CHAPTER 9

Accounting for Receivables

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<td>1B, 3B, 4B, 6B, 7B</td>
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<tr>
<td>2. Explain how companies recognize accounts receivable.</td>
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<td>1, 2</td>
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<td>10, 11, 12</td>
<td>7A</td>
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<td>7. Describe how companies value notes receivable.</td>
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<td></td>
<td>10, 11, 12</td>
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<td>15–20</td>
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<td>Moderate</td>
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<td>3A</td>
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# Accounting for Receivables

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## Correlation Chart between Bloom’s Taxonomy, Study Objectives and End-of-Chapter Exercises and Problems

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<th>Knowledge</th>
<th>Comprehension</th>
<th>Application</th>
<th>Analysis</th>
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<td>1. Identify the different types of receivables.</td>
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<td>Q9-2</td>
<td>Q9-3</td>
<td>BE9-2</td>
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<tr>
<td>2. Explain how companies recognize accounts receivable.</td>
<td>Q9-4</td>
<td>BE9-3</td>
<td>Q9-5</td>
<td>Q9-6</td>
<td>BE9-4</td>
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<td>3. Distinguish between the methods and bases used to value accounts receivable.</td>
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<td>BE9-5</td>
<td>Q9-8</td>
<td>Q9-9</td>
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<td>4. Describe the entries to record the disposition of accounts receivable.</td>
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<td>BE9-7</td>
<td>Q9-11</td>
<td>Q9-12</td>
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<tr>
<td>5. Compute the maturity date of and interest on notes receivable.</td>
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<td>Q9-15</td>
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<td>6. Explain how companies recognize notes receivable.</td>
<td>Q9-16</td>
<td>BE9-11</td>
<td>Q9-17</td>
<td>Q9-18</td>
<td>BE9-12</td>
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<td>7. Describe how companies value notes receivable.</td>
<td>Q9-19</td>
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<td>8. Describe the entries to record the disposition of notes receivable.</td>
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### Broadening Your Perspective
- Exploring the Web
- Decision Making Across the Organization
- Comparative Analysis
- Ethics Case
- Communication
- Financial Reporting
- Comparative Analysis

### All About You
- Decision Making Across the Organization
- Comparative Analysis
- Ethics Case
- Communication
- Financial Reporting
- Comparative Analysis

### Air About You
- Decision Making Across the Organization
- Comparative Analysis
- Ethics Case
- Communication
- Financial Reporting
- Comparative Analysis

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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. Jerry Gatewood 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 Debts Expense ............................................................................................................. 4,100
   Allowance for Doubtful Accounts .................................................................................. 4,100

   The adjusting entry under the percentage-of-receivables basis is:
   Bad Debts Expense .......................................................................................................... 2,300
   Allowance for Doubtful Accounts ($5,800 – $3,500) ........................................... 2,300

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 Debts Expense. The direct write-off method makes no attempt to match bad debts expense to sales revenues or to show the cash realizable value of the receivables in the balance sheet.

9. From its own credit cards, the DeVito 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................................................................. 582,000
    Service Charge Expense (3% X $600,000)............................................. 18,000
    Accounts Receivable................................................................. 600,000

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) $20,000, (b) $9,000, (c) 8%, 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 Cain 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 X $400,000 = $3,256,000.

20. PepsiCo’s 2007 allowance for doubtful accounts of $69 million represents 1.5% of its gross receivables of $4,458 million (See Note 14).
SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 9-1

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

BRIEF EXERCISE 9-2

(a) Accounts Receivable ................................................... 15,200
   Sales ................................................................. 15,200

(b) Sales Returns and Allowances ................................ 3,800
   Accounts Receivable ............................................. 3,800

(c) Cash ($11,400 – $228) ................................................. 11,172
   Sales Discounts ($11,400 x 2%) .............................. 228
   Accounts Receivable ($15,200 – $3,800) ........... 11,400

BRIEF EXERCISE 9-3

(a) Bad Debts Expense ...................................................... 35,000
   Allowance for Doubtful Accounts .......................... 35,000

(b) Current assets
   Cash ....................................................................... $ 90,000
   Accounts receivable ............................................... $600,000
   Less: Allowance for doubtful accounts ................. 35,000
   Merchandise inventory .......................................... 130,000
   Prepaid expenses ................................................... 7,500
   Total current assets ............................................... $792,500
BRIEF EXERCISE 9-4

(a) Allowance for Doubtful Accounts ..................................... 5,400
    Accounts Receivable—Ristau ........................................ 5,400

(b)  

<table>
<thead>
<tr>
<th></th>
<th>(1) Before Write-Off</th>
<th>(2) After Write-Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$700,000</td>
<td>$694,600</td>
</tr>
<tr>
<td>Allowance for doubtful accounts</td>
<td>54,000</td>
<td>48,600</td>
</tr>
<tr>
<td>Cash realizable value</td>
<td>$646,000</td>
<td>$646,000</td>
</tr>
</tbody>
</table>

BRIEF EXERCISE 9-5

Accounts Receivable—Ristau ............................................. 5,400
    Allowance for Doubtful Accounts .................................. 5,400
    Cash ........................................................................ 5,400
    Accounts Receivable—Ristau ........................................ 5,400

BRIEF EXERCISE 9-6

Bad Debts Expense [($800,000 – $45,000) X 2%] ................ 15,100
    Allowance for Doubtful Accounts .................................. 15,100

BRIEF EXERCISE 9-7

(a) Bad Debts Expense [($450,000 X 1%) – $1,500] ............. 3,000
    Allowance for Doubtful Accounts .................................. 3,000

(b) Bad Debts Expense [($450,000 X 1%) + $800] = $5,300

BRIEF EXERCISE 9-8

(a) Cash ($150 – $6) ......................................................... 144
    Service Charge Expense ($150 X 4%) .......................... 6
    Sales ....................................................................... 150

(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

<table>
<thead>
<tr>
<th>Interest</th>
<th>Maturity Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) $800</td>
<td>August 9</td>
</tr>
<tr>
<td>(b) $875</td>
<td>October 12</td>
</tr>
<tr>
<td>(c) $200</td>
<td>July 11</td>
</tr>
</tbody>
</table>

BRIEF EXERCISE 9-10

<table>
<thead>
<tr>
<th>Maturity Date</th>
<th>Annual Interest Rate</th>
<th>Total Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) May 31</td>
<td>9%</td>
<td>$9,000</td>
</tr>
<tr>
<td>(b) August 1</td>
<td>8%</td>
<td>$  600</td>
</tr>
<tr>
<td>(c) September 7</td>
<td>10%</td>
<td>$6,000</td>
</tr>
</tbody>
</table>

BRIEF EXERCISE 9-11

Jan. 10  Accounts Receivable .............................................. 13,600  
          Sales .................................................................... 13,600  
Feb. 9   Notes Receivable.................................................... 13,600  
          Accounts Receivable .............................................. 13,600  

BRIEF EXERCISE 9-12

Accounts Receivable Turnover Ratio:

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

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 bring the balance in the Allowance for Doubtful Accounts up from $6,100 credit to $21,700 credit (7% X $310,000):

Bad Debts Expense ............................................................ 15,600
Allowance for Doubtful Accounts ......................... 15,600
(To record estimate of uncollectible accounts)

DO IT! 9-2

To speed up the collection of cash, Ronald could sell its accounts receivable to a factor. Assuming the factor charges Ronald a 2% service charge, it would make the following entry:

Cash ........................................................................ 980,000
Service Charge Expense ........................................... 20,000
Accounts Receivable ............................................ 1,000,000
(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 $248:
Face X Rate X Time = Interest
$6,200 X 12% X 4/12 = $248

The entry recorded by Galen Wholesalers at the maturity date is:
Cash ........................................................................ 6,448
Notes Receivable ...................................................... 6,200
Interest Revenue ....................................................... 248
(To record collection of Picard note)
DO IT! 9-4

(a) Net credit sales \( \div \) Average net accounts receivable = Accounts receivable turnover

\[
\frac{\$1,600,000}{\frac{\$101,000 + \$107,000}{2}} = 15.4 \text{ times}
\]

(b) Days in year \( \div \) Accounts receivable turnover = Average collection period in days

\[
\frac{365}{15.4 \text{ times}} = 23.7 \text{ days}
\]
SOLUTIONS TO EXERCISES

EXERCISE 9-1

March 1  Accounts Receivable—CC Company .......... 3,000
         Sales ................................................................. 3,000

3       Sales Returns and Allowances ..................... 500
         Accounts Receivable—CC Company ........ 500

9       Cash ................................................................. 2,450
         Sales Discounts ..................................................... 50
         Accounts Receivable—CC Company ........ 2,500

15      Accounts Receivable ........................................ 400
         Sales ................................................................. 400

31      Accounts Receivable ........................................ 6
         Interest Revenue ............................................. 6

EXERCISE 9-2

(a) Jan. 6  Accounts Receivable—Cortez .................... 9,000
         Sales ................................................................. 9,000

16      Cash ($9,000 – $180) ............................. 8,820
         Sales Discounts (2% X $9,000) .................... 180
         Accounts Receivable—Cortez ................. 9,000

(b) Jan. 10 Accounts Receivable—Dawes .................... 9,000
     Sales ................................................................. 9,000

Feb. 12  Cash ................................................................. 5,000
     Accounts Receivable—Dawes .................... 5,000

Mar. 10  Accounts Receivable—Dawes .................... 80
     Interest Revenue [2% X ($9,000 – $5,000)] .......... 80
EXERCISE 9-3

(a) Dec. 31  
   Bad Debts Expense .................................. 1,400  
   Accounts Receivable—Fell ....................... 1,400

(b) (1) Dec. 31  
   Bad Debts Expense  
   \[ \frac{(840,000 - 30,000)}{10} \times 1\% \] .......... 8,100  
   Allowance for Doubtful Accounts .................. 8,100

   (2) Dec. 31  
   Bad Debts Expense .................................. 9,900  
   Allowance for Doubtful Accounts  
   \[ \frac{(120,000 \times 10\%)}{2,100} \] ........... 9,900

(c) (1) Dec. 31  
   Bad Debts Expense  
   \[ \frac{(840,000 - 30,000)}{100} \times .75\% \] .......... 6,075  
   Allowance for Doubtful Accounts .................. 6,075

   (2) Dec. 31  
   Bad Debts Expense .................................. 7,400  
   Allowance for Doubtful Accounts  
   \[ \frac{(120,000 \times 6\%)}{2,100} \] ........... 7,400

EXERCISE 9-4

(a) Accounts Receivable | Amount | %  | Estimated Uncollectible |
------------------------|--------|----|-------------------------|
  1–30 days             | $60,000| 2.0| $1,200                  |
  31–60 days            | 17,600 | 5.0|  880                    |
  61–90 days            |  8,500 | 30.0|  2,550                  |
  Over 90 days          |  7,000 | 50.0|  3,500                  |
                       |        |    | **$8,130**              |

(b) Mar. 31  
   Bad Debts Expense .................................. 6,930  
   Allowance for Doubtful Accounts  
   \[ (8,130 - 1,200) \] ................................ 6,930
EXERCISE 9-5

Allowance for Doubtful Accounts ........................................... 13,000
   Accounts Receivable ............................................................. 13,000

Accounts Receivable .............................................................. 1,800
   Allowance for Doubtful Accounts ......................................... 1,800

Cash .......................................................................................... 1,800
   Accounts Receivable ............................................................. 1,800

Bad Debts Expense ................................................................. 15,200
   Allowance for Doubtful Accounts
   [$19,000 – ($15,000 – $13,000 + $1,800)] .......................... 15,200

EXERCISE 9-6

December 31, 2010

Bad Debts Expense (2% X $400,000) ....................................... 8,000
   Allowance for Doubtful Accounts ......................................... 8,000

May 11, 2011

Allowance for Doubtful Accounts ......................................... 1,100
   Accounts Receivable—Frye .................................................. 1,100

June 12, 2011

Accounts Receivable—Frye ................................................... 1,100
   Allowance for Doubtful Accounts ......................................... 1,100

Cash .......................................................................................... 1,100
   Accounts Receivable—Frye .................................................. 1,100

EXERCISE 9-7

(a) Mar.  3  Cash ($680,000 – $20,400).................................... 659,600
   Service Charge Expense
   (3% X $680,000) ............................................................... 20,400
   Accounts Receivable .......................................................... 680,000

(b) May 10  Cash ($3,500 – $140) ............................................ 3,360
   Service Charge Expense
   (4% X $3,500) ............................................................... 140
   Sales ................................................................................. 3,500
EXERCISE 9-8

(a) Apr. 2 Accounts Receivable—Nancy Hansel..... 1,500
    Sales .......................................................... 1,500

May 3 Cash................................................ .................... 700
    Accounts Receivable—Nancy Hansel.......................... 700

June 1 Accounts Receivable—Nancy Hansel..... 8
    Interest Revenue
    [($1,500 – $700) X 1%] ........................................ 8

(b) July 4 Cash............................................... ..................... 194
    Service Charge Expense
    (3% X $200) .................................................. 6
    Sales .......................................................... 200

EXERCISE 9-9

(a) Jan. 15 Accounts Receivable ..................................... 18,000
    Sales ........................................................... 18,000

    20 Cash ($4,300 – $86)............................................. 4,214
    Service Charge Expense
    ($4,300 X 2%) ................................................ 86
    Sales .......................................................... 4,300

Feb. 10 Cash..................................................................... 10,000
    Accounts Receivable ........................................... 10,000

    15 Accounts Receivable ($8,000 X 1%)................. 80
    Interest Revenue.................................................. 80

(b) Interest Revenue is reported under other revenues and gains.
    Service Charge Expense is a selling expense.
EXERCISE 9-10

(a) 2010

Nov. 1 Notes Receivable ........................................ 15,000
     Cash ........................................................... 15,000

Dec. 11 Notes Receivable ......................................... 6,750
     Sales ........................................................... 6,750

   16 Notes Receivable ........................................... 4,000
     Accounts Receivable—Reber ......................... 4,000

   31 Interest Receivable ........................................ 295
     Interest Revenue* ....................................... 295

*Calculation of interest revenue:
  Givens’s note: $15,000 X 10% X 2/12 = $250
  Countryman’s note: 6,750 X 8% X 20/360 = 30
  Reber’s note: 4,000 X 9% X 15/360 = 15
  Total accrued interest $295

(b) 2011

Nov. 1 Cash ............................................................ 16,500
     Interest Receivable ........................................ 250
     Interest Revenue* ....................................... 1,250
     Notes Receivable ........................................... 15,000
     *(15,000 X 10% X 10/12)

EXERCISE 9-11

2010

May 1 Notes Receivable ......................................... 7,500
     Accounts Receivable—Julia Gonzalez ................... 7,500

Dec. 31 Interest Receivable ....................................... 500
     Interest Revenue ........................................... 500
     ($7,500 X 10% X 8/12) ..................................... 500

   31 Interest Revenue ........................................... 500
     Income Summary ........................................... 500
EXERCISE 9-11 (Continued)

2011

May  1  Cash ................................................................. 8,250
      Notes Receivable .................................................. 7,500
      Interest Receivable ............................................. 500
      Interest Revenue
      ($7,500 X 10% X 4/12) ................................ 250

EXERCISE 9-12

4/1/10  Notes Receivable ............................................. 20,000
        Accounts Receivable—Wilson ........................ 20,000

7/1/10  Notes Receivable ............................................. 25,000
        Cash ................................................................ 25,000

12/31/10 Interest Receivable ........................................ 1,800
     Interest Revenue
     ($20,000 X 12% X 9/12) .................... 1,800

     Interest Receivable ........................................ 1,250
     Interest Revenue
     ($25,000 X 10% X 6/12) .................... 1,250

4/1/11  Cash ................................................................ 22,400
        Notes Receivable ............................................. 20,000
        Interest Receivable ........................................ 1,800
        Interest Revenue
        ($20,000 X 12% X 3/12 = $600) ........... 600

     Accounts Receivable .................................... 26,875
     Notes Receivable ............................................. 25,000
     Interest Receivable ........................................ 1,250
     Interest Revenue
     ($25,000 X 10% X 3/12 = $625) ........... 625
EXERCISE 9-13

(a) May 2  
   Notes Receivable ..........................................................  7,600  
   Cash .................................................................................  7,600

(b) Nov. 2  
   Accounts Receivable—Everhart Inc. ..................................  7,942  
     Notes Receivable .........................................................  7,600  
     Interest Revenue ..........................................................  342  
     ($7,600 \times 9\% \times 1/2) .....................................................  342  
     (To record the dishonor of Everhart Inc. note with expectation of collection)

(c) Nov. 2  
   Allowance for Doubtful Accounts ..................................  7,600  
     Notes Receivable .........................................................  7,600  
     (To record the dishonor of Everhart Inc. note with no expectation of collection)

EXERCISE 9-14

(a) Beginning accounts receivable ........................................  $  100,000  
   Net credit sales ......................................................................  1,000,000  
   Cash collections .....................................................................  (900,000)  
   Accounts written off ..........................................................  (30,000)  
   Ending accounts receivable ................................................  $  170,000

(b) $1,000,000/[(($100,000 + $170,000)/2)] = 7.41

(c) 365/7.41 = 49.3 days
PROBLEM 9-1A

(a) 1. Accounts Receivable................................. 3,200,000
    Sales .................................................... 3,200,000

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................................. 24,000
    Allowance for Doubtful Accounts............... 24,000
    Cash..................................................... 24,000
    Accounts Receivable................................. 24,000

(b)

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
<th>Allowance for Doubtful Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bal. 960,000</td>
<td>(4) 90,000</td>
</tr>
<tr>
<td>(1) 3,200,000</td>
<td>(5) 80,000</td>
</tr>
<tr>
<td>(2) 50,000</td>
<td>(5) 24,000</td>
</tr>
<tr>
<td>(3) 2,810,000</td>
<td></td>
</tr>
<tr>
<td>(4) 90,000</td>
<td></td>
</tr>
<tr>
<td>(5) 24,000</td>
<td></td>
</tr>
<tr>
<td>Bal. 1,210,000</td>
<td>Bal. 14,000</td>
</tr>
</tbody>
</table>
PROBLEM 9-1A (Continued)

(c) Balance before adjustment [see (b)] ........................................... $ 14,000
Balance needed ................................................................................. 115,000
Adjustment required ........................................................................ $101,000

The journal entry would therefore be as follows:

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad Debts Expense</td>
<td>101,000</td>
</tr>
<tr>
<td>Allowance for Doubtful Accounts............</td>
<td>101,000</td>
</tr>
</tbody>
</table>

(d) \[
\frac{3,200,000 - 50,000}{(880,000 + 1,095,000)} \div 2 = \frac{3,150,000}{987,500} = 3.19 \text{ times}
\]
PROBLEM 9-2A

(a) $33,000.

(b) $44,000 ($2,200,000 \times 2\%).

(c) $46,500 [($825,000 \times 6\%) - $3,000].

(d) $52,500 [($825,000 \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.
PROBLEM 9-3A

(a) Dec. 31  Bad Debts Expense........................................... 30,610
Allowance for Doubtful Accounts
($42,610 – $12,000) ............................................. 30,610

(a) & (b)

Bad Debts Expense

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>Ref.</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Dec. 31 Adjusting</td>
<td></td>
<td>30,610</td>
<td></td>
<td>30,610</td>
</tr>
</tbody>
</table>

Allowance for Doubtful Accounts

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>Ref.</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Dec. 31 Balance</td>
<td></td>
<td></td>
<td>12,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31 Adjusting</td>
<td></td>
<td></td>
<td>30,610</td>
<td>42,610</td>
</tr>
<tr>
<td>2011</td>
<td>Mar. 31</td>
<td></td>
<td></td>
<td>1,000</td>
<td>41,610</td>
</tr>
<tr>
<td></td>
<td>May 31</td>
<td></td>
<td>1,000</td>
<td></td>
<td>42,610</td>
</tr>
</tbody>
</table>

(b) 2011

(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) 2011

Dec. 31  Bad Debts Expense............................ 29,400
Allowance for Doubtful Accounts
($28,600 + $800) ........................................... 29,400
PROBLEM 9-4A

(a) Total estimated bad debts

<table>
<thead>
<tr>
<th>Number of Days Outstanding</th>
<th>Total</th>
<th>0–30</th>
<th>31–60</th>
<th>61–90</th>
<th>91–120</th>
<th>Over 120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$200,000</td>
<td>$77,000</td>
<td>$46,000</td>
<td>$39,000</td>
<td>$23,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>% uncollectible</td>
<td>2%</td>
<td>5%</td>
<td>8%</td>
<td>10%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Estimated Bad debts</td>
<td>$11,510</td>
<td>$1,540</td>
<td>$2,300</td>
<td>$3,120</td>
<td>$2,300</td>
<td>$2,250</td>
</tr>
</tbody>
</table>

(b) Bad Debts Expense ............................................................ 19,510
   Allowance for Doubtful Accounts
   [$11,510 + $8,000] ..................................................... 19,510

(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 Wall Inc. used 3% of total accounts receivable rather than aging the individual accounts the bad debt expense adjustment would be $14,000 [($200,000 X 3%) + $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.
(a) The allowance method. Since the balance in the allowance for doubtful accounts is given, they must be using this method because the account would not exist if they were using the direct write-off method.

(b) (1) Dec. 31  
   Bad Debts Expense  
   ($11,750 – $2,000) ........................................ 9,750  
   Allowance for Doubtful Accounts .......................... 9,750

   (2) Dec. 31  
   Bad Debts Expense  
   ($950,000 \times 1\%) ..................................... 9,500  
   Allowance for Doubtful Accounts .......................... 9,500

(c) (1) Dec. 31  
   Bad Debts Expense  
   ($11,750 + $2,000) ......................................... 13,750  
   Allowance for Doubtful Accounts .......................... 13,750

   (2) Dec. 31  
   Bad Debts Expense  
   .......................................................... 9,500  
   Allowance for Doubtful Accounts .......................... 9,500

(d) Allowance for Doubtful Accounts ................................................... 3,000  
   Accounts Receivable ....................................................... 3,000

Note: The entry is the same whether the amount of bad debts expense at the end of 2010 was estimated using the percentage of receivables or the percentage of sales method.

(e) Bad Debts Expense .......................................................... 3,000  
   Accounts Receivable .......................................................... 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 .............................................................. 6,900

12 Cash ($900 – $27) ................................................. 873
    Service Charge Expense
    ($900 X 3%) .................................................. 27
    Sales .............................................................. 900

15 Accounts Receivable ........................................ 460
    Interest Revenue ........................................... 460

15 Cash ........................................................................ 8,107
    Notes Receivable ............................................ 8,000
    Interest Receivable
    ($8,000 X 8% X 45/360) ................................. 80
    Interest Revenue
    ($8,000 X 8% X 15/360) ................................. 27

24 Accounts Receivable—Hughey ..................... 9,150
    Notes Receivable ............................................ 9,000
    Interest Receivable
    ($9,000 X 10% X 36/360) ............................ 90
    Interest Revenue
    ($9,000 X 10% X 24/360) ............................ 60

31 Interest Receivable
    ($16,000 X 9% X 1/12)................................. 120
    Interest Revenue ........................................... 120

(b)

Notes Receivable

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>Ref.</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 1</td>
<td>Balance</td>
<td>✓</td>
<td></td>
<td></td>
<td>33,000</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>8,000</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td>9,000</td>
<td>16,000</td>
<td></td>
</tr>
</tbody>
</table>
PROBLEM 9-6A (Continued)

### Accounts Receivable

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>Ref.</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 7</td>
<td></td>
<td></td>
<td>6,900</td>
<td></td>
<td>6,900</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>460</td>
<td></td>
<td>7,360</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td>9,150</td>
<td></td>
<td>16,510</td>
</tr>
</tbody>
</table>

### Interest Receivable

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>Ref.</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct.  1</td>
<td>Balance</td>
<td>✓</td>
<td></td>
<td></td>
<td>170</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>80</td>
<td></td>
<td>90</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td>90</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td>120</td>
<td></td>
<td>120</td>
</tr>
</tbody>
</table>

(c) **Current assets**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes receivable</td>
<td>...........................................</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>...........................................</td>
</tr>
<tr>
<td>Interest receivable</td>
<td>...........................................</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>$16,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16,510</td>
</tr>
<tr>
<td></td>
<td>120</td>
</tr>
<tr>
<td>Total receivables</td>
<td>$32,630</td>
</tr>
</tbody>
</table>
### PROBLEM 9-7A

<table>
<thead>
<tr>
<th>Date</th>
<th>Transaction Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 5</td>
<td>Accounts Receivable—Dedonder Company</td>
<td>20,000</td>
<td>Sales</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Notes Receivable</td>
<td>20,000</td>
<td>Accounts Receivable—Dedonder Company</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb. 18</td>
<td>Notes Receivable</td>
<td>8,000</td>
<td>Sales</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr. 20</td>
<td>Cash ($20,000 + $450)</td>
<td>20,450</td>
<td>Notes Receivable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Interest Revenue</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>($20,000 X 9% X 3/12)</td>
</tr>
<tr>
<td>30</td>
<td>Cash ($25,000 + $1,000)</td>
<td>26,000</td>
<td>Notes Receivable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Interest Revenue</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>($25,000 X 12% X 4/12)</td>
</tr>
<tr>
<td>May 25</td>
<td>Notes Receivable</td>
<td>4,000</td>
<td>Accounts Receivable—Jenks Inc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug. 18</td>
<td>Cash ($8,000 + $360)</td>
<td>8,360</td>
<td>Notes Receivable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Interest Revenue</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>($8,000 X 9% X 6/12)</td>
</tr>
<tr>
<td>25</td>
<td>Accounts Receivable—Jenks Inc.</td>
<td>4,070</td>
<td>Notes Receivable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Interest Revenue</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>($4,000 X 7% X 3/12)</td>
</tr>
<tr>
<td>Sept. 1</td>
<td>Notes Receivable</td>
<td>12,000</td>
<td>Sales</td>
</tr>
</tbody>
</table>
PROBLEM 9-1B

(a) 1. Accounts Receivable ........................................ 2,400,000
    Sales .................................................. 2,400,000

2. Sales Returns and Allowances ............... 45,000
    Accounts Receivable .......................... 45,000

3. Cash ..................................................... 2,250,000
    Accounts Receivable ......................... 2,250,000

4. Allowance for Doubtful Accounts ............ 12,000
    Accounts Receivable ......................... 12,000

5. Accounts Receivable .................................. 3,000
    Allowance for Doubtful
    Accounts ........................................... 3,000
    Cash ..................................................... 3,000
    Accounts Receivable ......................... 3,000

(b) Accounts Receivable  Allowance for Doubtful Accounts

<table>
<thead>
<tr>
<th></th>
<th>Accounts Receivable</th>
<th>Allowance for Doubtful Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bal.</td>
<td>250,000</td>
<td>45,000</td>
</tr>
<tr>
<td>(1)</td>
<td>2,400,000</td>
<td>12,000</td>
</tr>
<tr>
<td>(2)</td>
<td>45,000</td>
<td></td>
</tr>
<tr>
<td>(3)</td>
<td>2,250,000</td>
<td>12,000</td>
</tr>
<tr>
<td>(4)</td>
<td></td>
<td>3,000</td>
</tr>
<tr>
<td>(5)</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Bal.</td>
<td>343,000</td>
<td></td>
</tr>
</tbody>
</table>

(c) Balance before adjustment [see (b)] .................. $6,000
    Balance needed .................................... $22,000
    Adjustment required ............................ $16,000

The journal entry would therefore be as follows:

Bad Debts Expense .................................. 16,000
    Allowance for Doubtful Accounts ........... 16,000

(d) \[
\frac{2,400,000 - 45,000}{2} = \frac{2,355,000}{278,000} = 8.47 \text{ times}
\]
PROBLEM 9-2B

(a) $22,150.

(b) $22,000 ($1,100,000 X 2%).

(c) $18,140 [($369,000 X 6%) – $4,000].

(d) $24,140 [($369,000 X 6%) + $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.
### PROBLEM 9-3B

(a) Dec. 31  
Bad Debts Expense .................................  38,570  
Allowance for Doubtful Accounts  
($54,570 – $16,000) ...........................  38,570

(a) & (b)

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>Ref.</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec. 31</td>
<td>Adjusting</td>
<td></td>
<td>38,570</td>
<td></td>
<td>38,570</td>
</tr>
</tbody>
</table>

#### Allowance for Doubtful Accounts

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>Ref.</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec. 31</td>
<td>Balance</td>
<td></td>
<td></td>
<td>16,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusting</td>
<td></td>
<td>38,570</td>
<td></td>
<td>54,570</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar. 1</td>
<td></td>
<td></td>
<td>1,900</td>
<td></td>
<td>52,670</td>
</tr>
<tr>
<td>May 1</td>
<td></td>
<td></td>
<td>1,900</td>
<td></td>
<td>54,570</td>
</tr>
</tbody>
</table>

(b) 2011

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) 2011

Dec. 31  
Bad Debts Expense .................................  44,300  
Allowance for Doubtful Accounts  
($42,300 + $2,000) ...........................  44,300
(a) Total estimated bad debts

<table>
<thead>
<tr>
<th>Number of Days Outstanding</th>
<th>Total</th>
<th>0–30</th>
<th>31–60</th>
<th>61–90</th>
<th>91–120</th>
<th>Over 120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$375,000</td>
<td>$220,000</td>
<td>$90,000</td>
<td>$40,000</td>
<td>$20,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>% uncollectible</td>
<td>1%</td>
<td>4%</td>
<td>5%</td>
<td>8%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Estimated Bad debts</td>
<td>$10,100</td>
<td>$2,200</td>
<td>$3,600</td>
<td>$2,000</td>
<td>$800</td>
<td>$1,500</td>
</tr>
</tbody>
</table>

(b) Bad Debts Expense ............................................... 7,100
   Allowance for Doubtful Accounts
   ($10,100 – $3,000) .................................................... 7,100

(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 matching principle by recording the bad debts expense in the period in which the sales occur.
PROBLEM 9-5B

(a) (1) Dec. 31  
Bad Debts Expense  
($12,500 – $1,100)............................... 11,400  
Allowance for Doubtful Accounts................................. 11,400  

(2) Dec. 31  
Bad Debts Expense  
($600,000 X 2%)................................... 12,000  
Allowance for Doubtful Accounts................................. 12,000  

(b) (1) Dec. 31  
Bad Debts Expense  
($12,500 + $1,100)............................... 13,600  
Allowance for Doubtful Accounts................................. 13,600  

(2) Dec. 31  
Bad Debts Expense................................. 12,000  
Allowance for Doubtful Accounts................................. 12,000  

(c) Allowance for Doubtful Accounts  
Accounts Receivable................................. 3,200  

Note: The entry is the same whether the amount of bad debts expense at the end of 2010 was estimated using the percentage of receivables or the percentage of sales method.  

(d) Bad Debts Expense  
Accounts Receivable................................. 3,200  

(e) The advantages of the allowance method over the direct write-off method are:  

(1) It attempts to match bad debts 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 .................................................. 7,200

       Cash ($1,000 – $30) ......................... 970
       Service Charge Expense
       ($1,000 X 3%) ....................................... 30
       Sales .................................................. 1,000

14  Accounts Receivable ......................... 510
       Interest Revenue ................................. 510

15  Cash ................................................. 12,200
       Notes Receivable ............................... 12,000
       Interest Receivable
       ($12,000 X 10% X 45/360) ................... 150
       Interest Revenue
       ($12,000 X 10% X 15/360) ................... 50

25  Accounts Receivable ......................... 30,450
       Notes Receivable ............................... 30,000
       Interest Receivable
       ($30,000 X 9% X 36/360) ..................... 270
       Interest Revenue
       ($30,000 X 9% X 24/360) ..................... 180

31  Interest Receivable
       ($15,000 X 12% X 1/12) .................... 150
       Interest Revenue ................................. 150

(b)

Notes Receivable

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>Ref.</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1</td>
<td>Balance</td>
<td>✓</td>
<td></td>
<td></td>
<td>57,000</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>12,000</td>
<td>45,000</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td>30,000</td>
<td>15,000</td>
<td></td>
</tr>
</tbody>
</table>
PROBLEM 9-6B (Continued)

## Accounts Receivable

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>Ref.</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 5</td>
<td>7,200</td>
<td></td>
<td></td>
<td></td>
<td>7,200</td>
</tr>
<tr>
<td>14</td>
<td>510</td>
<td></td>
<td></td>
<td></td>
<td>7,710</td>
</tr>
<tr>
<td>25</td>
<td>30,450</td>
<td></td>
<td></td>
<td></td>
<td>38,160</td>
</tr>
</tbody>
</table>

## Interest Receivable

<table>
<thead>
<tr>
<th>Date</th>
<th>Explanation</th>
<th>Ref.</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1</td>
<td>Balance</td>
<td>✓</td>
<td>✓✓✓✓</td>
<td>✓✓✓✓</td>
<td>420</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>150</td>
<td></td>
<td>270</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td>270</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>31</td>
<td>Adjusting</td>
<td>150</td>
<td></td>
<td></td>
<td>150</td>
</tr>
</tbody>
</table>

(c) **Current assets**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes receivable</td>
<td>$15,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>38,160</td>
</tr>
<tr>
<td>Interest receivable</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total receivables</strong></td>
<td><strong>$53,310</strong></td>
</tr>
</tbody>
</table>
PROBLEM 9-7B

Jan.  5  Accounts Receivable—Kandle Company .................................. 10,800
       Sales ............................................................. 10,800

Feb.  2  Notes Receivable ....................................................... 10,800
       Accounts Receivable—Kandle Company .................. 10,800

       12  Notes Receivable ...................................................... 13,500
           Sales ............................................................ 13,500

       26  Accounts Receivable—Barrel Co. 7,000
           Sales ............................................................ 7,000

Apr.  5  Notes Receivable ....................................................... 7,000
       Accounts Receivable—Barrel Co. ......................... 7,000

       12  Cash ($13,500 + $225) .............................................. 13,725
           Notes Receivable .............................................. 13,500
           Interest Revenue ($13,500 X 10% X 2/12) .............. 225

June  2  Cash ($10,800 + $360) ................................................ 11,160
       Notes Receivable ................................................... 10,800
       Interest Revenue ($10,800 X 10% X 4/12) ................. 360

July  5  Accounts Receivable—Barrel Co. ($7,000 + $140) ............... 7,140
       Notes Receivable ................................................. 7,000
       Interest Revenue ($7,000 X 8% X 3/12) ...................... 140

       15  Notes Receivable .................................................... 12,000
           Sales ............................................................ 12,000

Oct. 15  Allowance for Doubtful Accounts .................................. 12,000
       Notes Receivable .................................................. 12,000
(a) 

**SEK COMPANY**  
**Accounts Receivable Aging Schedule**  
**May 31, 2010**

<table>
<thead>
<tr>
<th>Proportion of Total</th>
<th>Amount in Category</th>
<th>Probability of Non-Collection</th>
<th>Estimated Uncollectible Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not yet due</td>
<td>.620</td>
<td>$ 868,000</td>
<td>.02</td>
</tr>
<tr>
<td>Less than 30 days past due</td>
<td>.200</td>
<td>280,000</td>
<td>.04</td>
</tr>
<tr>
<td>30 to 60 days past due</td>
<td>.090</td>
<td>126,000</td>
<td>.06</td>
</tr>
<tr>
<td>61 to 120 days past due</td>
<td>.050</td>
<td>70,000</td>
<td>.09</td>
</tr>
<tr>
<td>121 to 180 days past due</td>
<td>.025</td>
<td>35,000</td>
<td>.25</td>
</tr>
<tr>
<td>Over 180 days past due</td>
<td>.015</td>
<td>21,000</td>
<td>.70</td>
</tr>
<tr>
<td><strong>1.000</strong></td>
<td><strong>$1,400,000</strong></td>
<td></td>
<td><strong>$65,870</strong></td>
</tr>
</tbody>
</table>

(b) 

**SEK COMPANY**  
**Analysis of Allowance for Doubtful Accounts**  
**May 31, 2010**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 1, 2009 balance</td>
<td>$ 29,500</td>
</tr>
<tr>
<td>Bad debts expense accrual ($2,900,000 X .045)</td>
<td>130,500</td>
</tr>
<tr>
<td>Balance before write-offs of bad accounts</td>
<td>160,000</td>
</tr>
<tr>
<td>Write-offs of bad accounts</td>
<td>102,000</td>
</tr>
<tr>
<td>Balance before year-end adjustment</td>
<td>58,000</td>
</tr>
<tr>
<td>Estimated uncollectible amount</td>
<td>65,870</td>
</tr>
<tr>
<td>Additional allowance needed</td>
<td>$ 7,870</td>
</tr>
</tbody>
</table>

**Bad Debts Expense**                        7,870  
**Allowance for Doubtful Accounts**          7,870
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 ratio

<table>
<thead>
<tr>
<th>PepsiCo</th>
<th>Coca-Cola</th>
</tr>
</thead>
<tbody>
<tr>
<td>$39,474</td>
<td>$28,857</td>
</tr>
<tr>
<td>($3,725 + $4,389) ÷ 2</td>
<td>($2,587 + $3,317) ÷ 2</td>
</tr>
</tbody>
</table>

\[
\frac{$39,474}{4,057} = \frac{39,474}{4,057} = 9.7 \text{ times} \\
\frac{$28,857}{2,952} = \frac{28,857}{2,952} = 9.8 \text{ times}
\]

(2) Average collection period

\[
\frac{365}{9.7} = 37.6 \text{ days} \\
\frac{365}{9.8} = 37.2 \text{ days}
\]

(b) Both companies have reasonable accounts receivable turnovers and collection periods of slightly greater than 37 days. This collection period probably approximates their credit terms that they provide to customers.
(a) Benefits of Factoring Receivables

Factoring is a flexible financial solution that can help your business be more competitive while improving your cash flow, credit rating, and supplier discounts. Unlike traditional bank financing, factoring relies on the financial strength and credit worthiness of your customers, not you. You can use factoring services as much as you want or as little as you want. There are no obligations, no minimums, and no maximums. Here are the most common reasons businesses use factoring services:

Offer better terms to win more business. With factoring you can attract more business by offering better terms on your invoices. Most companies negotiate on price to win business in a competitive market, but with factoring you can negotiate with terms instead of price. To your customers, better terms can be more attractive than better prices. When using attractive terms to win business, you can build the cost of factoring into your costs of goods and services.

Example: A new customer may choose to do business with your company because you can offer NET 30 or NET 45 terms while your competitor (who isn’t factoring) requires payment up front but has a 3% better price. If you factor the subsequent invoice at a discount of 3%, you have leveraged factoring services to win the business at no extra cost and improved your cash flow at the same time.

Improve cash flow without additional debt. Eliminate long billing cycles. Receive cash for your outstanding invoices in 24 hours or less. No new debt is created. Factoring is not a loan. This allows you to preserve your financial leverage to take on new debt.

Customer Credit Services. Reduce bad debt expense, streamline credit approvals for new customers, improve decision-making on new business, and reduce administrative costs.
BYP 9-3 (Continued)

Accounts Receivable Management. Reduce administrative costs, improve customer relationships, improve receivable turns, improve accounting, and redirect critical resources to marketing and production.

Flexibility. Factor as much as you want or as little as you want. You decide. No obligations. No binding contracts. There are no minimums and no maximums in the amount you can factor. Funding is based on the strength of your customers.

(b) Factoring fees are based on a per Diem Rate. The factor will assess the risk of the particular situation and determine a discount rate. This usually ranges from 3% to 9% of the gross invoices sold, and is the fee for the duties the factor assumes and the cost of using their money. The sooner a receivable is paid, the lower the discount rate.

(c) Upon approval, the factor will advance the manufacturer 70%–90% of the total value of their invoices. This percentage is called the Advance Rate, and the cash is often delivered within 24 hours after an application is received.

The rest of the cash minus the factor’s fees is then returned to the manufacturer as the receivables are collected. If the manufacturer’s customers pay slowly, the discount rates that apply grow accordingly larger.
## BYP 9-4  DECISION MAKING ACROSS THE ORGANIZATION

### (a)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net credit sales</td>
<td>$500,000</td>
<td>$600,000</td>
<td>$400,000</td>
</tr>
<tr>
<td>Credit and collection expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collection agency fees</td>
<td>$2,450</td>
<td>$2,500</td>
<td>$2,400</td>
</tr>
<tr>
<td>Salary of accounts receivable clerk</td>
<td>4,100</td>
<td>4,100</td>
<td>4,100</td>
</tr>
<tr>
<td>Uncollectible accounts</td>
<td>8,000</td>
<td>9,600</td>
<td>6,400</td>
</tr>
<tr>
<td>Billing and mailing costs</td>
<td>2,500</td>
<td>3,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Credit investigation fees</td>
<td>750</td>
<td>900</td>
<td>600</td>
</tr>
<tr>
<td>Total</td>
<td>$17,800</td>
<td>$20,100</td>
<td>$15,500</td>
</tr>
</tbody>
</table>

Total expenses as a percentage of net credit sales: 3.56%, 3.35%, 3.88%

### (b)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average accounts receivable (5%)</td>
<td>$25,000</td>
<td>$30,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Investment earnings (8%)</td>
<td>$2,000</td>
<td>$2,400</td>
<td>$1,600</td>
</tr>
</tbody>
</table>

Total credit and collection expenses per above: $17,800, $20,100, $15,500
Add: Investment earnings*       | 2,000  | 2,400  | 1,600  |
Net credit and collection expenses: $19,800, $22,500, $17,100

Net expenses as a percentage of net credit sales: 3.96%, 3.75%, 4.28%

*The investment earnings on the cash tied up in accounts receivable is an additional expense of continuing the existing credit policies.

### (c)

The analysis shows that the credit card fee of 4% of net credit sales will be higher than the percentage cost of credit and collection expenses in each year before considering the effect of earnings from other investment opportunities. However, after considering investment earnings, the credit card fee of 4% will be less than the company’s percentage cost if annual net credit sales are less than $500,000.
Finally, the decision hinges on: (1) the accuracy of the estimate of investment earnings, (2) the expected trend in credit sales, and (3) the effect the new policy will have on sales. Nonfinancial factors include the effects on customer relationships of the alternative credit policies and whether the Maynes 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 Rene,

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 Debts 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 Ruiz Co.
- The controller of Ruiz 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) Ruiz 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/, www.federalreserve.gov/pubs/shop/, and 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.