

# CHAPTER 9

## Accounting for Receivables

### ASSIGNMENT CLASSIFICATION TABLE

| <u>Learning Objectives</u>                                                               | <u>Questions</u>   | <u>Brief Exercises</u> | <u>Do It!</u> | <u>Exercises</u> | <u>A Problems</u>  | <u>B Problems</u>  |
|------------------------------------------------------------------------------------------|--------------------|------------------------|---------------|------------------|--------------------|--------------------|
| 1. Identify the different types of receivables.                                          | 1, 2               | 1                      |               |                  |                    |                    |
| 2. Explain how companies recognize accounts receivable.                                  | 3                  | 2                      |               | 1, 2             | 1A, 3A, 4A, 6A, 7A | 1B, 3B, 4B, 6B, 7B |
| 3. Distinguish between the methods and bases companies use to value accounts receivable. | 4, 5, 6, 7, 8      | 3, 4, 5, 6, 7          | 1             | 3, 4, 5, 6       | 1A, 2A, 3A, 4A, 5A | 1B, 2B, 3B, 4B, 5B |
| 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.                        | 12, 13, 14, 15, 16 | 9, 10                  | 3             | 10, 11, 12, 13   | 6A, 7A             | 6B, 7B             |
| 6. Explain how companies recognize notes receivable.                                     |                    | 11                     |               | 10, 11, 12       | 7A                 | 7B                 |
| 7. Describe how companies value notes receivable.                                        |                    |                        |               |                  |                    |                    |
| 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, 20         | 3, 12                  | 4             | 14               | 1A, 6A             | 1B, 6B             |

## ASSIGNMENT CHARACTERISTICS TABLE

| <b>Problem Number</b> | <b>Description</b>                                              | <b>Difficulty Level</b> | <b>Time Allotted (min.)</b> |
|-----------------------|-----------------------------------------------------------------|-------------------------|-----------------------------|
| 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 ACCOUNTING PRINCIPLES 11E**  
**CHAPTER 9**  
**ACCOUNTING FOR RECEIVABLES**

| <b>Number</b> | <b>LO</b> | <b>BT</b> | <b>Difficulty</b> | <b>Time (min.)</b> |
|---------------|-----------|-----------|-------------------|--------------------|
| 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, 4–6, 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, 4–6, 8     | AP    | Complex    | 50–60       |
| BYP1   | 3             | E     | Moderate   | 20–25       |
| BYP2   | 9             | AN, E | Simple     | 10–15       |
| BYP3   | 9             | AN, E | Simple     | 10–15       |
| BYP4   | 8             | AP    | Simple     | 10–15       |
| BYP5   | 4             | AN    | Moderate   | 20–30       |
| BYP6   | 3             | E     | Simple     | 10–15       |
| BYP7   | 3             | E     | Simple     | 10–15       |
| BYP8   | 4             | E     | Simple     | 15–20       |
| BYP9   | —             | AP    | Moderate   | 10–15       |

**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.                                 | Q9-2      | Q9-1 BE9-1           |                                            |                                                                    |                                                                                                    |                                                                                              |
| 2. Explain how companies recognize accounts receivable.                         |           |                      | Q9-3<br>BE9-2<br>E9-1                      | E9-2<br>P9-7A<br>P9-7B                                             | P9-1A P9-4A P9-3B<br>P9-3A P9-6A P9-4B<br>P9-1B P9-6B                                              |                                                                                              |
| 3. Distinguish between the methods and bases used to value accounts receivable. | Q9-8      | Q9-4<br>Q9-5<br>Q9-6 | BE9-4<br>BE9-5<br>BE9-6<br>DI9-1<br>E9-5   | E9-6                                                               | Q9-7 P9-1A P9-1B<br>BE9-3 P9-2A P9-2B<br>BE9-7 P9-3A P9-3B<br>E9-3 P9-4A P9-4B<br>E9-4 P9-5A P9-5B |                                                                                              |
| 4. Describe the entries to record the disposition of accounts receivable.       | Q9-9      | Q9-10                | Q9-11<br>BE9-8<br>DI9-2<br>E9-7            | E9-8<br>E9-9<br>P9-7A<br>P9-7B                                     | P9-6A<br>P9-6B                                                                                     |                                                                                              |
| 5. Compute the maturity date of and interest on notes receivable.               | Q9-13     | Q9-12<br>Q9-16       | Q9-14<br>Q9-15<br>BE9-9<br>BE9-10<br>DI9-3 | E9-12<br>E9-13<br>P9-7A<br>P9-7B                                   | E9-10<br>E9-11<br>P9-6A<br>P9-6B                                                                   |                                                                                              |
| 6. Explain how companies recognize notes receivable.                            |           |                      | BE9-11<br>P9-7A                            | P9-7B<br>E9-12                                                     | E9-10<br>E9-11                                                                                     |                                                                                              |
| 7. Describe how companies value notes receivable.                               |           |                      |                                            |                                                                    |                                                                                                    |                                                                                              |
| 8. Describe the entries to record the disposition of notes receivable.          |           | Q9-17                | DI9-3<br>E9-12<br>E9-13                    | P9-7A<br>P9-7B                                                     | P9-6A<br>P9-6B                                                                                     |                                                                                              |
| 9. Explain the statement presentation and analysis of receivables.              | Q9-18     |                      | Q9-19<br>Q9-20<br>BE9-12<br>E9-14          |                                                                    | BE9-3 P9-1B<br>DI9-4 P9-6B<br>P9-1A<br>P9-6A                                                       |                                                                                              |
| Broadening Your Perspective                                                     |           |                      | Real-World Focus<br>FASB Codification      | Decision Making Across<br>the Organization<br>Comparative Analysis |                                                                                                    | All About You<br>Financial Reporting<br>Comparative Analysis<br>Ethics Case<br>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 Debts 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-of-receivables. 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 .....                | 4,100 |       |
| Allowance for Doubtful Accounts ..... |       | 4,100 |

The adjusting entry under the percentage-of-receivables basis is:

|                                                           |       |       |
|-----------------------------------------------------------|-------|-------|
| Bad Debt Expense .....                                    | 2,800 |       |
| Allowance for Doubtful Accounts (\$5,800 – \$3,000) ..... |       | 2,800 |
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 debt expense to sales revenues or to show the cash realizable value of the receivables in the balance sheet.
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 9 (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.
11. Cash..... 776,000  
Service Charge Expense (3% X \$800,000)..... 24,000  
Accounts Receivable ..... 800,000
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) 6%, 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 balance sheet 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 below short-term investments.
19. Net credit sales for the period are  $8.14 \times \$400,000 = \$3,256,000$ .
20. Apple's 2011 allowance for doubtful accounts of \$53 million represents 1% of its gross receivables of \$5,422 million.

# SOLUTIONS TO BRIEF EXERCISES

## BRIEF EXERCISE 9-1

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

## BRIEF EXERCISE 9-2

|     |                                                |        |        |
|-----|------------------------------------------------|--------|--------|
| (a) | Accounts Receivable .....                      | 17,200 |        |
|     | Sales Revenue .....                            |        | 17,200 |
| (b) | Sales Returns and Allowances .....             | 3,800  |        |
|     | Accounts Receivable .....                      |        | 3,800  |
| (c) | Cash (\$13,400 – \$268) .....                  | 13,132 |        |
|     | Sales Discounts (\$13,400 X 2%) .....          | 268    |        |
|     | Accounts Receivable (\$17,200 – \$3,800) ..... |        | 13,400 |

## BRIEF EXERCISE 9-3

|     |                                       |               |                  |
|-----|---------------------------------------|---------------|------------------|
| (a) | Bad Debt Expense .....                | 31,000        |                  |
|     | Allowance for Doubtful Accounts ..... |               | 31,000           |
| (b) | Current assets                        |               |                  |
|     | Cash .....                            |               | \$ 90,000        |
|     | Accounts receivable .....             | \$600,000     |                  |
|     | Less: Allowance for doubtful          |               |                  |
|     | Accounts .....                        | <u>31,000</u> | 569,000          |
|     | Inventory .....                       |               | 130,000          |
|     | Prepaid insurance .....               |               | <u>7,500</u>     |
|     | Total current assets .....            |               | <u>\$796,500</u> |



**BRIEF EXERCISE 9-4**

|     |                                       |                             |                            |
|-----|---------------------------------------|-----------------------------|----------------------------|
| (a) | Allowance for Doubtful Accounts ..... | 6,200                       |                            |
|     | Accounts Receivable—Gray .....        |                             | 6,200                      |
| (b) |                                       | (1) <u>Before Write-Off</u> | (2) <u>After Write-Off</u> |
|     | Accounts receivable                   | \$700,000                   | \$693,800                  |
|     | Allowance for doubtful accounts       | <u>54,000</u>               | <u>47,800</u>              |
|     | Cash realizable value                 | <u>\$646,000</u>            | <u>\$646,000</u>           |

**BRIEF EXERCISE 9-5**

|                                       |       |       |
|---------------------------------------|-------|-------|
| Accounts Receivable—Gray.....         | 6,200 |       |
| Allowance for Doubtful Accounts ..... |       | 6,200 |
| Cash .....                            | 6,200 |       |
| Accounts Receivable—Gray .....        |       | 6,200 |

**BRIEF EXERCISE 9-6**

|                                                      |        |        |
|------------------------------------------------------|--------|--------|
| Bad Debt Expense [(\$800,000 – \$40,000) X 2%] ..... | 15,200 |        |
| Allowance for Doubtful Accounts .....                |        | 15,200 |

**BRIEF EXERCISE 9-7**

|     |                                                       |       |       |
|-----|-------------------------------------------------------|-------|-------|
| (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%) + \$800] = \$5,000 |       |       |

**BRIEF EXERCISE 9-8**

|     |                                              |        |        |
|-----|----------------------------------------------|--------|--------|
| (a) | Cash (\$175 – \$7).....                      | 168    |        |
|     | Service Charge Expense (\$175 X 4%) .....    | 7      |        |
|     | Sales Revenue.....                           |        | 175    |
| (b) | Cash (\$60,000 – \$1,800).....               | 58,200 |        |
|     | Service Charge Expense (\$60,000 X 3%) ..... | 1,800  |        |
|     | Accounts Receivable .....                    |        | 60,000 |

## BRIEF EXERCISE 9-9

| <u>Interest</u> | <u>Maturity Date</u> |
|-----------------|----------------------|
| (a) \$800       | August 9             |
| (b) \$1,120     | October 12           |
| (c) \$200       | July 11              |

## BRIEF EXERCISE 9-10

| <u>Maturity Date</u> | <u>Annual Interest Rate</u> | <u>Total Interest</u> |
|----------------------|-----------------------------|-----------------------|
| (a) May 31           | 6%                          | \$6,000               |
| (b) August 1         | 8%                          | \$ 600                |
| (c) September 7      | 10%                         | \$6,000               |

## BRIEF EXERCISE 9-11

|         |                           |        |        |
|---------|---------------------------|--------|--------|
| Jan. 10 | Accounts Receivable ..... | 15,600 |        |
|         | Sales Revenue .....       |        | 15,600 |
| Feb. 9  | Notes Receivable.....     | 15,600 |        |
|         | Accounts Receivable.....  |        | 15,600 |

## BRIEF EXERCISE 9-12

Accounts Receivable Turnover Ratio:

$$\frac{\$20\text{B}}{(\$2.7\text{B} + \$2.8\text{B}) \div 2} = \frac{\$20\text{B}}{\$2.75\text{B}} = 7.3 \text{ times}$$

Average Collection Period for Accounts Receivable:

$$\frac{365 \text{ days}}{7.3 \text{ times}} = 50 \text{ days}$$

## SOLUTIONS FOR DO IT! REVIEW EXERCISES

### DO IT! 9-1

The following entry should be prepared to increase the balance in the Allowance for Doubtful Accounts from \$6,100 credit to \$15,500 credit (5% X \$310,000):

|                                                |       |       |
|------------------------------------------------|-------|-------|
| Bad Debt Expense .....                         | 9,400 |       |
| Allowance for Doubtful Accounts .....          |       | 9,400 |
| (To record estimate of uncollectible accounts) |       |       |

### DO IT! 9-2

|                                               |         |         |
|-----------------------------------------------|---------|---------|
| Cash.....                                     | 194,000 |         |
| Service Charge Expense (\$200,000 X 3%) ..... | 6,000   |         |
| Accounts Receivable.....                      |         | 200,000 |
| (To record sale of receivables to factor)     |         |         |

### DO IT! 9-3

(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 \$186:

Face X Rate X Time = Interest

\$6,200 X 9% X 4/12 = \$186

The entry recorded by Gentry Wholesalers at the maturity date is:

|                                       |       |       |
|---------------------------------------|-------|-------|
| Cash .....                            | 6,386 |       |
| Notes Receivable .....                |       | 6,200 |
| Interest Revenue .....                |       | 186   |
| (To record collection of Benton note) |       |       |

## DO IT! 9-4

(a)

$$\begin{array}{rclcl} \text{Net credit sales} & \div & \text{Average net} & = & \text{Accounts receivable} \\ & & \text{accounts receivable} & & \text{turnover} \\ \\ \$1,300,000 & \div & \frac{\$101,000 + \$107,000}{2} & = & 12.5 \text{ times} \end{array}$$

(b)

$$\begin{array}{rclcl} \text{Days in year} & \div & \text{Accounts receivable} & = & \text{Average collection} \\ & & \text{turnover} & & \text{period in days} \\ \\ 365 & \div & 12.5 \text{ times} & = & 29.2 \text{ days} \end{array}$$

# SOLUTIONS TO EXERCISES

## EXERCISE 9-1

|         |                                          |       |       |
|---------|------------------------------------------|-------|-------|
| March 1 | Accounts Receivable—Dodson Company..     | 5,000 |       |
|         | Sales Revenue .....                      |       | 5,000 |
| 3       | Sales Returns and Allowances.....        | 500   |       |
|         | Accounts Receivable—Dodson Company ..... |       | 500   |
| 9       | Cash .....                               | 4,410 |       |
|         | Sales Discounts.....                     | 90    |       |
|         | Accounts Receivable—Dodson Company ..... |       | 4,500 |
| 15      | Accounts Receivable .....                | 400   |       |
|         | Sales Revenue .....                      |       | 400   |
| 31      | Accounts Receivable .....                | 3     |       |
|         | Interest Revenue .....                   |       | 3     |

## EXERCISE 9-2

|             |                                      |       |       |
|-------------|--------------------------------------|-------|-------|
| (a) Jan. 6  | Accounts Receivable—Pryor.....       | 7,000 |       |
|             | Sales Revenue .....                  |       | 7,000 |
| 16          | Cash (\$7,000 – \$140) .....         | 6,860 |       |
|             | Sales Discounts (2% X \$7,000) ..... | 140   |       |
|             | Accounts Receivable—Pryor .....      |       | 7,000 |
| (b) Jan. 10 | Accounts Receivable—Farley.....      | 9,000 |       |
|             | Sales Revenue .....                  |       | 9,000 |
| Feb. 12     | Cash .....                           | 5,000 |       |
|             | Accounts Receivable—Farley .....     |       | 5,000 |
| Mar. 10     | Accounts Receivable—Farley.....      | 40    |       |
|             | Interest Revenue                     |       |       |
|             | [1% X (\$9,000 – \$5,000)].....      |       | 40    |

### EXERCISE 9-3

|         |         |                                                                                  |       |       |
|---------|---------|----------------------------------------------------------------------------------|-------|-------|
| (a)     | Dec. 31 | Bad Debt Expense .....                                                           | 1,400 |       |
|         |         | Accounts Receivable—L. Dole.....                                                 |       | 1,400 |
| (b) (1) | Dec. 31 | Bad Debt Expense<br>[ $(\$840,000 - \$20,000) \times 1\%$ ] .....                | 8,200 |       |
|         |         | Allowance for Doubtful<br>Accounts .....                                         |       | 8,200 |
| (2)     | Dec. 31 | Bad Debt Expense .....                                                           | 8,900 |       |
|         |         | Allowance for Doubtful Accounts<br>[ $(\$110,000 \times 10\%) - \$2,100$ ] ..... |       | 8,900 |
| (c) (1) | Dec. 31 | Bad Debt Expense<br>[ $(\$840,000 - \$20,000) \times .75\%$ ] .....              | 6,150 |       |
|         |         | Allowance for Doubtful<br>Accounts .....                                         |       | 6,150 |
| (2)     | Dec. 31 | Bad Debt Expense .....                                                           | 6,800 |       |
|         |         | Allowance for Doubtful Accounts<br>[ $(\$110,000 \times 6\%) + \$200$ ] .....    |       | 6,800 |

### EXERCISE 9-4

|     |                            |                                                                    |          |                                |
|-----|----------------------------|--------------------------------------------------------------------|----------|--------------------------------|
| (a) | <u>Accounts Receivable</u> | <u>Amount</u>                                                      | <u>%</u> | <u>Estimated Uncollectible</u> |
|     | 1–30 days                  | \$60,000                                                           | 2.0      | \$1,200                        |
|     | 31–60 days                 | 17,600                                                             | 5.0      | 880                            |
|     | 61–90 days                 | 8,500                                                              | 20.0     | 1,700                          |
|     | Over 90 days               | 7,000                                                              | 50.0     | <u>3,500</u>                   |
|     |                            |                                                                    |          | <u>\$7,280</u>                 |
| (b) | Mar. 31                    | Bad Debt Expense .....                                             |          | 6,080                          |
|     |                            | Allowance for Doubtful Accounts<br>[ $(\$7,280 - \$1,200)$ ] ..... |          | 6,080                          |

**EXERCISE 9-5**

|                                                   |        |        |
|---------------------------------------------------|--------|--------|
| Allowance for Doubtful Accounts .....             | 11,000 |        |
| Accounts Receivable.....                          |        | 11,000 |
| Accounts Receivable .....                         | 1,800  |        |
| Allowance for Doubtful Accounts .....             |        | 1,800  |
| Cash .....                                        | 1,800  |        |
| Accounts Receivable.....                          |        | 1,800  |
| Bad Debt Expense.....                             | 13,200 |        |
| Allowance for Doubtful Accounts                   |        |        |
| [\$19,000 – (\$15,000 – \$11,000 + \$1,800)]..... |        | 13,200 |

**EXERCISE 9-6**

December 31, 2014

|                                         |       |       |
|-----------------------------------------|-------|-------|
| Bad Debt Expense (2% X \$450,000) ..... | 9,000 |       |
| Allowance for Doubtful Accounts .....   |       | 9,000 |

May 11, 2015

|                                       |       |       |
|---------------------------------------|-------|-------|
| Allowance for Doubtful Accounts ..... | 1,100 |       |
| Accounts Receivable—Shoemaker .....   |       | 1,100 |

June 12, 2015

|                                       |       |       |
|---------------------------------------|-------|-------|
| Accounts Receivable—Shoemaker.....    | 1,100 |       |
| Allowance for Doubtful Accounts ..... |       | 1,100 |
| Cash .....                            | 1,100 |       |
| Accounts Receivable—Shoemaker .....   |       | 1,100 |

**EXERCISE 9-7**

|            |                                  |         |         |
|------------|----------------------------------|---------|---------|
| (a) Mar. 3 | Cash (\$650,000 – \$19,500)..... | 630,500 |         |
|            | Service Charge Expense           |         |         |
|            | (3% X \$650,000).....            | 19,500  |         |
|            | Accounts Receivable .....        |         | 650,000 |
| (b) May 10 | Cash (\$3,000 – \$120) .....     | 2,880   |         |
|            | Service Charge Expense           |         |         |
|            | (4% X \$3,000) .....             | 120     |         |
|            | Sales Revenue .....              |         | 3,000   |

## EXERCISE 9-8

|     |        |                                                    |       |       |
|-----|--------|----------------------------------------------------|-------|-------|
| (a) | Apr. 2 | Accounts Receivable—J. Elston .....                | 1,500 |       |
|     |        | Sales Revenue.....                                 |       | 1,500 |
|     | May 3  | Cash.....                                          | 500   |       |
|     |        | Accounts Receivable—<br>J. Elston .....            |       | 500   |
|     | June 1 | Accounts Receivable—J. Elston .....                | 10    |       |
|     |        | Interest Revenue<br>[(\$1,500 – \$500) X 1%] ..... |       | 10    |
| (b) | July 4 | Cash.....                                          | 196   |       |
|     |        | Service Charge Expense<br>(2% X \$200).....        | 4     |       |
|     |        | Sales Revenue.....                                 |       | 200   |

## EXERCISE 9-9

|     |         |                                               |        |        |
|-----|---------|-----------------------------------------------|--------|--------|
| (a) | Jan. 15 | Accounts Receivable.....                      | 18,000 |        |
|     |         | Sales Revenue.....                            |        | 18,000 |
|     | 20      | Cash (\$4,500 – \$90).....                    | 4,410  |        |
|     |         | Service Charge Expense<br>(\$4,500 X 2%)..... | 90     |        |
|     |         | Sales Revenue.....                            |        | 4,500  |
|     | Feb. 10 | Cash.....                                     | 10,000 |        |
|     |         | Accounts Receivable .....                     |        | 10,000 |
|     | 15      | Accounts Receivable (\$8,000 X 1.5%) ....     | 120    |        |
|     |         | Interest Revenue .....                        |        | 120    |

- (b) Interest Revenue is reported under other revenues and gains.  
Service Charge Expense is a selling expense.



**EXERCISE 9-10**

|         |                                   | 2014   |        |
|---------|-----------------------------------|--------|--------|
| Nov. 1  | Notes Receivable .....            | 30,000 |        |
|         | Cash .....                        |        | 30,000 |
| Dec. 11 | Notes Receivable .....            | 6,750  |        |
|         | Sales Revenue .....               |        | 6,750  |
| 16      | Notes Receivable .....            | 4,000  |        |
|         | Accounts Receivable—Ferneti ..... |        | 4,000  |
| 31      | Interest Receivable .....         | 545    |        |
|         | Interest Revenue* .....           |        | 545    |

**\*Calculation of interest revenue:**

|                        |                                            |
|------------------------|--------------------------------------------|
| Lopez's note:          | $\$30,000 \times 10\% \times 2/12 = \$500$ |
| Kremer's note:         | $6,750 \times 8\% \times 20/360 = 30$      |
| Ferneti's note:        | $4,000 \times 9\% \times 15/360 = 15$      |
| Total accrued interest | <u>\$545</u>                               |

|        |                           | 2015   |        |
|--------|---------------------------|--------|--------|
| Nov. 1 | Cash .....                | 33,000 |        |
|        | Interest Receivable ..... |        | 500    |
|        | Interest Revenue* .....   |        | 2,500  |
|        | Notes Receivable .....    |        | 30,000 |
|        | *(\$30,000 X 10% X 10/12) |        |        |

**EXERCISE 9-11**

|         |                                       | 2014  |       |
|---------|---------------------------------------|-------|-------|
| May 1   | Notes Receivable .....                | 9,000 |       |
|         | Accounts Receivable—<br>Chamber ..... |       | 9,000 |
| Dec. 31 | Interest Receivable .....             | 600   |       |
|         | Interest Revenue                      |       |       |
|         | (\$9,000 X 10% X 8/12) .....          |       | 600   |
| 31      | Interest Revenue .....                | 600   |       |
|         | Income Summary .....                  |       | 600   |

## EXERCISE 9-11 (Continued)

|       |                                             | 2015  |       |
|-------|---------------------------------------------|-------|-------|
| May 1 | Cash .....                                  | 9,900 |       |
|       | Notes Receivable .....                      |       | 9,000 |
|       | Interest Receivable .....                   |       | 600   |
|       | Interest Revenue                            |       |       |
|       | ( $\$9,000 \times 10\% \times 4/12$ ) ..... |       | 300   |

## EXERCISE 9-12

|          |                                                      |        |        |
|----------|------------------------------------------------------|--------|--------|
| 4/1/14   | Notes Receivable .....                               | 30,000 |        |
|          | Accounts Receivable—Goodwin .....                    |        | 30,000 |
| 7/1/14   | Notes Receivable .....                               | 25,000 |        |
|          | Cash .....                                           |        | 25,000 |
| 12/31/14 | Interest Receivable .....                            | 2,700  |        |
|          | Interest Revenue                                     |        |        |
|          | ( $\$30,000 \times 12\% \times 9/12$ ) .....         |        | 2,700  |
|          | Interest Receivable .....                            | 1,250  |        |
|          | Interest Revenue                                     |        |        |
|          | ( $\$25,000 \times 10\% \times 6/12$ ) .....         |        | 1,250  |
| 4/1/15   | Cash .....                                           | 33,600 |        |
|          | Notes Receivable .....                               |        | 30,000 |
|          | Interest Receivable .....                            |        | 2,700  |
|          | Interest Revenue                                     |        |        |
|          | ( $\$30,000 \times 12\% \times 3/12 = \$900$ ) ..... |        | 900    |
|          | Accounts Receivable .....                            | 26,875 |        |
|          | Notes Receivable .....                               |        | 25,000 |
|          | Interest Receivable .....                            |        | 1,250  |
|          | Interest Revenue                                     |        |        |
|          | ( $\$25,000 \times 10\% \times 3/12 = \$625$ ) ..... |        | 625    |

### EXERCISE 9-13

|     |        |                                                                                     |       |       |
|-----|--------|-------------------------------------------------------------------------------------|-------|-------|
| (a) | May 2  | Notes Receivable.....                                                               | 9,000 |       |
|     |        | Cash .....                                                                          |       | 9,000 |
| (b) | Nov. 2 | Accounts Receivable—Chang<br>Inc.....                                               | 9,405 |       |
|     |        | Notes Receivable.....                                                               |       | 9,000 |
|     |        | Interest Revenue<br>(\$9,000 X 9% X 1/2) .....                                      |       | 405   |
|     |        | (To record the dishonor of<br>Chang Inc. note with<br>expectation of collection)    |       |       |
| (c) | Nov. 2 | Allowance for Doubtful Accounts .....                                               | 9,000 |       |
|     |        | Notes Receivable.....                                                               |       | 9,000 |
|     |        | (To record the dishonor of<br>Chang Inc. note with no<br>expectation of collection) |       |       |

### EXERCISE 9-14

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

# SOLUTIONS TO PROBLEMS

## PROBLEM 9-1A

|     |    |                                       |           |           |
|-----|----|---------------------------------------|-----------|-----------|
| (a) | 1. | Accounts Receivable .....             | 3,700,000 |           |
|     |    | Sales Revenue .....                   |           | 3,700,000 |
|     | 2. | Sales Returns and Allowances .....    | 50,000    |           |
|     |    | Accounts Receivable .....             |           | 50,000    |
|     | 3. | Cash .....                            | 2,810,000 |           |
|     |    | Accounts Receivable .....             |           | 2,810,000 |
|     | 4. | Allowance for Doubtful Accounts ..... | 90,000    |           |
|     |    | Accounts Receivable .....             |           | 90,000    |
|     | 5. | Accounts Receivable .....             | 29,000    |           |
|     |    | Allowance for Doubtful Accounts ..... |           | 29,000    |
|     |    | Cash .....                            | 29,000    |           |
|     |    | Accounts Receivable .....             |           | 29,000    |

(b)

| Accounts Receivable |           |     |           | Allowance for Doubtful Accounts |        |      |        |
|---------------------|-----------|-----|-----------|---------------------------------|--------|------|--------|
| Bal.                | 960,000   | (2) | 50,000    | (4)                             | 90,000 | Bal. | 80,000 |
| (1)                 | 3,700,000 | (3) | 2,810,000 |                                 |        | (5)  | 29,000 |
| (5)                 | 29,000    | (4) | 90,000    |                                 |        |      |        |
|                     |           | (5) | 29,000    |                                 |        |      |        |
| Bal.                | 1,710,000 |     |           |                                 |        | Bal. | 19,000 |

### PROBLEM 9-1A (Continued)

|     |                                           |                  |
|-----|-------------------------------------------|------------------|
| (c) | Balance before adjustment [see (b)] ..... | \$ 19,000        |
|     | Balance needed .....                      | <u>115,000</u>   |
|     | Adjustment required.....                  | <u>\$ 96,000</u> |

The journal entry would therefore be as follows:

|                                       |        |        |
|---------------------------------------|--------|--------|
| Bad Debt Expense.....                 | 96,000 |        |
| Allowance for Doubtful Accounts ..... |        | 96,000 |

(d) 
$$\frac{\$3,700,000 - \$50,000}{(\$880,000 + \$1,595,000) \div 2} = \frac{\$3,650,000}{\$1,237,500} = 2.95 \text{ times}$$

|                     |
|---------------------|
| <b>PROBLEM 9-2A</b> |
|---------------------|

- (a) \$33,000.**
- (b) \$50,000 ( $\$2,500,000 \times 2\%$ ).**
- (c) \$49,500 [ $(\$875,000 \times 6\%) - \$3,000$ ].**
- (d) \$55,500 [ $(\$875,000 \times 6\%) + \$3,000$ ].**
- (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 balance sheet date.**

|                     |
|---------------------|
| <b>PROBLEM 9-3A</b> |
|---------------------|

|     |         |                                 |        |        |
|-----|---------|---------------------------------|--------|--------|
| (a) | Dec. 31 | Bad Debt Expense.....           | 26,610 |        |
|     |         | Allowance for Doubtful Accounts |        |        |
|     |         | (\$38,610 – \$12,000) .....     |        | 26,610 |

(a) & (b)

**Bad Debt Expense**

| Date    | Explanation | Ref. | Debit  | Credit | Balance |
|---------|-------------|------|--------|--------|---------|
| 2014    |             |      |        |        |         |
| Dec. 31 | Adjusting   |      | 26,610 |        | 26,610  |

**Allowance for Doubtful Accounts**

| Date    | Explanation | Ref. | Debit | Credit | Balance |
|---------|-------------|------|-------|--------|---------|
| 2014    |             |      |       |        |         |
| Dec. 31 | Balance     |      |       |        | 12,000  |
| 31      | Adjusting   |      |       | 26,610 | 38,610  |
| 2015    |             |      |       |        |         |
| Mar. 31 |             |      | 1,000 |        | 37,610  |
| May 31  |             |      |       | 1,000  | 38,610  |

|     |         |                                       |  |       |       |
|-----|---------|---------------------------------------|--|-------|-------|
| (b) |         | 2015                                  |  |       |       |
|     |         | (1)                                   |  |       |       |
|     | Mar. 31 | Allowance for Doubtful Accounts ..... |  | 1,000 |       |
|     |         | Accounts Receivable.....              |  |       | 1,000 |
|     |         | (2)                                   |  |       |       |
|     | May 31  | Accounts Receivable .....             |  | 1,000 |       |
|     |         | Allowance for Doubtful Accounts.....  |  |       | 1,000 |
|     | 31      | Cash .....                            |  | 1,000 |       |
|     |         | Accounts Receivable.....              |  |       | 1,000 |

|     |         |                                 |        |  |        |
|-----|---------|---------------------------------|--------|--|--------|
| (c) |         | 2015                            |        |  |        |
|     | Dec. 31 | Bad Debt Expense.....           | 32,400 |  |        |
|     |         | Allowance for Doubtful Accounts |        |  |        |
|     |         | (\$31,600 + \$800) .....        |        |  | 32,400 |

# **PROBLEM 9-4A**

## (a) Total estimated bad debts

|                     |           | Number of Days Outstanding |          |          |          |          |
|---------------------|-----------|----------------------------|----------|----------|----------|----------|
|                     | Total     | 0–30                       | 31–60    | 61–90    | 91–120   | Over 120 |
| Accounts receivable | \$200,000 | \$77,000                   | \$46,000 | \$39,000 | \$23,000 | \$15,000 |
| % uncollectible     |           | 1%                         | 4%       | 5%       | 8%       | 20%      |
| Estimated Bad debts | \$ 9,400  | \$ 770                     | \$ 1,840 | \$ 1,950 | \$ 1,840 | \$ 3,000 |

(b) Bad Debt Expense ..... 17,400  
     Allowance for Doubtful Accounts  
         [\$9,400 + \$8,000] ..... 17,400

(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 Rigney Inc. used 4% of total accounts receivable rather than aging the individual accounts the bad debt expense adjustment would be \$16,000  $[(\$200,000 \times 4\%) + \$8,000]$ . 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.



|                     |
|---------------------|
| <b>PROBLEM 9-5A</b> |
|---------------------|

(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 | <b>Bad Debt Expense</b><br>(\$11,750 – \$1,000) ..... | 10,750 |        |
|     |     |         | <b>Allowance for Doubtful</b>                         |        |        |
|     |     |         | <b>Accounts.....</b>                                  |        | 10,750 |

|     |         |                                                   |       |       |
|-----|---------|---------------------------------------------------|-------|-------|
| (2) | Dec. 31 | <b>Bad Debt Expense</b><br>(\$970,000 X 1%) ..... | 9,700 |       |
|     |         | <b>Allowance for Doubtful</b>                     |       |       |
|     |         | <b>Accounts.....</b>                              |       | 9,700 |

|     |     |         |                                                       |        |        |
|-----|-----|---------|-------------------------------------------------------|--------|--------|
| (c) | (1) | Dec. 31 | <b>Bad Debt Expense</b><br>(\$11,750 + \$1,000) ..... | 12,750 |        |
|     |     |         | <b>Allowance for Doubtful</b>                         |        |        |
|     |     |         | <b>Accounts.....</b>                                  |        | 12,750 |

|     |         |                               |       |       |
|-----|---------|-------------------------------|-------|-------|
| (2) | Dec. 31 | <b>Bad Debt Expense .....</b> | 9,700 |       |
|     |         | <b>Allowance for Doubtful</b> |       |       |
|     |         | <b>Accounts.....</b>          |       | 9,700 |

|     |                                       |       |       |
|-----|---------------------------------------|-------|-------|
| (d) | Allowance for Doubtful Accounts ..... | 3,000 |       |
|     | <b>Accounts Receivable .....</b>      |       | 3,000 |

**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) | <b>Bad Debt Expense .....</b>    | 3,000 |       |
|     | <b>Accounts Receivable .....</b> |       | 3,000 |

(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 9-6A**

|     |        |                                |        |        |
|-----|--------|--------------------------------|--------|--------|
| (a) | Oct. 7 | Accounts Receivable.....       | 6,900  |        |
|     |        | Sales Revenue.....             |        | 6,900  |
|     | 12     | Cash (\$900 – \$27).....       | 873    |        |
|     |        | Service Charge Expense         |        |        |
|     |        | (\$900 X 3%).....              | 27     |        |
|     |        | Sales Revenue.....             |        | 900    |
|     | 15     | Accounts Receivable.....       | 460    |        |
|     |        | Interest Revenue .....         |        | 460    |
|     | 15     | Cash.....                      | 12,160 |        |
|     |        | Notes Receivable .....         |        | 12,000 |
|     |        | Interest Receivable            |        |        |
|     |        | (\$12,000 X 8% X 45/360) ..... |        | 120    |
|     |        | Interest Revenue               |        |        |
|     |        | (\$12,000 X 8% X 15/360) ..... |        | 40     |
|     | 24     | Accounts Receivable—Holt ..... | 9,105  |        |
|     |        | Notes Receivable .....         |        | 9,000  |
|     |        | Interest Receivable            |        |        |
|     |        | (\$9,000 X 7% X 36/360) .....  |        | 63     |
|     |        | Interest Revenue               |        |        |
|     |        | (\$9,000 X 7% X 24/360) .....  |        | 42     |
|     | 31     | Interest Receivable            |        |        |
|     |        | (\$16,000 X 9% X 1/12).....    | 120    |        |
|     |        | Interest Revenue .....         |        | 120    |

(b)

## **Notes Receivable**

| Date   | Explanation | Ref. | Debit | Credit | Balance |
|--------|-------------|------|-------|--------|---------|
| Oct. 1 | Balance     | ✓    |       |        | 37,000  |
| 15     |             |      |       | 12,000 | 25,000  |
| 24     |             |      |       | 9,000  | 16,000  |

**PROBLEM 9-6A (Continued)****Accounts Receivable**

| <b>Date</b> | <b>Explanation</b> | <b>Ref.</b> | <b>Debit</b> | <b>Credit</b> | <b>Balance</b> |
|-------------|--------------------|-------------|--------------|---------------|----------------|
| Oct. 7      |                    |             | 6,900        |               | 6,900          |
| 15          |                    |             | 460          |               | 7,360          |
| 24          |                    |             | 9,105        |               | 16,465         |

**Interest Receivable**

| <b>Date</b> | <b>Explanation</b> | <b>Ref.</b> | <b>Debit</b> | <b>Credit</b> | <b>Balance</b> |
|-------------|--------------------|-------------|--------------|---------------|----------------|
| Oct. 1      | Balance            | ✓           |              |               | 183            |
| 15          |                    |             |              | 120           | 63             |
| 24          |                    |             |              | 63            | 0              |
| 31          |                    |             | 120          |               | 120            |

**(c) Current assets**

|                           |                 |
|---------------------------|-----------------|
| Notes receivable.....     | \$16,000        |
| Accounts receivable ..... | 16,465          |
| Interest receivable.....  | 120             |
| Total receivables .....   | <u>\$32,585</u> |

|                     |
|---------------------|
| <b>PROBLEM 9-7A</b> |
|---------------------|

|         |                                                         |        |        |
|---------|---------------------------------------------------------|--------|--------|
| Jan. 5  | Accounts Receivable—Sheldon Company .....               | 20,000 |        |
|         | Sales Revenue .....                                     |        | 20,000 |
| 20      | Notes Receivable .....                                  | 20,000 |        |
|         | Accounts Receivable—Sheldon Company .....               |        | 20,000 |
| Feb. 18 | Notes Receivable .....                                  | 8,000  |        |
|         | Sales Revenue .....                                     |        | 8,000  |
| Apr. 20 | Cash (\$20,000 + \$400) .....                           | 20,400 |        |
|         | Notes Receivable .....                                  |        | 20,000 |
|         | Interest Revenue (\$20,000 X 8% X 3/12) .....           |        | 400    |
| 30      | Cash (\$25,000 + \$ 750) .....                          | 25,750 |        |
|         | Notes Receivable .....                                  |        | 25,000 |
|         | Interest Revenue (\$25,000 X 9% X 4/12) .....           |        | 750    |
| May 25  | Notes Receivable .....                                  | 6,000  |        |
|         | Accounts Receivable—Potter Inc. ....                    |        | 6,000  |
| Aug. 18 | Cash (\$8,000 + \$360) .....                            | 8,360  |        |
|         | Notes Receivable .....                                  |        | 8,000  |
|         | Interest Revenue (\$8,000 X 9% X 6/12) .....            |        | 360    |
| 25      | Accounts Receivable—Potter Inc. (\$6,000 + \$105) ..... | 6,105  |        |
|         | Notes Receivable .....                                  |        | 6,000  |
|         | Interest Revenue (\$6,000 X 7% X 3/12) .....            |        | 105    |
| Sept. 1 | Notes Receivable .....                                  | 12,000 |        |
|         | Sales Revenue .....                                     |        | 12,000 |

# PROBLEM 9-1B

|     |    |                                          |           |           |
|-----|----|------------------------------------------|-----------|-----------|
| (a) | 1. | Accounts Receivable .....                | 2,600,000 |           |
|     |    | Sales Revenue .....                      |           | 2,600,000 |
|     | 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 .....    | 10,000    |           |
|     |    | Accounts Receivable .....                |           | 10,000    |
|     | 5. | Accounts Receivable .....                | 3,000     |           |
|     |    | Allowance for Doubtful<br>Accounts ..... |           | 3,000     |
|     |    | Cash .....                               | 3,000     |           |
|     |    | Accounts Receivable .....                |           | 3,000     |

| Accounts Receivable |           |     |           | Allowance for Doubtful Accounts |        |      |        |
|---------------------|-----------|-----|-----------|---------------------------------|--------|------|--------|
| Bal.                | 250,000   | (2) | 45,000    | (4)                             | 10,000 | Bal. | 15,000 |
| (1)                 | 2,600,000 | (3) | 2,250,000 |                                 |        | (5)  | 3,000  |
| (5)                 | 3,000     | (4) | 10,000    |                                 |        |      |        |
|                     |           | (5) | 3,000     |                                 |        |      |        |
| Bal.                | 545,000   |     |           |                                 |        | Bal. | 8,000  |

|     |                                           |                 |
|-----|-------------------------------------------|-----------------|
| (c) | Balance before adjustment [see (b)] ..... | \$ 8,000        |
|     | Balance needed .....                      | <u>22,000</u>   |
|     | Adjustment required .....                 | <u>\$14,000</u> |

The journal entry would therefore be as follows:

|                                       |        |        |
|---------------------------------------|--------|--------|
| Bad Debt Expense .....                | 14,000 |        |
| Allowance for Doubtful Accounts ..... |        | 14,000 |

(d) 
$$\frac{\$2,600,000 - \$45,000}{(\$523,000 + \$235,000) \div 2} = \frac{\$2,555,000}{\$379,000} = 6.74 \text{ times}$$

|                     |
|---------------------|
| <b>PROBLEM 9-2B</b> |
|---------------------|

- (a) **\$22,150.**
- (b) **\$20,000  $(\$1,000,000 \times 2\%)$ .**
- (c) **\$14,450  $[(\$369,000 \times 5\%) - \$4,000]$ .**
- (d) **\$20,450  $[(\$369,000 \times 5\%) + \$2,000]$ .**
- (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 balance sheet date.**

|                     |
|---------------------|
| <b>PROBLEM 9-3B</b> |
|---------------------|

|     |         |                                 |        |        |
|-----|---------|---------------------------------|--------|--------|
| (a) | Dec. 31 | Bad Debt Expense.....           | 31,970 |        |
|     |         | Allowance for Doubtful Accounts |        |        |
|     |         | (\$47,970 – \$16,000) .....     |        | 31,970 |

(a) & (b)

#### Bad Debt Expense

| Date        | Explanation | Ref. | Debit  | Credit | Balance |
|-------------|-------------|------|--------|--------|---------|
| <b>2014</b> |             |      |        |        |         |
| Dec. 31     | Adjusting   |      | 31,970 |        | 31,970  |

#### Allowance for Doubtful Accounts

| Date        | Explanation | Ref. | Debit | Credit | Balance |
|-------------|-------------|------|-------|--------|---------|
| <b>2014</b> |             |      |       |        |         |
| Dec. 31     | Balance     |      |       |        | 16,000  |
| 31          | Adjusting   |      |       | 31,970 | 47,970  |
| <b>2015</b> |             |      |       |        |         |
| Mar. 1      |             |      | 1,900 |        | 46,070  |
| May 1       |             |      |       | 1,900  | 47,970  |

|        |                                       |             |  |       |       |
|--------|---------------------------------------|-------------|--|-------|-------|
| (b)    |                                       | <b>2015</b> |  |       |       |
|        |                                       | (1)         |  |       |       |
| Mar. 1 | Allowance for Doubtful Accounts ..... |             |  | 1,900 |       |
|        | Accounts Receivable.....              |             |  |       | 1,900 |
|        |                                       | (2)         |  |       |       |
| May 1  | Accounts Receivable .....             |             |  | 1,900 |       |
|        | Allowance for Doubtful Accounts.....  |             |  |       | 1,900 |
|        | 1 Cash .....                          |             |  | 1,900 |       |
|        | Accounts Receivable.....              |             |  |       | 1,900 |

|         |                                 |             |  |        |        |
|---------|---------------------------------|-------------|--|--------|--------|
| (c)     |                                 | <b>2015</b> |  |        |        |
| Dec. 31 | Bad Debt Expense.....           |             |  | 40,300 |        |
|         | Allowance for Doubtful Accounts |             |  |        |        |
|         | (\$38,300 + \$2,000) .....      |             |  |        | 40,300 |

# **PROBLEM 9-4B**

(a) Total estimated bad debts

|                     |           | Number of Days Outstanding |          |          |          |          |
|---------------------|-----------|----------------------------|----------|----------|----------|----------|
|                     | Total     | 0–30                       | 31–60    | 61–90    | 91–120   | Over 120 |
| Accounts receivable | \$375,000 | \$220,000                  | \$90,000 | \$40,000 | \$10,000 | \$15,000 |
| % uncollectible     |           | 1%                         | 4%       | 5%       | 8%       | 20%      |
| Estimated Bad debts | \$ 11,600 | \$ 2,200                   | \$ 3,600 | \$ 2,000 | \$ 800   | \$ 3,000 |

(b) Bad Debt Expense ..... 8,600  
     Allowance for Doubtful Accounts  
         (\$11,600 – \$3,000)..... 8,600

(c) Allowance for Doubtful Accounts..... 1,600  
     Accounts Receivable ..... 1,600

(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.



|                     |
|---------------------|
| <b>PROBLEM 9-5B</b> |
|---------------------|

|     |     |         |                            |                                       |        |
|-----|-----|---------|----------------------------|---------------------------------------|--------|
| (a) | (1) | Dec. 31 | Bad Debt Expense           |                                       |        |
|     |     |         | (\$13,500 – \$1,100) ..... | 12,400                                |        |
|     |     |         | Allowance for Doubtful     |                                       |        |
|     |     |         | Accounts.....              |                                       | 12,400 |
|     | (2) | Dec. 31 | Bad Debt Expense           |                                       |        |
|     |     |         | (\$650,000 X 2%) .....     | 13,000                                |        |
|     |     |         | Allowance for Doubtful     |                                       |        |
|     |     |         | Accounts.....              |                                       | 13,000 |
| (b) | (1) | Dec. 31 | Bad Debt Expense           |                                       |        |
|     |     |         | (\$13,500 + \$1,100) ..... | 14,600                                |        |
|     |     |         | Allowance for Doubtful     |                                       |        |
|     |     |         | Accounts.....              |                                       | 14,600 |
|     | (2) | Dec. 31 | Bad Debt Expense .....     | 13,000                                |        |
|     |     |         | Allowance for Doubtful     |                                       |        |
|     |     |         | Accounts.....              |                                       | 13,000 |
| (c) |     |         |                            | Allowance for Doubtful Accounts ..... | 3,200  |
|     |     |         |                            | Accounts Receivable .....             | 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 balance sheet.

# **PROBLEM 9-6B**

|     |      |   |                                  |        |        |
|-----|------|---|----------------------------------|--------|--------|
| (a) | July | 5 | Accounts Receivable.....         | 7,200  |        |
|     |      |   | Sales Revenue.....               |        | 7,200  |
|     | 14   |   | Cash (\$1,000 – \$30).....       | 970    |        |
|     |      |   | Service Charge Expense           |        |        |
|     |      |   | (\$1,000 X 3%).....              | 30     |        |
|     |      |   | Sales Revenue.....               |        | 1,000  |
|     | 14   |   | Accounts Receivable.....         | 510    |        |
|     |      |   | Interest Revenue .....           |        | 510    |
|     | 15   |   | Cash.....                        | 12,140 |        |
|     |      |   | Notes Receivable .....           |        | 12,000 |
|     |      |   | Interest Receivable              |        |        |
|     |      |   | (\$12,000 X 7% X 45/360) .....   |        | 105    |
|     |      |   | Interest Revenue                 |        |        |
|     |      |   | (\$12,000 X 7% X 15/360) .....   |        | 35     |
|     | 24   |   | Accounts Receivable—Masasi ..... | 20,300 |        |
|     |      |   | Notes Receivable .....           |        | 20,000 |
|     |      |   | Interest Receivable              |        |        |
|     |      |   | (\$20,000 X 9% X 36/360) .....   |        | 180    |
|     |      |   | Interest Revenue                 |        |        |
|     |      |   | (\$20,000 X 9% X 24/360) .....   |        | 120    |
|     | 31   |   | Interest Receivable              |        |        |
|     |      |   | (\$15,000 X 8% X 1/12).....      | 100    |        |
|     |      |   | Interest Revenue .....           |        | 100    |

(b)

## **Notes Receivable**

| Date   | Explanation | Ref. | Debit | Credit | Balance |
|--------|-------------|------|-------|--------|---------|
| July 1 | Balance     | ✓    |       |        | 47,000  |
| 15     |             |      |       | 12,000 | 35,000  |
| 24     |             |      |       | 20,000 | 15,000  |

## PROBLEM 9-6B (Continued)

### Accounts Receivable

| Date   | Explanation | Ref. | Debit  | Credit | Balance |
|--------|-------------|------|--------|--------|---------|
| July 5 |             |      | 7,200  |        | 7,200   |
| 14     |             |      | 510    |        | 7,710   |
| 24     |             |      | 20,300 |        | 28,010  |

### Interest Receivable

| Date   | Explanation | Ref. | Debit | Credit | Balance |
|--------|-------------|------|-------|--------|---------|
| July 1 | Balance     | ✓    |       |        | 285     |
| 15     |             |      |       | 105    | 180     |
| 24     |             |      |       | 180    | 0       |
| 31     | Adjusting   |      | 100   |        | 100     |

### (c) Current assets

|                           |                 |
|---------------------------|-----------------|
| Notes receivable.....     | \$15,000        |
| Accounts receivable ..... | 28,010          |
| Interest receivable.....  | 100             |
| Total receivables .....   | <u>\$43,110</u> |

|                     |
|---------------------|
| <b>PROBLEM 9-7B</b> |
|---------------------|

|      |    |                                                          |        |        |
|------|----|----------------------------------------------------------|--------|--------|
| Jan. | 5  | Accounts Receivable—Motte Company .....                  | 10,800 |        |
|      |    | Sales Revenue .....                                      |        | 10,800 |
| Feb. | 2  | Notes Receivable .....                                   | 10,800 |        |
|      |    | Accounts Receivable—Motte Company .....                  |        | 10,800 |
|      | 12 | Notes Receivable .....                                   | 13,500 |        |
|      |    | Sales Revenue .....                                      |        | 13,500 |
|      | 26 | Accounts Receivable—Benedict Co. ....                    | 9,000  |        |
|      |    | Sales Revenue .....                                      |        | 9,000  |
| Apr. | 5  | Notes Receivable .....                                   | 9,000  |        |
|      |    | Accounts Receivable—Benedict Co. ....                    |        | 9,000  |
|      | 12 | Cash (\$13,500 + \$180) .....                            | 13,680 |        |
|      |    | Notes Receivable .....                                   |        | 13,500 |
|      |    | Interest Revenue (\$13,500 X 8% X 2/12) .....            |        | 180    |
| June | 2  | Cash (\$10,800 + \$324) .....                            | 11,124 |        |
|      |    | Notes Receivable .....                                   |        | 10,800 |
|      |    | Interest Revenue (\$10,800 X 9% X 4/12) .....            |        | 324    |
| July | 5  | Accounts Receivable—Benedict Co. (\$9,000 + \$180) ..... | 9,180  |        |
|      |    | Notes Receivable .....                                   |        | 9,000  |
|      |    | Interest Revenue (\$9,000 X 8% X 3/12) .....             |        | 180    |
|      | 15 | Notes Receivable .....                                   | 12,000 |        |
|      |    | Sales Revenue .....                                      |        | 12,000 |
| Oct. | 15 | Allowance for Doubtful Accounts .....                    | 12,000 |        |
|      |    | Notes Receivable .....                                   |        | 12,000 |

# COMPREHENSIVE PROBLEM SOLUTION

|            |                                              |        |        |
|------------|----------------------------------------------|--------|--------|
| (a) Jan. 1 | Notes Receivable.....                        | 1,200  |        |
|            | Accounts Receivable—<br>Merando Company..... |        | 1,200  |
| 3          | Allowance for Doubtful Accounts .....        | 730    |        |
|            | Accounts Receivable.....                     |        | 730    |
| 8          | Inventory .....                              | 17,200 |        |
|            | Accounts Payable .....                       |        | 17,200 |
| 11         | Accounts Receivable .....                    | 28,000 |        |
|            | Sales Revenue .....                          |        | 28,000 |
|            | Cost of Goods Sold .....                     | 19,600 |        |
|            | Inventory .....                              |        | 19,600 |
| 15         | Cash .....                                   | 970    |        |
|            | Service Charge Expense.....                  | 30     |        |
|            | Sales Revenue .....                          |        | 1,000  |
|            | Cost of Goods Sold .....                     | 700    |        |
|            | Inventory .....                              |        | 700    |
| 17         | Cash .....                                   | 22,900 |        |
|            | Accounts Receivable.....                     |        | 22,900 |
| 21         | Accounts Payable .....                       | 14,300 |        |
|            | Cash.....                                    |        | 14,300 |
| 24         | Accounts Receivable .....                    | 280    |        |
|            | Allowance for Doubtful Accounts.....         |        | 280    |
|            | Cash .....                                   | 280    |        |
|            | Accounts Receivable.....                     |        | 280    |
| 27         | Supplies .....                               | 1,400  |        |
|            | Cash.....                                    |        | 1,400  |
| 31         | Other Operating Expenses .....               | 3,718  |        |
|            | Cash.....                                    |        | 3,718  |

## COMPREHENSIVE PROBLEM SOLUTION (Continued)

### Adjusting Entries

|         |                                                                       |       |       |
|---------|-----------------------------------------------------------------------|-------|-------|
| Jan. 31 | Interest Receivable .....                                             | 8     |       |
|         | Interest Revenue (\$1,200 X 8% X 1/12) .....                          |       | 8     |
| 31      | Bad Debt Expense [(\$22,950 X 6%) –<br>(\$800 – \$730 + \$280)] ..... | 1,027 |       |
|         | Allowance for Doubtful Accounts .....                                 |       | 1,027 |
| 31      | Supplies Expense .....                                                | 840   |       |
|         | Supplies (\$1,400 – \$560) .....                                      |       | 840   |

(b) **WINTER COMPANY**  
**Adjusted Trial Balance**  
**January 31, 2014**

|                                       | <u>Debit</u>    | <u>Credit</u>   |
|---------------------------------------|-----------------|-----------------|
| Cash .....                            | \$17,832        |                 |
| Notes Receivable .....                | 1,200           |                 |
| Accounts Receivable .....             | 22,950          |                 |
| Allowance for Doubtful Accounts ..... |                 | 1,377           |
| Interest Receivable .....             | 8               |                 |
| Inventory .....                       | 6,300           |                 |
| Supplies .....                        | 560             |                 |
| Accounts Payable .....                |                 | 11,650          |
| Owner's Capital .....                 |                 | 32,730          |
| Sales Revenue .....                   |                 | 29,000          |
| Cost of Goods Sold .....              | 20,300          |                 |
| Supplies Expense .....                | 840             |                 |
| Bad Debt Expense .....                | 1,027           |                 |
| Service Charge Expense .....          | 30              |                 |
| Other Operating Expenses .....        | 3,718           |                 |
| Interest Revenue .....                |                 | 8               |
|                                       | <u>\$74,765</u> | <u>\$74,765</u> |

## COMPREHENSIVE PROBLEM SOLUTION (Continued)

(b) Optional T accounts for accounts with multiple transactions

| Cash      |        |      |        |
|-----------|--------|------|--------|
| 1/1 Bal.  | 13,100 | 1/21 | 14,300 |
| 1/15      | 970    | 1/27 | 1,400  |
| 1/17      | 22,900 | 1/31 | 3,718  |
| 1/24      | 280    |      |        |
| 1/31 Bal. | 17,832 |      |        |

| Accounts Receivable |        |      |        |
|---------------------|--------|------|--------|
| 1/1 Bal.            | 19,780 | 1/1  | 1,200  |
| 1/11                | 28,000 | 1/3  | 730    |
| 1/24                | 280    | 1/17 | 22,900 |
|                     |        | 1/24 | 280    |
| 1/31 Bal.           | 22,950 |      |        |

| Allowance for Doubtful Accounts |     |           |       |
|---------------------------------|-----|-----------|-------|
| 1/3                             | 730 | 1/1 Bal.  | 800   |
|                                 |     | 1/24      | 280   |
|                                 |     | 1/31      | 1,027 |
|                                 |     | 1/31 Bal. | 1,377 |

| Inventory |        |      |        |
|-----------|--------|------|--------|
| 1/1 Bal.  | 9,400  | 1/11 | 19,600 |
| 1/8       | 17,200 | 1/15 | 700    |
| 1/31 Bal. | 6,300  |      |        |

| Supplies  |       |      |     |
|-----------|-------|------|-----|
| 1/27      | 1,400 | 1/31 | 840 |
| 1/31 Bal. | 560   |      |     |

| Accounts Payable |        |           |        |
|------------------|--------|-----------|--------|
| 1/21             | 14,300 | 1/1 Bal.  | 8,750  |
|                  |        | 1/8       | 17,200 |
|                  |        | 1/31 Bal. | 11,650 |

| Sales Revenue |  |           |        |
|---------------|--|-----------|--------|
|               |  | 1/11      | 28,000 |
|               |  | 1/15      | 1,000  |
|               |  | 1/31 Bal. | 29,000 |

| Cost of Goods Sold |        |  |  |
|--------------------|--------|--|--|
| 1/11               | 19,600 |  |  |
| 1/15               | 700    |  |  |
| 1/31 Bal.          | 20,300 |  |  |

## COMPREHENSIVE PROBLEM SOLUTION (Continued)

(c)

### WINTER COMPANY Income Statement For the Month Ending January 31, 2014

|                                |                  |                               |
|--------------------------------|------------------|-------------------------------|
| Sales revenue .....            |                  | <b>\$29,000</b>               |
| Cost of goods sold.....        |                  | <u><b>20,300</b></u>          |
| Gross profit .....             |                  | <b>8,700</b>                  |
| Operating expenses .....       |                  |                               |
| Other operating expenses.....  | <b>\$3,718</b>   |                               |
| Bad debt expense .....         | <b>1,027</b>     |                               |
| Supplies expense .....         | <b>840</b>       |                               |
| Service charge expense .....   | <u><b>30</b></u> |                               |
| Total operating expenses ..... |                  | <u><b>5,615</b></u>           |
| Income from operations .....   |                  | <b>3,085</b>                  |
| Other revenues and gains ..... |                  |                               |
| Interest revenue .....         |                  | <u><b>8</b></u>               |
| Net Income.....                |                  | <u><u><b>\$ 3,093</b></u></u> |



## COMPREHENSIVE PROBLEM SOLUTION (Continued)

### WINTER COMPANY Owner's Equity Statement For the Month Ending January 31, 2014

---

|                                   |                 |
|-----------------------------------|-----------------|
| Owner's Capital, January 1 .....  | \$32,730        |
| Add: Net income .....             | <u>3,093</u>    |
| Owner's Capital, January 31 ..... | <u>\$35,823</u> |

### WINTER COMPANY Balance Sheet January 31, 2014

---

| Assets                                         |                 |
|------------------------------------------------|-----------------|
| Current assets                                 |                 |
| Cash .....                                     | \$17,832        |
| Notes receivable .....                         | 1,200           |
| Accounts receivable.....                       | \$22,950        |
| Less: Allowance for doubtful<br>accounts ..... | <u>1,377</u>    |
| Interest receivable .....                      | 8               |
| Inventory .....                                | 6,300           |
| Supplies .....                                 | <u>560</u>      |
| Total assets .....                             | <u>\$47,473</u> |
| Liabilities and Owner's Equity                 |                 |
| Current liabilities                            |                 |
| Accounts payable.....                          | \$ 11,650       |
| Owner's equity                                 |                 |
| Owner's capital .....                          | <u>35,823</u>   |
| Total liabilities and owner's equity .....     | <u>\$47,473</u> |

(a)

**RLF COMPANY**  
**Accounts Receivable Aging Schedule**  
**May 31, 2014**

|                            | Proportion<br>of<br>Total | Amount<br>in<br>Category | Probability<br>of Non-<br>Collection | Estimated<br>Uncollectible<br>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                               |
|                            | <u>1.000</u>              | <u>\$1,400,000</u>       |                                      | <u>\$66,430</u>                      |

(b)

**RLF COMPANY**  
**Analysis of Allowance for Doubtful Accounts**  
**May 31, 2014**

|                                                      |                 |
|------------------------------------------------------|-----------------|
| June 1, 2013 balance .....                           | \$ 29,500       |
| Bad debts expense accrual (\$2,900,000 X .045) ..... | <u>130,500</u>  |
| Balance before write-offs of bad accounts .....      | 160,000         |
| Write-offs of bad accounts .....                     | <u>102,000</u>  |
| Balance before year-end adjustment .....             | 58,000          |
| Estimated uncollectible amount .....                 | <u>66,430</u>   |
| Additional allowance needed .....                    | <u>\$ 8,430</u> |

|                                       |       |       |
|---------------------------------------|-------|-------|
| Bad Debt Expense .....                | 8,430 |       |
| Allowance for Doubtful Accounts ..... |       | 8,430 |

## **BYP 9-1 (Continued)**

### **(c) 1. Steps to Improve the Accounts Receivable Situation**

---

**Establish more selective credit-granting 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**

$$\begin{array}{r} \text{PepsiCo} \\ \hline \$66,504 \\ \hline (\$6,323 + \$6,912) \div 2 \\ \hline \end{array}$$
$$\frac{\$66,504}{\$6,618} = 10.0 \text{ times}$$

$$\begin{array}{r} \text{Coca-Cola} \\ \hline \$46,542 \\ \hline (\$4,430 + \$4,920) \div 2 \\ \hline \end{array}$$
$$\frac{\$46,542}{\$4,675} = 10.0 \text{ times}$$

**(2) Average collection period**

$$\frac{365}{10.0} = 36.5 \text{ days}$$

$$\frac{365}{10.0} = 36.5 \text{ days}$$

- (b) Both companies have reasonable accounts receivable turnovers and collection periods of approximately 37 days. This collection period probably approximates their credit terms that they provide to customers.**

## (a) (1) Accounts receivable turnover ratio

| Amazon                                          | Wal-Mart                                         |
|-------------------------------------------------|--------------------------------------------------|
| <u>\$48,077</u>                                 | <u>\$443,854</u>                                 |
| $(\$2,571 + \$1,587) \div 2$                    | $(\$5,937 + \$5,089) \div 2$                     |
| $\frac{\$48,077}{\$2,079} = 23.1 \text{ times}$ | $\frac{\$443,854}{\$5,513} = 80.5 \text{ times}$ |

## (2) Average collection period

|                                        |                                       |
|----------------------------------------|---------------------------------------|
| $\frac{365}{23.1} = 15.8 \text{ days}$ | $\frac{365}{80.5} = 4.5 \text{ days}$ |
|----------------------------------------|---------------------------------------|

- (b) Both companies have outstanding accounts receivable turnovers and collection periods of less than 16 days. These collection periods are significantly shorter than the credit terms that they provide to customers.

- (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 3.0% 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.

| (a)                                                      | 2015             | 2014             | 2013             |
|----------------------------------------------------------|------------------|------------------|------------------|
| Net credit sales.....                                    | <u>\$500,000</u> | <u>\$550,000</u> | <u>\$400,000</u> |
| Credit and collection expenses                           |                  |                  |                  |
| Collection agency fees.....                              | \$ 2,450         | \$ 2,500         | \$ 2,300         |
| Salary of accounts receivable clerk.....                 | 4,100            | 4,100            | 4,100            |
| Uncollectible accounts .....                             | 8,000            | 8,800            | 6,400            |
| Billing and mailing costs .....                          | 2,500            | 2,750            | 2,000            |
| Credit investigation fees.....                           | 750              | 825              | 600              |
| Total.....                                               | <u>\$ 17,800</u> | <u>\$ 18,975</u> | <u>\$ 15,400</u> |
| Total expenses as a percentage of net credit sales ..... | <u>3.56%</u>     | <u>3.45%</u>     | <u>3.85%</u>     |
| (b) Average accounts receivable (5%).....                | <u>\$ 25,000</u> | <u>\$ 27,500</u> | <u>\$ 20,000</u> |
| Investment earnings (8%) .....                           | <u>\$ 2,000</u>  | <u>\$ 2,200</u>  | <u>\$ 1,600</u>  |
| Total credit and collection expenses per above .....     | \$ 17,800        | \$ 18,975        | \$ 15,400        |
| Add: Investment earnings* .....                          | 2,000            | 2,200            | 1,600            |
| Net credit and collection expenses.....                  | <u>\$ 19,800</u> | <u>\$ 21,175</u> | <u>\$ 17,000</u> |
| Net expenses as a percentage of net credit sales .....   | <u>3.96%</u>     | <u>3.85%</u>     | <u>4.25%</u>     |

\*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.

## **BYP 9-5 (Continued)**

**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. Nonfinancial factors include the effects on customer relationships of the alternative credit policies and whether the Foyles 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 Jill,**

The three methods you asked about are methods of dealing with uncollectible accounts receivable. Two of them, percentage-of-sales and percentage-of-receivables, 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 “balance sheet” 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 Diaz Co.
  - ▶ The controller of Diaz Co.
  - ▶ The stockholders.
- (b) Yes. The controller is posed with an ethical dilemma—should he/she follow the president’s “suggestion” and prepare misleading financial statements (understated net income) or should he/she attempt to stand up to and possibly anger the president by preparing a fair (realistic) income statement.
- (c) Diaz 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.

- (a) There are a number of sources that compare features of credit cards. Here are three: [www.creditcards.com/](http://www.creditcards.com/), [www.federalreserve.gov/pubs/shop/](http://www.federalreserve.gov/pubs/shop/), and [www.creditorweb.com/](http://www.creditorweb.com/).
- (b) Here are some of the features you should consider: annual percentage rate, credit limit, annual fees, billing and due dates, minimum payment, penalties and fees, premiums received (airlines miles, hotel discounts etc.), and cash rebates.
- (c) Answer depends on present credit card and your personal situation.

- (a) **Receivables represent contractual rights to receive money on fixed or determinable dates, whether or not there is any stated provision for interest. Receivables may arise from credit sales, loans, or other transactions. Receivables may be in the form of loans, notes, and other types of financial instruments and may be originated by an entity or purchased from another entity. (Codification reference 310-10-05-4).**
- (b) **The conditions under which receivables exist usually involve some degree of uncertainty about their collectibility, in which case a contingency exists.**

**Subtopic 450-20 requires recognition of a loss when both of the following conditions are met:**

- a. **Information available prior to issuance of the financial statements indicates that it is probable that an asset has been impaired at the date of the financial statements.**
- b. **The amount of the loss can be reasonably estimated.**

**Losses from uncollectible receivables shall be accrued when both the preceding conditions are met. Those conditions may be considered in relation to individual receivables or in relation to groups of similar types of receivables. If the conditions are met, accrual shall be made even though the particular receivables that are uncollectible may not be identifiable. (Codification reference 310-10-35-7, 35-8-35-9).**

**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 “two-tiered” 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.**

- (a) Zetar indicated that a later Easter contributed to a £5.9m increase in receivables due from customers compared to the previous year.**
- (b) Note 3.14 states that loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market.**
- (c) Note 18 reports that £35 of trade receivables were written off (utilised) during 2011.**
- (d) Note 18 indicates that the provision for impairment of receivables was £65 or 0.3% of trade receivables for 2011. In 2010, the provision was £95 or 0.6% of trade receivables. This decrease signals that Zetar is having less difficulty collecting its receivables. It is also interesting to note that trade receivables increased 32% from £16,790 in 2010 to £22,145 in 2011.**