubtful Accounts $(\$ 31,600+\$ 800) . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$

## PROBLEM 8-4A

(a) Total estimated bad debts

|  |  | Number of Days Outstanding |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $0-30$ | $31-60$ | $61-90$ | $91-120$ | Over 120 |  |
| Accounts <br> receivable | HK\$193,000 | HK\$70,000 | HK $\$ 46,000$ | HK\$39,000 | HK $\$ 23,000$ | HK\$15,000 |  |
| $\%$ uncollectible |  | $1 \%$ | $3 \%$ | $5 \%$ | $8 \%$ | $10 \%$ |  |
| Estimated <br> Bad debts | HK\$7,370 | HK\$700 | HK\$1,380 | HK\$1,950 | HK\$1,840 | HK\$1,500 |  |

(b) Bad Debt Expense.................................................... 10,370

Allowance for Doubtful Accounts
[HK\$7,370 + HK\$3,000]
10,370
(c) Allowance for Doubtful Accounts

5,000
Accounts Receivable
5,000
(d) Accounts Receivable

5,000
Allowance for Doubtful Accounts
5,000
Cash
5,000
Accounts Receivable 5,000
(e) If Hú Inc. used 3\% of total accounts receivable rather than aging the individual accounts the bad debt expense adjustment would be HK\$8,790 [(HK\$193,000 X 3\%) + HK\$3,000]. The rest of the entries would be the same as they were when aging the accounts receivable.

Aging the individual accounts rather than applying a percentage to the total accounts receivable should produce a more accurate allowance account and bad debts expense.

## PROBLEM 8-5A

(a) The allowance method. Since the balance in the allowance for doubtful accounts is given, they must be using this method because the account would not exist if they were using the direct write-off method.
(b) (1) Dec. 31 Bad Debt Expense
(\$11,750 - \$800) ............................ 10,950
Allowance for Doubtful Accounts

10,950
(2) Dec. 31 Bad Debt Expense (\$918,000 X 1\%) ............................ 9,180

Allowance for Doubtful Accounts $\qquad$ 9,180
(c) (1) Dec. 31 Bad Debt Expense (\$11,750 + \$800) 12,550

> Allowance for Doubtful Accounts ............................... 12,550

Note: The entry is the same whether the amount of bad debt expense at the end of 2014 was estimated using the percentage-of-receivables or the percentage-of-sales method.
(e) Bad Debt Expense

3,000
Accounts Receivable
(f) Allowance for Doubtful Accounts is a contra-asset account. It is subtracted from the gross amount of accounts receivable so that accounts receivable is reported at its cash realizable value.

## PROBLEM 8-6A

(a) Oct. 7 Accounts Receivable ..... 6,300
Sales Revenue

$\qquad$ ..... 6,300
12 Cash (\$1,200-\$36) ..... 1,164
Service Charge Expense (\$1,200 X 3\%) ..... 36
Sales Revenue ..... 1,200
15 Accounts Receivable ..... 460
Interest Revenue ..... 460
15 Cash ..... 8,107
Notes Receivable ..... 8,000
Interest Receivable (\$8,000 X 8\% X 45/360) ..... 80
Interest Revenue
(\$8,000 X 8\% X 15/360) ..... 27
24 Accounts Receivable-Skinner ..... 9,150
Notes Receivable ..... 9,000
Interest Receivable
(\$9,000 X 10\% X 36/360) ..... 90
Interest Revenue
(\$9,000 X 10\% X 24/360) ..... 60
31 Interest Receivable
(\$14,000 X 9\% X 1/12) ..... 105
Interest Revenue ..... 105
(b)

Notes Receivable

| Date | Explanation | Ref. | Debit | Credit | Balance |  |
| :--- | ---: | :--- | :---: | :---: | :---: | ---: |
| Oct. | 1 | Balance | $\checkmark$ |  |  | 31,000 |
|  | 15 |  |  |  | 8,000 | 23,000 |
|  | 24 |  |  |  | 9,000 | 14,000 |

PROBLEM 8-6A (Continued)
Accounts Receivable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Oct. | 7 |  | 6,300 |  | 6,300 |
|  | 15 |  | 460 |  | 6,760 |
|  | 24 |  | 9,150 |  | 15,910 |

Interest Receivable

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :---: | :---: | :---: | ---: |
| Oct. | 1 | Balance | $\checkmark$ |  |  |
|  | 15 |  |  |  | 80 |
|  | 24 |  |  |  | 105 |
|  | 31 |  |  | 105 |  |
|  |  |  |  |  | 00 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

(c) Current assets
Notes receivable. ..... \$14,000
Accounts receivable ..... 15,910
Interest receivable ..... 105
Total receivables ..... \$30,015

## PROBLEM 8-7A

Jan. 5 Accounts Receivable-Zwingle Company ..... 24,000
Sales Revenue ..... 24,000
20 Notes Receivable ..... 24,000
Accounts Receivable- Zwingle Company ..... 24,000
Feb. 18 Notes Receivable ..... 8,000
Sales Revenue ..... 8,000
Apr. 20 Cash (€24,000 + €540) ..... 24,540
Notes Receivable ..... 24,000
Interest Revenue (€24,000 X 9\% X 3/12) ..... 540
30 Cash (€30,000 + €1,200) ..... 31,200
Notes Receivable ..... 30,000
Interest Revenue (€30,000 X 12\% X 4/12) ..... 1,200
May 25 Notes Receivable ..... 4,000
Accounts Receivable- Isabella Inc. ..... 4,000
Aug. 18 Cash (€8,000 + €320) ..... 8,320
Notes Receivable. ..... 8,000
Interest Revenue(€8,000 X 8\% X 6/12)320
25 Accounts Receivable-Isabella Inc. (€4,000 + €70) ..... 4,070
Notes Receivable ..... 4,000
Interest Revenue (€4,000 X 7\% X 3/12) ..... 70
Sept. 1 Notes Receivable ..... 12,000
Sales Revenue ..... 12,000

## PROBLEM 8-1B

(a) 1. Accounts Receivable ..... 2,400,000Sales Revenue
$\qquad$2,400,000
2. Sales Returns and Allowances ..... 45,000
Accounts Receivable ..... 45,000
3. Cash ..... 2,250,000
Accounts Receivable ..... 2,250,000
4. Allowance for Doubtful Accounts ..... 13,000Accounts Receivable13,000
5. Accounts Receivable ..... 2,000Allowance for DoubtfulAccounts
$\qquad$2,000
Cash ..... 2,000Accounts Receivable2,000
(b)

Accounts Receivable

| Bal. | 220,000 | $(2)$ | 45,000 |
| :--- | ---: | ---: | ---: |
| (1) | $2,400,000$ | $(3)$ | $2,250,000$ |
| (5) | 2,000 | $(4)$ | 13,000 |
|  |  | $(5)$ | 2,000 |
| Bal. | 312,000 |  |  |

Allowance for Doubtful Accounts
(4)

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


| Bal. | 15,000 |
| :--- | ---: |
| (5) | 2,000 |
|  |  |
|  | Bal. |

(c) Balance before adjustment [see (b)] $\qquad$
Balance needed
Adjustment required
The journal entry would therefore be as follows:
Bad Debt Expense ..... 18,000Allowance for Doubtful Accounts18,000
(d) $\frac{\$ 2,400,000-\$ 45,000}{(\$ 290,000+\$ 205,000) \div 2}=\frac{\$ 2,355,000}{\$ 247,500}=9.52$ times

## PROBLEM 8-2B

(a) $\ddagger 23,400$.
(b) $\ddagger 27,600$ ( $\ddagger 920,000 \times 3 \%$ ).
(c) $\ddagger 21,830[(\ddagger 369,000 \times 7 \%)-屯 4,000]$.
(d) $\ddagger 27,830[(\ddagger 369,000 \times 7 \%)+\ddagger 2,000]$.
(e) There are two major weaknesses with the direct write-off method. First, it does not match expenses with the associated revenues. Second, the accounts receivable are not stated at cash realizable value at the statement of financial position date.

## PROBLEM 8-3B

$\begin{array}{ll}\text { (a) Dec. } 31 & \begin{array}{r}\text { Bad Debt Expense.................................. } \\ \text { Allowance for Doubtful Accounts } \\ (\$ 54,250-\$ 14,000) . . . . . . . . . . . . . . . . . . . . . . ~\end{array}\end{array}$
(a) \& (b)

Bad Debt Expense

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 2014 |  |  |  |  |  |
| Dec. 31 | Adjusting |  | 40,250 |  | 40,250 |

Allowance for Doubtful Accounts

| Date | Explanation | Ref. | Debit | Credit | Balance |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 2014 |  |  |  |  |  |
| Dec. | 31 | Balance |  |  | 40,250 |
| 31 | Adjusting |  |  | 54,000 |  |
| 2015 |  | 1,900 |  |  |  |
| Mar. | 1 |  |  | 1,900 | 52,350 |
| May |  |  |  |  | 54,250 |

(b) ..... 2015
(1)
Mar. 1 Allowance for Doubtful Accounts ..... 1,900Accounts Receivable1,900
(2)
May 1 Accounts Receivable ..... 1,900
Allowance for Doubtful Accounts ..... 1,900
1 Cash ..... 1,900
Accounts Receivable ..... 1,900
(c) ..... 2015
Dec. 31 Bad Debt Expense ..... 45,700
Allowance for Doubtful Accounts (\$42,300 + \$3,400)45,700

## PROBLEM 8-4B

(a) Total estimated bad debts

|  |  |  |  | Number of Days Outstanding |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $0-30$ | $31-60$ | $61-90$ | $91-120$ | Over 120 |
| Accounts <br> receivable | CHF383,000 | CHF220,000 | CHF90,000 | CHF40,000 | CHF18,000 | CHF15,000 |
| \% uncollectible |  | $1 \%$ | $3 \%$ | $5 \%$ | $8 \%$ | $10 \%$ |
| Estimated <br> Bad debts | CHF9,840 | CHF2,200 | CHF2,700 | CHF2,000 | CHF1,440 | CHF1,500 |

(b) Bad Debt Expense ..... 8,240
Allowance for Doubtful Accounts (CHF9,840 - CHF1,600) ..... 8,240
(c) Allowance for Doubtful Accounts ..... 1,100Accounts Receivable
1,100
(d) Accounts Receivable ..... 700
Allowance for Doubtful Accounts ..... 700
Cash ..... 700
Accounts Receivable ..... 700
(e) When an allowance account is used, an adjusting journal entry is made at the end of each accounting period. This entry satisfies the expense recognition principle by recording the bad debt expense in the period in which the sales occur.

## PROBLEM 8-5B

(a) (1) Dec. 31 Bad Debt Expense(\$13,800 - \$1,400) .......................... 12,400
Allowance for DoubtfulAccounts12,400(2) Dec. 31 Bad Debt Expense(\$600,000 X 2\%) ............................. 12,000
Allowance for Doubtful Accounts ..... 12,000
(b) (1) Dec. 31 Bad Debt Expense (\$13,800 + \$1,400) ..... 15,200
Allowance for Doubtful Accounts ..... 15,200
(2) Dec. 31 Bad Debt Expense ..... 12,000
Allowance for Doubtful Accounts ..... 12,000
(c) Allowance for Doubtful Accounts ..... 3,200
Accounts Receivable

$\qquad$ ..... 3,200
Note: The entry is the same whether the amount of bad debt expense at the end of 2014 was estimated using the percentage-of-receivables or the percentage-of-sales method.
(d) Bad Debt Expense ..... 3,200
Accounts Receivable ..... 3,200
(e) The advantages of the allowance method over the direct write-off method are:
(1) It attempts to match bad debt expense related to uncollectible accounts receivable with sales revenues on the income statement.
(2) It attempts to show the cash realizable value of the accounts receivable on the statement of financial position.

## PROBLEM 8-6B



## PROBLEM 8-6B (Continued)

## Accounts Receivable



## PROBLEM 8-7B

Jan. 5 Accounts Receivable—Patrick Company ..... 8,400
Sales Revenue ..... 8,400
Feb. 2 Notes Receivable ..... 8,400
Accounts Receivable-Patrick Company ..... 8,400
12 Notes Receivable ..... 13,500
Sales Revenue ..... 13,500
26 Accounts Receivable-Felton Co ..... 7,000
Sales Revenue ..... 7,000
Apr. 5 Notes Receivable ..... 7,000
Accounts Receivable- Felton Co ..... 7,000
12 Cash (\$13,500 + \$225) ..... 13,725
Notes Receivable ..... 13,500
Interest Revenue(\$13,500 X 10\% X 2/12)225
June 2 Cash (\$8,400 + \$280) ..... 8,680
Notes Receivable ..... 8,400
Interest Revenue (\$8,400 X 10\% X 4/12) ..... 280
July 5 Accounts Receivable-Felton Co. (\$7,000 + \$140) ..... 7,140
Notes Receivable ..... 7,000
Interest Revenue(\$7,000 X 8\% X 3/12)140
15 Notes Receivable ..... 14,000
Sales Revenue ..... 14,000
Oct. 15 Allowance for Doubtful Accounts ..... 14,000Notes Receivable14,000
(a) Jan. 1 Notes Receivable ..... 1,500Accounts Receivable-Leon Company1,500
3 Allowance for Doubtful Accounts ..... 780
Accounts Receivable780
8 Inventory ..... 17,200
Accounts Payable. ..... 17,200
11 Accounts Receivable ..... 25,000
Sales Revenue ..... 25,000
Cost of Goods Sold ..... 17,500Inventory17,500
15 Cash ..... 1,164
Service Charge Expense ..... 36
Sales Revenue1,200
Cost of Goods Sold ..... 780
Inventory780
17 Cash ..... 22,900
Accounts Receivable ..... 22,900
21 Accounts Payable ..... 16,300Cash16,300
24 Accounts Receivable ..... 330
Allowance for Doubtful Accounts ..... 330
Cash ..... 330Accounts Receivable330
27 Supplies ..... 1,400
Cash ..... 1,400
31 Other Operating Expenses ..... 3,218
Cash ..... 3,218

## Adjusting Entries

Jan. 31 Interest Receivable ..... 10Interest Revenue (\$1,500 X 8\% X 1/12) ....... 10
31 Bad Debt Expense [(\$19,600 X 5\%) - (\$800 - \$780 + \$330)] ..... 630
Allowance for Doubtful Accounts ..... 630
31 Supplies Expense ..... 930
Supplies (\$1,400 - \$470) ..... 930
VICTORIA COMPANY Adjusted Trial Balance January 31, 2014

|  | Debit | Credit |
| :---: | :---: | :---: |
| Cash...................................................... | \$16,576 |  |
| Notes Receivable..................................... | 1,500 |  |
| Accounts Receivable | 19,600 |  |
| Allowance for Doubtful Accounts............ |  | 980 |
| Interest Receivable................................... | 10 |  |
| Inventory .................................................. | 8,320 |  |
| Supplies ................................................. | 470 |  |
| Accounts Payable ................................... |  | 9,650 |
| Share Capital-Ordinary ......................... |  | 20,000 |
| Retained Earnings.................................... |  | 12,730 |
| Sales Revenue .......................................... |  | 26,200 |
| Cost of Goods Sold | 18,280 |  |
| Supplies Expense.................................... | 930 |  |
| Bad Debt Expense................................... | 630 |  |
| Service Charge Expense .......................... | 36 |  |
| Other Operating Expenses ....................... | 3,218 |  |
| Interest Revenue ...................................... |  | 10 |
|  | \$69,570 | \$69,570 |

## COMPREHENSIVE PROBLEM SOLUTION (Continued)

(b) Optional T accounts for accounts with multiple transactions

Cash

| $1 / 1$ Bal. | 13,100 | $1 / 21$ | 16,300 |
| :--- | ---: | :--- | ---: |
| $1 / 15$ | 1,164 | $1 / 27$ | 1,400 |
| $1 / 17$ | 22,900 | $1 / 31$ | 3,218 |
| $1 / 24$ | 330 |  |  |
| $1 / 31$ Bal. 16,576 |  |  |  |

Accounts Receivable

| $1 / 1$ Bal. | 19,780 | $1 / 1$ | 1,500 |
| :--- | ---: | :--- | ---: |
| $1 / 11$ | 25,000 | $1 / 3$ | 780 |
| $1 / 24$ | 330 | $1 / 17$ | 22,900 |
|  |  | $1 / 24$ | 330 |
| $1 / 31$ Bal. | 19,600 |  |  |


| Supplies |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| $1 / 27$ | 1,400 | $1 / 31$ | 930 |
| $1 / 31$ Bal. | 470 |  |  |


| Accounts Payable |  |  |  |
| :--- | ---: | :--- | ---: |
| $1 / 21$ | 16,300 | $1 / 1$ Bal. | 8,750 |
|  |  | $1 / 8$ | 17,200 |
|  |  | $1 / 31$ Bal. | 9,650 |


| Sales Revenue |  |  |
| :--- | :--- | ---: |
|  | $1 / 11$ | 25,000 |
|  | $1 / 15$ | 1,200 |
|  | $1 / 31$ Bal. 26,200 |  |

Allowance for Doubtful Accounts

| $1 / 3$ | 780 | $1 / 1$ Bal. | 800 |
| :--- | :--- | :--- | :--- |
|  | $1 / 24$ | 330 |  |
|  | $1 / 31$ | 630 |  |
|  | $1 / 31$ Bal. | 980 |  |


| Inventory |  |  |  |
| :--- | ---: | ---: | ---: |
| $1 / 1$ Bal. | 9,400 | $1 / 11$ | 17,500 |
| $1 / 8$ | 17,200 | $1 / 15$ | 780 |
| $1 / 31$ Bal. | 8,320 |  |  |

## VICTORIA COMPANY Income Statement <br> For the Month Ending January 31, 2014

Sales revenue ..... \$26,200
Cost of goods sold ..... 18,280
Gross profit ..... 7,920
Operating expenses
Other operating expenses ..... \$3,218
Supplies expense ..... 930
Bad debt expense ..... 630
Service charge expense ..... 36
Total operating expenses ..... 4,814
Income from operations ..... 3,106
Other income and expense
Interest revenue ..... 10
Net Income
$\qquad$

## COMPREHENSIVE PROBLEM SOLUTION (Continued)

## VICTORIA COMPANY Retained Earnings Statement For the Month Ending January 31, 2014

Retained Earnings, January 1 ..... \$12,730
Add: Net income ..... 3,116
Retained Earnings, January 31 ..... \$15,846
VICTORIA COMPANY Statement of Financial Position January 31, 2014
Assets
Current assets
Supplies ..... \$ 470
Inventory ..... 8,320
Notes receivable ..... 1,500
Accounts receivable ..... \$19,600
Less: Allowance for doubtful accounts ..... 980
18,620
Interest receivable10
Cash ..... 16,576
Total assets\$45,496
Equity and Liabilities
Equity
Share capital—ordinary ..... \$20,000
Retained earnings ..... 15,846 ..... \$ 35,846
Current liabilitiesAccounts payable9,650Total equity and liabilities\$45,496
(a) Answers to Natalie's questions

1. Calculations you should perform on the statements are:

- Working capital = Current assets - Current liabilities
- Current ratio $=$ Current assets $\div$ Current liabilities
- Inventory turnover = Cost of goods sold $\div$ Average inventory
- Days sales in inventory = Days in the year $\div$ Inventory turnover

Given the type of business it is unlikely that Curtis would have a significant amount of accounts receivable.

Positive working capital and a high current ratio are indications that the company has good liquidity and will be more likely to be able to pay for the mixer. The inventory turnover and days sales in inventory will provide additional information - the days sales in inventory will tell you how long, on average, it takes for inventory to be sold.
2. Other alternatives to extending credit to Curtis include:

- Waiting for 30 days to make the sale.
- Have Curtis borrow from the bank.
- Have Curtis use a credit card to finance the purchase.


## CCC8 (Continued)

## (a) (Continued)

3. The advantage of extending credit to customers is the anticipated increase in sales expected from customers who will purchase goods only if they can receive credit. The disadvantages of extending credit are the additional costs incurred to keep track of amounts owed, the additional costs incurred when staff need to be assigned to follow up on late account balances, and the risk of not collecting a receivable from a customer who is unable to pay.

The advantages of allowing customers to use credit cards include making the purchase easier for the customer, potentially increasing sales, as customers are not limited to the amount of cash in their wallet, and reducing the accounts receivable you have to manage if credit cards are used instead of granting credit to customers. In addition, the credit card company assumes the risk of nonpayment, and if a bank credit card is used the seller has cash immediately.

The disadvantage is the cost to your business. When a customer makes a purchase using a credit card you will have to pay a percentage of the sale to the credit card company. The rate varies but 3\% would not be unusual. You will also have to pay to rent the equipment to process the credit card sales. The fee is not large but is an ongoing expense.
(b)


## CCC8 (Continued)

(b) (Continued)

# July 31 Accounts Receivable—Lesperance [\$1,150 + \$8] 1,158 Notes Receivable 1,150 Interest Revenue [\$1,150 X 8.25\% X 1/12]....... 8 

Aug. 7 Cash.................................................................... 1,158
Accounts Receivable-Lesperance 1,158

## CAF COMPANY

## Accounts Receivable Aging Schedule <br> May 31, 2014

|  | Proportion of Total | Amount in Category | Probability of NonCollection | Estimated Uncollectible Amount |
| :---: | :---: | :---: | :---: | :---: |
| Not yet due | . 600 | \$ 840,000 | . 02 | \$16,800 |
| Less than 30 days past due | . 220 | 308,000 | . 04 | 12,320 |
| 30 to 60 days past due | . 090 | 126,000 | . 06 | 7,560 |
| 61 to 120 days past due | . 050 | 70,000 | . 09 | 6,300 |
| 121 to 180 days past due | . 025 | 35,000 | . 25 | 8,750 |
| Over 180 days past due | . 015 | 21,000 | . 70 | 14,700 |
|  | $\underline{\underline{1.000}}$ | \$1,400,000 |  | \$66,430 |

(b)

## CAF COMPANY

## Analysis of Allowance for Doubtful Accounts

May 31, 2014
June 1, 2013 balance ..... \$ 29,500
Bad debts expense accrual ( $\$ 2,800,000 \times$. 045) ..... 126,000
Balance before write-offs of bad accounts ..... 155,500
Write-offs of bad accounts ..... 102,000
Balance before year-end adjustment ..... 53,500
Estimated uncollectible amount ..... 66,430\$ 12,930
Bad Debt Expense ..... 12,930
Allowance for Doubtful Accounts ..... 12,930
(c) 1. Steps to Improve the Accounts Receivable Situation

Establish more selective creditgranting policies, such as more restrictive credit requirements or more thorough credit investigations.

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

Charge interest on overdue accounts. Insist on cash on delivery (cod) or cash on order (coo) for new customers or poor credit risks.
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 office equipment and supplies industry.

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.
(a) (1) Accounts receivable turnover ratio

| Zetar | Nestlé |
| :---: | :---: |
| £131,922 | CHF109,722 |
| $(£ 24,935+£ 19,062) \div 2$ | (CHF12,083 + CHF12,309) $\div 2$ |
| $£ 131,922=6.00$ times | $\underline{\text { CHF109,722 }}=9.0$ times |
|  | CHF12,196 ${ }^{\text {- }}$ - |
| Average collection period |  |
| $365=60.8$ days | $365=40.6$ days |
| 6.0 - 60.8 days | 9.0 - 40.6 days |

(b) Nestlé's average collection period is 20 days shorter the Zetar's. While this might be due to Zetar's difficulty in collecting from customers, it also might be at least partially explained by our assumption that all receivables are trade receivables.
(a) Factoring invoices enhances cash flow and allows a company to meet business expenses and take on new opportunities. The benefits of factoring include:

- Predictable cash flow and elimination of slow payments.
- Flexible financing, as factoring line is tied to sales. It's the ideal tool for growth.
- Factoring is easy to obtain. Works well with startups and established companies.
- Factoring financing lines can be setup in a few days.
(b) Factoring rates range between $1.5 \%$ and $3.5 \%$ per month. The two major variables considered when determining the rate are: (1) the size of the transaction, and (2) the credit quality of the company's clients.
(c) The first installment is paid within a couple of days and is typically $90 \%$ of the invoice amount. After customers pay the invoice amount to the factor, the second installment (10\%) is paid, less a fee for the transaction.


## BYP 8-4 DECISION-MAKING ACROSS THE ORGANIZATION

(a)
$\qquad$

| 2014 |  | 2013 |  |
| :---: | :---: | :---: | :---: |
| $\underline{\$ 500,000}$ | $\underline{\$ 650,000}$ | $\underline{\$ 400,000}$ |  |

Credit and collection expenses
Collection agency fees $\qquad$
\$

Salary of accounts receivable clerk $\qquad$

Uncollectible accounts

$\qquad$

4,100
4,100

4,100
Billing and mailing costs

Credit investigation fees $\qquad$
$\qquad$Total

8,000
10,400
6,400
2,500
750
\$ 17,800
\$ 21,225
\$ 15,400
Total expenses as a percentage of net credit sales $\qquad$ 3.56\%
3.27\%
3.85\%
(b) Average accounts receivable (5\%) $\qquad$ \$ 25,000
\$ 32,500
\$ 20,000
$\$ \quad 2,600$
$\$ \quad 1,600$
Total credit and collection expenses per above
\$ 17,800
\$ 21,225
\$ 15,400
Add: Investment earnings*. 2,000
Net credit and collection expenses $\qquad$
2,600 1,600
\$ 23,825
\$ 17,000
Net expenses as a percentage of net credit sales $\qquad$ 3.96\%
3.67\%
4.25\%
*The investment earnings on the cash tied up in accounts receivable is an additional expense of continuing the existing credit policies.
(c) The analysis shows that the credit card fee of $4 \%$ of net credit sales will be higher than the percentage cost of credit and collection expenses in each year before considering the effect of earnings from other investment opportunities. However, after considering investment earnings, the credit card fee of $4 \%$ will be less than the company's percentage cost if annual net credit sales are less than $\$ 500,000$.

Finally, the decision hinges on: (1) the accuracy of the estimate of investment earnings, (2) the expected trend in credit sales, and (3) the effect the new policy will have on sales. Non-financial factors include the effects on customer relationships of the alternative credit policies and whether the Piweks want to continue with the problem of handling their own accounts receivable.

Of course, this solution will differ from student to student. Important factors to look for would be definitions of the methods, how they are similar and how they differ. Also, look for use of good sentence structure, correct spelling, etc.

## Example:

## Dear Lily,

The three methods you asked about are methods of dealing with uncollectible accounts receivable. Two of them, percentage-of-sales and percentage-ofreceivables, are "allowance" methods used to estimate the amount uncollectible. Under the percentage-of-sales basis, management establishes a percentage relationship between the amount of credit sales and expected losses from uncollectible accounts. This is based on past experience and anticipated credit policy. The percentage is then applied to either total credit sales or net credit sales of the current year. This basis of estimating emphasizes the matching of expenses with revenues.

Under the percentage-of-receivables basis, management establishes a percentage relationship between the amount of receivables and expected losses from uncollectible accounts. Customer accounts are classified by the length of time they have been unpaid. This basis emphasizes cash realizable value of receivables and is therefore deemed a "statement of financial position" approach.

The direct write-off method does not estimate losses and an allowance account is not used. Instead, when an account is determined to be uncollectible, it is written off directly to Bad Debt Expense. Unless bad debt losses are insignificant, this method is not acceptable for financial reporting purposes.

Sincerely,
(a) The stakeholders in this situation are:

- The president of Vestin Co.
- The controller of Vestin Co.
- The shareholders.
(b) Yes. The controller is posed with an ethical dilemma-should helshe follow the president's "suggestion" and prepare misleading financial statements (understated net income) or should helshe attempt to stand up to and possibly anger the president by preparing a fair (realistic) income statement.
(c) Vestin Co.'s growth rate should be a product of fair and accurate financial statements, not vice versa. That is, one should not prepare financial statements with the objective of achieving or sustaining a predetermined growth rate. The growth rate should be a product of management and operating results, not of creative accounting.


## GAAP EXERCISE

## GAAP-1

The FASB and IASB have both worked toward reporting financial instruments at fair value. Both require disclosure of fair value information in notes to financial statements and both permit (but do not require) companies to record some types of financial instruments at fair value.

IFRS requires that specific loans and receivables be reviewed for impairment and then all loans and receivables as a group be reviewed. This "twotiered" approach is not used by the FASB. IFRS and GAAP also differ in the criteria used to derecognize receivables. IFRS considers risks and rewards as well as loss of control over the receivables sold or factored. GAAP uses only the loss of control as its criteria. In addition, IFRS allows partial derecognition but GAAP does not.

GAAP 8-2
(a) Accounts receivable turnover ratio

| $\frac{\underline{2010}}{}+\frac{\underline{2009}}{(\$ 37,394+\$ 37,512) / 2}$ | $\frac{\$ 495,592}{(\$ 37,512+\$ 31,213) / 2}$ |
| :--- | :---: |
| $=$ | $=\frac{\$ 495,592}{\$ 37,453}$ |
| $=13.8$ times | $=14.4$ times |

Average collection period

$$
\frac{365}{13.8}=26.4 \text { days }
$$

$$
\frac{365}{14.4}=25.3 \text { days }
$$

(b) The accounts receivable turnover ratio measures the number of times, on average, a company collects accounts receivable during a period. The average collection period measures the number of days it takes to collect a receivable. From the results shown in (a), it is apparent that Tootsie Roll Industries' accounts receivable collections deteriorated slightly in 2010 over 2009. Both the turnover and the related collection period were worse in 2010 as compared to 2009. However, if Tootsie Roll's credit terms are 30 days, both years' collection period fall within those terms.

