## chaperer 8

## Accounting for Receivables

## STUDY OBJECTIVES

After studying this chapter, you should be able to:
1 Identify the different types of receivables.
2 Explain how companies recognize accounts receivable.
3 Distinguish between the methods and bases companies use to value accounts receivable.
4 Describe the entries to record the disposition of accounts receivable.
5 Compute the maturity date of and interest on notes receivable.
6 Explain how companies recognize notes receivable.
7 Describe how companies value notes receivable.
8 Describe the entries to record the disposition of notes receivable.
9 Explain the statement presentation and analysis of receivables. The Navigator

## The Navigator

| Scan Study Objectives |  |
| :---: | :---: |
| Read Feature Story |  |
| Read Preview |  |
| Read text and answer Do itt |  |
| p. $366 \square$ p. $369 \square \quad$ p. $373 \square$ | p. 375 |
| Work Comprehensive Do itt p. 377 | - |
| Review Summary of Study Objectives |  |
| Answer Self-Study Questions |  |
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## Feature Story

A DOSE OF CAREFUL MANAGEMENT KEEPS RECEIVABLES HEALTHY
"Sometimes you have to know when to be very tough, and sometimes you can give them a bit of a break," says Vivi Su. She's not talking about her children, but about the customers of a subsidiary of pharmaceutical company Whitehall-Robins (www.whitehall-robins.com), where she works as supervisor of credit and collections.

For example, while the company's regular terms are $1 / 15, n / 30$ ( $1 \%$ discount if paid within 15 days), a customer might ask for and receive a few days of grace and still get the discount. Or a customer might place orders above its credit limit, in which case, depending on its payment history and the circumstances, Ms. Su might authorize shipment of the goods anyway.

Nearly all of the company's sales come through the credit accounts Ms. Su manages. The process starts with the decision to grant a customer an account in the first place, Ms. Su explains. The sales rep gives the customer a credit application. "My department reviews this application very carefully; a customer needs to supply three good references, and we also run a check with a credit firm like Equifax. If we accept them, then based on their size and history, we assign a credit limit."

Once accounts are established, the company supervises them very carefully. "I get an aging report every single day," says Ms. Su.
"The rule of thumb is that we should always have at least $85 \%$ of receivables current-meaning they were billed less than 30 days ago," she continues. "But we try to do even better than that-l like to see 90\%." Similarly, her guideline is never to have more than $5 \%$ of receivables at over 90 days. But long before that figure is reached, "we jump on it," she says firmly.

At 15 days overdue, Whitehall-Robins phones the client. Often there's a reasonable explanation for the delay-an invoice may have gone astray, or the payables clerk is away. "But if a customer keeps on delaying, and tells us several times that it'll only be a few more days, we know there's a problem," says Ms. Su. After 45 days, "I send a letter. Then a second notice is sent in writing. After the third and final notice, the client has 10 days to pay, and then I hand it over to a collection agency, and it's out of my hands."

Ms. Su knows that management of receivables is crucial to the profitability of Whitehall-Robins. "Receivables are generally the second-largest asset of any company (after its capital assets)," she points out. "So it's no wonder we keep a very close eye on them."

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## - How Does a Credit Card Work? (p. 367)

- All About You: Should You Be Carrying Plastic? (p. 376)


## Preview of Chapter 8

As indicated in the Feature Story, receivables are a significant asset for many pharmaceutical companies. Because a significant portion of sales in the United States are done on credit, receivables are significant to companies in other industries as well. As a consequence, companies must pay close attention to their receivables and manage them carefully. In this chapter you will learn what journal entries companies make when they sell products, when they collect cash from those sales, and when they write off accounts they cannot collect.
The content and organization of the chapter are as follows.


## TYPES OF RECEIVABLES

STUDY OBJECTIVE 1
Identify the different types of receivables.

The term receivables refers to amounts due from individuals and other companies. Receivables are claims that are expected to be collected in cash. They are frequently classified as (1) accounts receivable, (2) notes receivable, and (3) other receivables.
Accounts receivalble are amounts owed by customers on account. They result from the sale of goods and services. Companies generally expect to collect these receivables within 30 to 60 days. Accounts receivable are the most significant type of claim held by a company.

Notes receivable are claims for which formal instruments of credit are issued as proof of the debt. A note receivable normally extends for time periods of 60-90 days or longer and requires the debtor to pay interest. Notes and ac-

## ETHICS NOTE

Companies report receivables from employees separately in the financial statements. The reason: Sometimes those assets are not the result of an "arm'slength" transaction. counts receivable that result from sales transactions are often called trade receivables.

Other receivalbles include nontrade receivables. Examples are interest receivable, loans to company officers, advances to employees, and income taxes refundable. These do not generally result from the operations of the business. Therefore companies generally classify and report them as separate items in the balance sheet.

## ACCOUNTS RECEIVABLE

Three accounting issues associated with accounts receivable are:

1. Recognizing accounts receivable.
2. Valuing accounts receivable.
3. Disposing of accounts receivable.

## Recognizing Accounts Receivable

Recognizing accounts receivable is relatively straightforward. In Chapter 5 we saw how the sale of merchandise affects accounts receivable. To review, assume that Jordache Co. on July 1, 2010, sells merchandise on account to Polo Company for $\$ 1,000$ terms $2 / 10, \mathrm{n} / 30$. On July 5, Polo returns mer-

STUDY OBJECTIVE 2
Explain how companies recognize accounts receivable. chandise worth $\$ 100$ to Jordache Co. On July 11, Jordache receives payment from Polo Company for the balance due. The journal entries to record these transactions on the books of Jordache Co. are as follows.

| July 1 | Accounts Receivable—Polo Company Sales <br> (To record sales on account) | 1,000 | 1,000 |
| :---: | :---: | :---: | :---: |
| July 5 | Sales Returns and Allowances <br> Accounts Receivable—Polo Company <br> (To record merchandise returned) | 100 | 100 |
| July 11 | Cash (\$900-\$18) <br> Sales Discounts (\$900×.02) <br> Accounts Receivable—Polo Company <br> (To record collection of accounts receivable) | $\begin{array}{r} 882 \\ 18 \end{array}$ | 900 |

HELPFUL HINT
These entries are the same as those described in Chapter 5. For simplicity, we have omitted inventory and cost of goods sold from this set of journal entries and from end-of-chapter material.

The opportunity to receive a cash discount usually occurs when a manufacturer sells to a wholesaler or a wholesaler sells to a retailer. The selling company gives a discount in these situations either to encourage prompt payment or for competitive reasons.

Retailers rarely grant cash discounts to customers. In fact, when you use a retailer's credit card (Sears, for example), instead of giving a discount, the retailer charges interest on the balance due if not paid within a specified period (usually 25-30 days).

To illustrate, assume that you use your JCPenney credit card to purchase clothing with a sales price of $\$ 300$. JC Penney will make the following entry at the date of sale.


JCPenney will send you a monthly statement of this transaction and any others that have occurred during the month. If you do not pay in full within 30 days, JCPenney adds an interest (financing) charge to the balance due. Although interest rates vary by region and over time, a common rate for retailers is $18 \%$ per year (1.5\% per month).

The seller recognizes interest revenue when it adds financing charges. Assuming that you owe $\$ 300$ at the end of the month, and JCPenney charges $1.5 \%$ per month on the balance due, the adjusting entry to record interest revenue of $\$ 4.50(\$ 300 \times 1.5 \%)$ is as follows.

Accounts Receivable
Interest Revenue
(To record interest on amount due)


| $=\mathbf{L}+$$\mathbf{S E}$ <br> +4.50 <br>  <br> Cash Flows <br> no effect |
| :--- |

[^0]
## Valuing Accounts Receivable

STUDY OBJECTIVE 3 Once companies record receivables in the accounts, the next question is:

Distinguish between the methods and bases companies use to value accounts receivable. How should they report receivables in the financial statements? Companies report accounts receivable on the balance sheet as an asset. But determining the amount to report is sometimes difficult because some receivables will become uncollectible.
Each customer must satisfy the credit requirements of the seller before the credit sale is approved. Inevitably, though, some accounts receivable become uncollectible. For example, a customer may not be able to pay because of a decline in its sales revenue due to a downturn in the economy. Similarly, individuals may be laid off from their jobs or faced with unexpected hospital bills. Companies record credit losses as debits to Bad Delbts Expense (or Uncollectible Accounts Expense). Such losses are a normal and necessary risk of doing business on a credit basis.

Two methods are used in accounting for uncollectible accounts: (1) the direct write-off method and (2) the allowance method. The following sections explain these methods.

## DIRECT WRITE-OFF METHOD FOR UNCOLLECTIBLE ACCOUNTS

Under the direct write-off method, when a company determines a particular account to be uncollectible, it charges the loss to Bad Debts Expense. Assume, for example, that on December 12 Warden Co. writes off as uncollectible M. E. Doran's $\$ 200$ balance. The entry is:

Dec. 12
Bad Debts Expense
Accounts Receivable-M. E. Doran (To record write-off of M. E. Doran account)

200
200

Cash Flows
no effect

## Illustration 8-1

Effects of direct write-off
method

Under the direct write-off method, companies often record bad debts expense in a period different from the period in which they record the revenue. The method does not attempt to match bad debts expense to sales revenues in the income statement. Nor does the direct write-off method show accounts receivable in the balance sheet at the amount the company actually expects to receive. Consequently, unless bad debts losses are insignificant, the direct write-off method is not acceptable for financial reporting purposes.

## ALLOWANCE METHOD FOR UNCOLLECTIBLE ACCOUNTS

The allowance method of accounting for bad debts involves estimating uncollectible accounts at the end of each period. This provides better matching on the income statement. It also ensures that companies state receivables on the balance sheet at their cash (net) realizable value. Cash (net) realizable value is the net amount the company expects to receive in cash. It excludes amounts that the company estimates it will not collect. Thus, this method reduces receivables in the balance sheet by the amount of estimated uncollectible receivables.

GAAP requires the allowance method for financial reporting purposes when bad debts are material in amount. This method has three essential features:

1. Companies estimate uncollectible accounts receivable. They match this estimated expense against revenues in the same accounting period in which they record the revenues.
2. Companies debit estimated uncollectibles to Bad Debts Expense and credit them to Allowance for Doubtful Accounts (a contra-asset account) through an adjusting entry at the end of each period.
3. When companies write off a specific account, they debit actual uncollectibles to Allowance for Doubtful Accounts and credit that amount to Accounts Receivable.
Recording Estimated Uncollectibles. To illustrate the allowance method, assume that Hampson Furniture has credit sales of $\$ 1,200,000$ in 2011. Of this amount, $\$ 200,000$ remains uncollected at December 31. The credit manager estimates that $\$ 12,000$ of these sales will be uncollectible. The adjusting entry to record the estimated uncollectibles is:

Dec. 31 || Bad Debts Expense
Allowance for Doubtful Accounts (To record estimate of uncollectible accounts)
B

| 12,000 |  |
| :--- | :--- |
|  | 12,000 |

Hampson reports Bad Debts Expense in the income statement as an operating expense (usually as a selling expense). Thus, the estimated uncollectibles are matched with sales in 2011. Hampson records the expense in the same year it made the sales.

As Illustration 8-2 shows, the company deducts the allowance account from accounts receivable in the current assets section of the balance sheet.

## HAMPSON FURNITURE Balance Sheet (partial)

| Current assets |  |  |
| :--- | ---: | ---: |
| Cash  $\$ 14,800$ <br> Accounts receivable $\mathbf{\$ 2 0 0 , 0 0 0}$  <br> Less: Allowance for doubtful accounts $\mathbf{1 2 , 0 0 0}$ $\mathbf{1 8 8 , 0 0 0}$ <br> Merchandise inventory  310,000 <br> Prepaid expense  $\underline{25,000}$ <br> $\quad$ Total current assets  $\$ 537,800$ |  |  |

HELPFUL HINT In this context, material means significant or important to financial statement users.

| $\mathbf{A}=$$\mathbf{L}$ <br>  <br>  <br> $-12,000$ <br> $-12,000 \mathrm{Exp}$ <br> Cash Flows <br> no effect |
| :--- | :--- |

Illustration 8-2
Presentation of allowance
for doubtful accounts

HELPFUL HINT
Cash realizable value is sometimes referred to as accounts receivable (net).
$\mathbf{A}=\mathbf{L}+\mathbf{S E}$
+500
-500

Cash Flows
no effect

Illustration 8-3
General ledger balances after write-off

Allowance for Doubtful Accounts shows the estimated amount of claims on customers that the company expects will become uncollectible in the future. Companies use a contra account instead of a direct credit to Accounts Receivable because they do not know which customers will not pay. The credit balance in the allowance account will absorb the specific write-offs when they occur. The amount of $\$ 188,000$ in Illustration 8-2 represents the expected cash realizable value of the accounts receivable at the statement date. Companies do not close Allowance for Doubtful Accounts at the end of the fiscal year.

Recording the Write-Off of an Uncollectible Account. As described in the Feature Story, companies use various methods of collecting past-due accounts, such as letters, calls, and legal action. When they have exhausted all means of collecting a past-due account and collection appears impossible, the company should write off the account. In the credit card industry, for example, it is standard practice to write off accounts that are 210 days past due. To prevent premature or unauthorized write-offs, management should formally approve, in writing, each write-off. To maintain good internal control, companies should not give authorization to write off accounts to someone who also has daily responsibilities related to cash or receivables.

To illustrate a receivables write-off, assume that the financial vice president of Hampson Furniture authorizes a write-off of the $\$ 500$ balance owed by R.A. Ware on March 1, 2012. The entry to record the write-off is:


Bad Debts Expense does not increase when the write-off occurs. Under the allowance method, companies debit every bad debt write-off to the allowance account rather than to Bad Debts Expense. A debit to Bad Debts Expense would be incorrect because the company has already recognized the expense when it made the adjusting entry for estimated bad debts. Instead, the entry to record the write-off of an uncollectible account reduces both Accounts Receivable and the Allowance for Doubtful Accounts. After posting, the general ledger accounts will appear as in Illustration 8-3.

| Accounts Receivable |  |  | Allowance for Doubtful Accounts |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 1 Bal. 200,000 | Mar. 1 | 500 | Mar. 1 | 500 | Jan. 1 Bal. | 12,000 |
| Mar. 1 Bal. 199,500 |  |  |  |  | Mar. 1 Bal. | 11,500 |

A write-off affects only balance sheet accounts-not income statement accounts. The write-off of the account reduces both Accounts Receivable and Allowance for Doubtful Accounts. Cash realizable value in the balance sheet, therefore, remains the same, as Illustration 8-4 shows.

Illustration 8-4
Cash realizable value comparison

|  | Before Write-Off | After Write-Off |
| :---: | :---: | :---: |
| Accounts receivable | \$200,000 | \$199,500 |
| Allowance for doubtful accounts | 12,000 | 11,500 |
| Cash realizable value | \$188,000 | \$188,000 |

Recovery of an Uncollectible Account. Occasionally, a company collects from a customer after it has written off the account as uncollectible. The company makes two entries to record the recovery of a bad debt: (1) It reverses the entry made in writing off the account. This reinstates the customer's account. (2) It journalizes the collection in the usual manner.

To illustrate, assume that on July 1, R. A. Ware pays the $\$ 500$ amount that Hampson had written off on March 1. These are the entries:

| (1) |  |  |  |
| :---: | :---: | :---: | :---: |
| July 1 | Accounts Receivable-R.A. Ware Allowance for Doubtful Accounts (To reverse write-off of R. A. Ware account) | 500 | 500 |
|  | (2) |  |  |
| July 1 | Cash <br> Accounts Receivable-R. A. Ware <br> (To record collection from R.A. Ware) | 500 | 500 |

Note that the recovery of a bad debt, like the write-off of a bad debt, affects only balance sheet accounts. The net effect of the two entries above is a debit to Cash and a credit to Allowance for Doubtful Accounts for \$500. Accounts Receivable and the Allowance for Doubtful Accounts both increase in entry (1) for two reasons: First, the company made an error in judgment when it wrote off the account receivable. Second, after R. A. Ware did pay, Accounts Receivable in the general ledger and Ware's account in the subsidiary ledger should show the collection for possible future credit purposes.

Bases Used for Allowance Method. To simplify the preceding explanation, we assumed we knew the amount of the expected uncollectibles. In "real life," companies must estimate that amount when they use the allowance method. Two bases are used to determine this amount: (1) percentage of sales, and (2) percentage of receivables. Both bases are generally accepted. The choice is a management decision. It depends on the relative emphasis that management wishes to give to expenses and revenues on the one hand or to cash realizable value of the accounts receivable on the other. The choice is whether to emphasize income statement or balance sheet relationships. Illustration 8-5 compares the two bases.


The percentage-of-sales basis results in a better matching of expenses with revenues-an income statement viewpoint. The percentage-of-receivables basis


Illustration 8-5
Comparison of bases for estimating uncollectibles

| $\mathbf{A}=$$\mathbf{L}$ $+\mathbf{S E}$ <br>  $-8,000 \mathrm{Exp}$ |  |
| :---: | :---: | :---: |
| $-8,000$ |  |

Cash Flows
no effect

Illustration 8-6 Bad debts accounts after posting
produces the better estimate of cash realizable value-a balance sheet viewpoint. Under both bases, the company must determine its past experience with bad debt losses.

Percentage-of-Sales. In the percentage-of-salles basis, management estimates what percentage of credit sales will be uncollectible. This percentage is based on past experience and anticipated credit policy.

The company applies this percentage to either total credit sales or net credit sales of the current year. To illustrate, assume that Gonzalez Company elects to use the percentage-of-sales basis. It concludes that $1 \%$ of net credit sales will become uncollectible. If net credit sales for 2011 are $\$ 800,000$, the estimated bad debts expense is $\$ 8,000(1 \% \times \$ 800,000)$. The adjusting entry is:


After the adjusting entry is posted, assuming the allowance account already has a credit balance of $\$ 1,723$, the accounts of Gonzalez Company will show the following:

| Bad Debts Expense |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: |
| Dec. 31 Adj. 8,000 |  | Allowance for Doubtful Accounts |  |  |

This basis of estimating uncollectibles emphasizes the matching of expenses with revenues. As a result, Bad Debts Expense will show a direct percentage relationship to the sales base on which it is computed. When the company makes the adjusting entry, it disregards the existing balance in Allowance for Doubtful Accounts. The adjusted balance in this account should be a reasonable approximation of the realizable value of the receivables. If actual write-offs differ significantly from the amount estimated, the company should modify the percentage for future years.

Percentage-of-Receivables. Under the percentage-of-receivables basis, management estimates what percentage of receivables will result in losses from uncollectible accounts. The company prepares an aging schedule, in which it classifies customer balances by the length of time they have been unpaid. Because of its emphasis on time, the analysis is often called aging the accounts receivable. In the opening story, Whitehall-Robins prepared an aging report daily.

After the company arranges the accounts by age, it determines the expected bad debt losses. It applies percentages based on past experience to the totals in each category. The longer a receivable is past due, the less likely it is to be collected. Thus, the estimated percentage of uncollectible debts increases as the number of days past due increases. Illustration 8-7 shows an aging schedule for Dart Company. Note that the estimated percentage uncollectible increases from 2 to $40 \%$ as the number of days past due increases.


Total estimated bad debts for Dart Company $(\$ 2,228)$ represent the amount of existing customer claims the company expects will become uncollectible in the future. This amount represents the required balance in Allowance for Doubtful Accounts at the balance sheet date. The amount of the bad debt adjusting entry is the difference between the required balance and the existing balance in the allowance account. If the trial balance shows Allowance for Doubtful Accounts with a credit balance of $\$ 528$, the company will make an adjusting entry for $\$ 1,700$ (\$2,228 - \$528), as shown here.

Dec. 31 Bad Debts Expense
Allowance for Doubtful Accounts (To adjust allowance account to total estimated uncollectibles)

Illustration 8-7
Aging schedule

HELPFUL HINT The older categories have higher percentages because the longer an account is past due, the less likely it is to be collected.

| $=$$\mathbf{A}$ $+\mathbf{S E}$ <br> $-1,700$  <br> Cash Flows  <br> no effect  |
| :--- |

## Illustration 8-8

Bad debts accounts after posting

Occasionally the allowance account will have a debit balance prior to adjustment. This occurs when write-offs during the year have exceeded previous provisions for bad debts. In such a case the company adds the debit balance to the required balance when it makes the adjusting entry. Thus, if there had been a $\$ 500$ debit balance in the allowance account before adjustment, the adjusting entry would have been for $\$ 2,728(\$ 2,228+\$ 500)$ to arrive at a credit balance of $\$ 2,228$. The percentage-of-receivables basis will normally result in the better approximation of cash realizable value.

| Bad Debts Expense |  |  |  |  |
| :---: | ---: | :--- | ---: | ---: |
| Dec. 31 Adj. 1,700 |  | Allowance for Doubtful Accounts |  |  |
|  |  | Bal. | 528 |  |
|  |  | Dec. 31 Adj. | $\mathbf{1 , 7 0 0}$ |  |
|  | Bal. | 2,228 |  |  | show:

## I N V ESTOR INSIGH T

## When Investors Ignore Warning Signs

At one time, Nortel Networks announced that half of its previous year's earnings were "fake." Should investors have seen this coming? Well, there were issues in its annual report that should at least have caused investors to ask questions. The company had cut its allowance for doubtful accounts on all receivables from $\$ 1,253$ million to $\$ 544$ million, even though its total balance of receivables remained relatively unchanged.

This reduction in bad debts expense was responsible for a very large part of the company's earnings that year. At the time it was unclear whether Nortel might have set the reserves too high originally and needed to reduce them, or whether it slashed the allowance to artificially boost earnings. But one thing is certain-when a company makes an accounting change of this magnitude, investors need to ask questions.

Source: Jonathan Weil, "Outside Audit: At Nortel, Warning Signs Existed Months Ago," Wall Street Journal, May 18, 2004, p. C3.

B
When would it be appropriate for a company to lower its allowance for doubtful accounts as a percentage of its receivables?

## Uncollectible Accounts Receivable

## Action Plan

- Report receivables at their cash (net) realizable value.
- Estimate the amount the company does not expect to collect.
- Consider the existing balance in the allowance account when using the percentage-of-receivables basis.


## before you go on...

## Do it

Brule Co. has been in business five years. The ledger at the end of the current year shows:

| Accounts Receivable | $\$ 30,000 \mathrm{Dr}$. |
| :--- | ---: |
| Sales | $\$ 180,000 \mathrm{Cr}$ |
| Allowance for Doubtful Accounts | $\$ 2,000 \mathrm{Dr}$. |

Bad debts are estimated to be $10 \%$ of receivables. Prepare the entry to adjust the Allowance for Doubtful Accounts.

## Solution

The following entry should be made to bring the balance in the Allowance for Doubtful Accounts up to a balance of $\$ 3,000(0.1 \times \$ 30,000)$ :

Bad Debts Expense [ $0.1 \times \$ 30,000)+\$ 2,000]$
Allowance for Doubtful Accounts (To record estimate of uncollectible accounts)

Related exercise material: BE8-3, BE8-4, BE8-5, BE8-6, BE8-7, E8-3, E8-4, E8-5, E8-6, and Do it1 8-1.

## Disposing of Accounts Receivable

STUDY OBJECTIVE 4
Describe the entries to record the disposition of accounts receivable.

In the normal course of events, companies collect accounts receivable in cash and remove the receivables from the books. However, as credit sales and receivables have grown in significance, the "normal course of events" has changed. Companies now frequently sell their receivables to another company for cash, thereby shortening the cash-to-cash operating cycle.

Companies sell receivables for two major reasons. First, they may be the only reasonable source of cash. When money is tight, companies may not be able to borrow money in the usual credit markets. Or, if money is available, the cost of borrowing may be prohibitive.

A second reason for selling receivables is that billing and collection are often timeconsuming and costly. It is often easier for a retailer to sell the receivables to another party with expertise in billing and collection matters. Credit card companies such as MasterCard, Visa, and Discover specialize in billing and collecting accounts receivable.

## SALE OF RECEIVABLES

A common sale of receivables is a sale to a factor. A factor is a finance company or bank that buys receivables from businesses and then collects the payments directly from the customers. Factoring is a multibillion dollar business.

Factoring arrangements vary widely. Typically the factor charges a commission to the company that is selling the receivables. This fee ranges from $1-3 \%$ of the amount of receivables purchased. To illustrate, assume that Hendredon Furniture factors $\$ 600,000$ of receivables to Federal Factors. Federal Factors assesses a service charge of $2 \%$ of the amount of receivables sold. The journal entry to record the sale by Hendredon Furniture is as follows.
$\left.\begin{array}{l|r|r}\text { Cash } & 588,000 & \\ \begin{array}{l}\text { Service Charge Expense }(2 \% \times \$ 600,000) \\ \quad \text { Accounts Receivable } \\ \quad \text { (To record the sale of accounts receivable) }\end{array} & & 6000\end{array}\right) 600,000$

If the company often sells its receivables, it records the service charge expense (such as that incurred by Hendredon) as selling expense. If the company infrequently sells receivables, it may report this amount in the "Other expenses and losses" section of the income statement.

## ACCOUNTING ACROSS THE ORGANIZATION

- 


## How Does a Credit Card Work?

Most of you know how to use a credit card, but do you know what happens in the transaction and how the transaction is processed? Suppose that you use a Visa card to purchase some new ties at Nordstrom. The salesperson swipes your card, and the swiping machine reads the information on the magnetic strip on the back of the card. The salesperson then types in the amount of the purchase. The machine contacts the Visa computer, which routes the call back to the bank that issued your Visa card. The issuing bank verifies that the account exists, that the card is not stolen, and that you have not exceeded your credit limit. At this point, the slip is printed, which you sign.

Visa acts as the clearing agent for the transaction. It transfers funds from the issuing bank to Nordstrom's bank account. Generally this transfer of funds, from sale to the receipt of funds in the merchant's account, takes two to three days.

In the meantime, Visa puts a pending charge on your account for the amount of the tie purchase; that amount counts immediately against your available credit limit. At the end of the billing period, Visa sends you an invoice (your credit card bill) which shows the various charges you made, and the amounts that Visa expended on your behalf, for the month. You then must "pay the piper" for your stylish new ties.


Assume that Nordstrom prepares a bank reconciliation at the end of each month. If some credit card sales have not been processed by the bank, how should Nordstrom treat these transactions on its bank reconciliation?


Illustration 8-9
Advantages of credit cards to the retailer

| A = | $\mathbf{L}+\mathrm{SE}$ |
| :---: | :---: |
| +970 |  |
|  | -30 Exp |
|  | +1,000 Rev |
| Cash Flows | 2 |
| +970 |  |

## CREDIT CARD SALES

Over one billion credit cards are in use in the United States-more than three credit cards for every man, woman, and child in this country. Visa, MasterCard, and American Express are the national credit cards that most individuals use. Three parties are involved when national credit cards are used in retail sales: (1) the credit card issuer, who is independent of the retailer, (2) the retailer, and (3) the customer. A retailer's acceptance of a national credit card is another form of selling (factoring) the receivable.

Illustration 8-9 shows the major advantages of national credit cards to the retailer. In exchange for these advantages, the retailer pays the credit card issuer a fee of $2-6 \%$ of the invoice price for its services.


Accounting for Credit Card Sales. The retailer generally considers sales from the use of national credit card sales as cash sales. The retailer must pay to the bank that issues the card a fee for processing the transactions. The retailer records the credit card slips in a similar manner as checks deposited from a cash sale.

To illustrate, Anita Ferreri purchases $\$ 1,000$ of compact discs for her restaurant from Karen Kerr Music Co., using her Visa First Bank Card. First Bank charges a service fee of $3 \%$. The entry to record this transaction by Karen Kerr Music is as follows.
Cash
Service Charge Expense
Sales
(To record Visa credit card sales)

## before you go on...

## Do ity

Mehl Wholesalers Co. has been expanding faster than it can raise capital. According to its local banker, the company has reached its debt ceiling. Mehl's suppliers (creditors) are demanding payment within 30 days of the invoice date for goods acquired, but Mehl's customers are slow in paying (60-90 days). As a result, Mehl has a cash flow problem.

Mehl needs $\$ 120,000$ in cash to safely cover next Friday's payroll. Its balance of outstanding accounts receivables totals $\$ 750,000$. What might Mehl do to alleviate this cash crunch? Record the entry that Mehl would make when it raises the needed cash.

## Solution

Assuming that Mehl Wholesalers factors $\$ 125,000$ of its accounts receivable at a $1 \%$ service charge, it would make the following entry.

| Cash | 123,750 |  |
| :--- | ---: | ---: |
| Service Charge Expense | 1,250 |  |
| $\quad$ Accounts Receivable |  | 125,000 |

## Disposition of Accounts Receivable

## Action Plan

- To speed up the collection of cash, sell receivables to a factor.
- Calculate service charge expense as a percentage of the factored receivables.

Related exercise material: BE8-8, E8-7, E8-8, E8-9, and Do it: 8-2.

## NOTES RECEIVABLE

Companies may also grant credit in exchange for a promissory note. A promissory note is a written promise to pay a specified amount of money on demand or at a definite time. Notes receivable give the payee a stronger legal claim to assets than accounts receivable. Promissory notes may be used: (1) when individuals and companies lend or borrow money, (2) when the amount of the transaction and the credit period exceed normal limits, or (3) in settlement of accounts receivable.

In a promissory note, the party making the promise to pay is called the maker. The party to whom payment is to be made is called the payee. The note may specifically identify the payee by name or may designate the payee simply as the bearer of the note. In the note shown in Illustration 8-10, Calhoun Company is the maker, Wilma Company is the payee. To Wilma Company, the promissory note is a note receivable; to Calhoun Company, it is a note payable.


Illustration 8-10 Promissory note

HELPFUL HINT Who are the two key parties to a note, and what entry does each party make when the note is issued?
Answer:

1. The maker, Calhoun Company, credits Notes Payable.
2. The payee, Wilma Company, debits Notes Receivable.

Like accounts receivable, notes receivable can be readily sold to another party. Promissory notes are negotiable instruments (as are checks), which means that they can be transferred to another party by endorsement.

Companies frequently accept notes receivable from customers who need to extend the payment of an account receivable. They often require such notes from high-risk customers. In some industries (such as the pleasure boat industry), all credit sales are supported by notes. The majority of notes originate from loans.

The basic issues in accounting for notes receivable are the same as those for accounts receivable:

1. Recognizing notes receivable.
2. Valuing notes receivable.
3. Disposing of notes receivable.

On the following pages, we will look at these issues. Before we do, we need to consider two issues that did not apply to accounts receivable: maturity date and computing interest.

## Determining the Maturity Date

STUDYOBJECTIVE5 When the life of a note is expressed in terms of months, you find the date

Compute the maturity date of and interest on notes receivable.
when it matures by counting the months from the date of issue. For example, the maturity date of a three-month note dated May 1 is August 1. A note drawn on the last day of a month matures on the last day of a subsequent month. That is, a July 31 note due in two months matures on September 30.

When the due date is stated in terms of days, you need to count the exact number of days to determine the maturity date. In counting, omit the date the note is issued but include the due date. For example, the maturity date of a 60-day note dated July 17 is September 15, computed as follows.

Illustration 8-11
Computation of maturity date

| Term of note |  | 60 days |
| :--- | :--- | :--- |
| July $(31-17)$ | 14 |  |
| August | $\underline{31}$ | $\underline{45}$ |
| Maturity date: September |  | $\underline{\mathbf{1 5}}$ |

Illustration 8-12 shows three ways of stating the maturity date of a promissory note.
Illustration 8-12 Maturity date of different notes


## Computing Interest

As indicated in Chapter 3, the basic formula for computing interest on an interestbearing note is:

| Face Value |
| :---: |
| of Note |$\times$| Annual |
| :---: |
| Interest |
| Rate |$\times$| Time in |
| :---: |
| Terms of |
| One Year |$=$ Interest

The interest rate specified in a note is an annual rate of interest. There are many different ways to calculate interest. The time factor in the formula in Illustration 8-13 expresses the fraction of a year that the note is outstanding. When the maturity date is stated in days, the time factor is often the number of days divided by 360 . When the due date is stated in months, the time factor is the number of months divided by 12 . Illustration $8-14$ shows computation of interest for various time periods.

| Terms of Note |  | Interest Computation |  |
| :--- | :--- | :--- | ---: |
|  |  | Face $\times$ Rate $\times$ Time $=$ Interest |  |
| $\$ 730,18 \%, 120$ days |  | $\$ 730 \times 18 \% \times 120 / 360=\$ 43.80$ |  |
| $\$ 1,000,15 \%, 6$ months |  | $\$ 1,000 \times 15 \% \times$ | $6 / 12=\$ 75.00$ |
| $\$ 2,000,12 \%, 1$ year |  | $\$ 2,000 \times 12 \% \times$ | $1 / 1=\$ 240.00$ |

The computation above assumed 360 days for the length of the year. Financial instruments actually use 365 days. In order to simplify calculations in our illustrations, we have assumed 360 days. For homework problems, assume 360 days.

## Recognizing Notes Receivable

To illustrate the basic entry for notes receivable, we will use the $\$ 1,000$, two-month, $12 \%$ promissory note on page 369 . Assuming that Calhoun Company wrote the note to settle an open account, Wilma Company makes the following entry for the receipt of the note.

STUDY OBJECTIVE 6
Explain how companies recognize notes receivable.

| May 1 | Notes Receivable <br> Accounts Receivable-Calhoun Company <br> (To record acceptance of Calhoun <br> Company note) |
| :--- | :--- |
|  | Com |
|  |  | Company note)

The company records the note receivable at its face value, the amount shown on the face of the note. No interest revenue is reported when the note is accepted, because the revenue recognition principle does not recognize revenue until earned. Interest is earned (accrued) as time passes.

If a company lends money using a note, the entry is a debit to Notes Receivable and a credit to Cash in the amount of the loan.

## Valuing Notes Receivable

Valuing short-term notes receivable is the same as valuing accounts receivable. Like accounts receivable, companies report short-term notes

Illustration 8-13
Formula for computing interest

HELPFUL HINT
The interest rate specified is the annual rate.

Illustration 8-14
Computation of interest
$\mathrm{A}=\mathbf{L}+\mathbf{S E}$
$+1,000$
$-1,000$
Cash Flows
no effect
receivable at their cash (net) realizable value. The notes receivable allowance account is Allowance for Doubtful Accounts. The estimations involved in determining cash realizable value and in recording bad debts expense and the related allowance are done similarly to accounts receivable.

## Disposing of Notes Receivable

STUDY OBJECTIVE 8 Notes may be held to their maturity date, at which time the maker must

Describe the entries to record the disposition of notes receivable. pay the face value plus accrued interest. Sometimes the maker of the note defaults and the payee must make an adjustment to the accounts. At other times the holder of the note speeds up the conversion to cash by selling the note receivable.

## HONOR OF NOTES RECEIVABLE

A note is honored when its maker pays it in full at its maturity date. For an interest-bearing note, the amount due at maturity is the face value of the note plus interest for the length of time specified on the note.

To illustrate, assume that Betty Co. lends Wayne Higley Inc. \$10,000 on June 1, accepting a five-month, $9 \%$ interest-bearing note. Interest will be $\$ 375(\$ 10,000 \times$ $9 \% \times 5 / 12$ ). The maturity value will be $\$ 10,375$. To obtain payment, Betty Co. (the payee) must present the note either to Wayne Higley Inc. (the maker) or to the maker's designated agent, such as a bank. Assuming that Betty Co. presents the note to Wayne Higley Inc. on the maturity date, Betty Co.'s entry to record the collection is:

| Nov. 1 | Cash | 10,375 |  |
| :--- | :--- | ---: | ---: |
| Notes Receivable |  | 10,000 |  |
| Interest Revenue |  |  |  |
| (To record collection of Higley Inc. note) |  |  |  |$\quad 375$

If Betty Co. prepares financial statements as of September 30, it must accrue interest. In this case, Betty Co. would make the adjusting entry shown below to record 4 months' interest (\$300).

| $\mathbf{A}$ |  |
| :--- | :--- |
| +300 | $\mathbf{L}$ |
|  | $+\mathbf{S E}$ |
|  | +300 Rev |
| Cash Flows <br> no effect |  |

Sept. 30
Interest Receivable ( $\$ 10,000 \times 9 \% \times 4 / 12$ )
Interest Revenue
(To accrue 4 months' interest)

When interest has been accrued, the company must credit Interest Receivable at maturity. In addition, since an additional month has passed, it must record one month of interest revenue. The entry by Betty Co. to record the honoring of the Wayne Higley Inc. note on November 1 is:

| A = | $\mathbf{L}+\mathrm{SE}$ |
| :---: | :---: |
| +10,375 |  |
| -10,000 |  |
| -300 |  |
|  | +75 Rev |
| Cash Flows |  |
| +10,375 |  |


| Nov. 1 | Cash | 10,375 |  |
| :--- | :--- | ---: | ---: |
|  | Notes Receivable <br> Interest Receivable |  | 10,000 |
|  | Interest Revenue $(\$ 10,000 \times 9 \% \times 1 / 12)$ <br> (To record collection of note at maturity) |  | 75 |
|  |  |  |  |

In this case, Betty Co. credits Interest Receivable because the receivable was established in the adjusting entry of September 30.

## DISHONOR OF NOTES RECEIVABLE

A dishonored note is a note that is not paid in full at maturity. A dishonored note receivable is no longer negotiable. However, the payee still has a claim against the maker of the note. Therefore the note holder usually transfers the Notes Receivable account to an Account Receivable.

To illustrate, assume that Wayne Higley Inc. on November 1 indicates that it cannot pay at the present time. The entry to record the dishonor of the note depends on whether Betty Co. expects eventual collection. If it does expect eventual collection, Betty Co. debits the amount due (face value and interest) on the note to Accounts Receivable. It would make the following entry at the time the note is dishonored (assuming no previous accrual of interest).


If instead, on November 1, there is no hope of collection, the note holder would write off the face value of the note by debiting the Allowance for Doubtful Accounts. No interest revenue would be recorded because collection will not occur.

## SALE OF NOTES RECEIVABLE

The accounting for the sale of notes receivable is recorded similarly to the sale of accounts receivable. The accounting entries for the sale of notes receivable are left for a more advanced course.

## before you go on...

## Do ity

Gambit Stores accepts from Leonard Co. a \$3,400, 90-day, $12 \%$ note dated May 10 in settlement of Leonard's overdue account. (a) What is the maturity date of the note? (b) What is the entry made by Gambit at the maturity date, assuming Leonard pays the note and interest in full at that time?

## Solution

(a) The maturity date is August 8, computed as follows.

| Term of note: |  | 90 days |
| :--- | :--- | :--- |
| May $(31-10)$ | 21 |  |
| June | 30 |  |
| July | $\underline{31}$ | $\underline{82}$ |
| Maturity date: August |  | $\underline{\underline{8}}$ |

(b) The interest payable at the maturity date is $\$ 102$, computed as follows.

$$
\begin{aligned}
& \text { Face } \times \text { Rate } \times \text { Time }=\text { Interest } \\
& \$ 3,400 \times 12 \% \times 90 / 360=\$ 102
\end{aligned}
$$

## Notes Receivable

## Action Plan

- Count the exact number of days to determine the maturity date. Omit the date the note is issued, but include the due date.
- Determine whether interest was accrued. The entry here assumes that no interest has been previously accrued on this note.

The entry recorded by Gambit Stores at the maturity date is:

| Cash | 3,502 |  |
| :--- | ---: | ---: |
| $\quad$ Notes Receivable |  | 3,400 |
| Interest Revenue |  | 102 |
| $\quad($ To record collection of Leonard note) |  |  |

Related exercise material: BE8-9, BE8-10, BE8-11, E8-10, E8-11, E8-12, E8-13, and Do itt 8-3.

## STATEMENT PRESENTATION AND ANALYSIS

## Presentation

## STUDYOBJECTIVE9 Companies should identify in the balance sheet or in the notes to the

Explain the statement presentation and analysis of receivables.
illustration 8-15
Accounts receivable turnover ratio and computation
financial statements each of the major types of receivables. Short-term receivables appear in the current assets section of the balance sheet, below short-term investments. Short-term investments appear before receivables, because short-term investments are more liquid (nearer to cash). Companies report both the gross amount of receivables and the allowance for doubtful accounts.

In a multiple-step income statement, companies report bad debts expense and service charge expense as selling expenses in the operating expenses section. Interest revenue appears under "Other revenues and gains" in the nonoperating activities section of the income statement.

## Analysis

Investors and corporate managers compute financial ratios to evaluate the liquidity of a company's accounts receivable. They use the accounts receivable turnover ratio to assess the liquidity of the receivables. This ratio measures the number of times, on average, the company collects accounts receivable during the period. It is computed by dividing net credit sales (net sales less cash sales) by the average net accounts receivable during the year. Unless seasonal factors are significant, average net accounts receivable outstanding can be computed from the beginning and ending balances of net accounts receivable.

For example, in 2008 Cisco Systems had net sales of $\$ 33,099$ million for the year. It had a beginning accounts receivable (net) balance of $\$ 3,989$ million and an ending accounts receivable (net) balance of $\$ 3,821$ million. Assuming that Cisco's sales were all on credit, its accounts receivable turnover ratio is computed as follows.

| Net Credit Sales | $\div$Average Net <br> Accounts Receivable | $=$ | Accounts Receivable <br> Turnover |
| :---: | :---: | :---: | :---: |
| $\$ 33,099$ | $\div$ | $\frac{\$ 3,989+\$ 3,821}{2}$ | $=$ |
| $\mathbf{8 . 5}$ times |  |  |  |

The result indicates an accounts receivable turnover ratio of 8.5 times per year. The higher the turnover ratio, the more liquid the company's receivables.

A variant of the accounts receivable turnover ratio that makes the liquidity even more evident is its conversion into an average collection period in terms of days. This is done by dividing the turnover ratio into 365 days. For example, Cisco's turnover of 8.5 times is divided into 365 days, as shown in Illustration 8-16, to obtain approximately 42.9 days. This means that it takes Cisco about 43 days to collect its accounts receivable.

| Days in Year | $\div$ | Accounts Receivable  Average Collection <br>  Turnover  <br> Period in Days   <br> 365 days $\div$ 8.5 times | $=$ | 42.9 days |
| :---: | :---: | :---: | :---: | :---: |

Companies frequently use the average collection period to assess the effectiveness of a company's credit and collection policies. The general rule is that the collection period should not greatly exceed the credit term period (that is, the time allowed for payment).

Illustration 8-16
Average collection period for receivables formula and computation

## before you go on...

## Do itI

 able (net) balance of $\$ 35,988$. Compute Lebron James Company's (a) accounts receivable turnover and (b) average collection period in days.
## Solution

| (a) | Net credit sales | $\div$ | Average net <br> accounts receivable |
| :--- | :--- | :--- | :--- |
| (b) | $=$Accounts receivable <br> turnover |  |  |
|  | $\div 923,795$ | $\div \frac{38,275+35,988}{2}$ | $=$ |
| 24.9 times |  |  |  |

## Analysis of Receivables

## Action Plan

- Review the formula to compute the accounts receivable turnover.
- Make sure that both the beginning and ending accounts receivable balances are considered in the computation.
- Review the formula to compute the average collection period in days.

Be sure to read
all about Y *U
Should You Be Carrying Plastic? on page 376 for information on how topics in this chapter apply to your personal life.

## all about $Y * U$

## Should You Be Carrying Plastic?

Smart business people carefully consider their use of credit. They evaluate who they lend to, and how they finance their own operations. They know that getting overextended on credit can destroy their business.

Individuals need to evaluate their personal credit positions using the same thought processes used by business people. Some of you might consider the idea of not having a credit card a ridiculous proposition.
But the reality is that the misuse of credit cards brings financial hardship to millions of Americans each year. Credit card companies aggressively market their cards with images of glamour and happiness. But there isn't much glamour in paying an $18 \%$ to $21 \%$ interest rate, and there is very little happiness to be found in filing for personal bankruptcy.

## *Some Facts

* According to data from the U.S. Census Bureau, there were 159 million credit cardholders in the United States in 2000 and 173 million in 2006; that number is projected to grow to 181 million Americans by 2010.
* In 2006, the U.S. Census Bureau determined that there were nearly 1.5 billion credit cards in use in the U.S. A stack of all those credit cards would reach more than 70 miles into space-and be almost as tall as 13 Mount Everests.
* In a recent year, Americans charged more than \$1 trillion in purchases with their credit cards. That was more than they spent in cash.
* Credit card defaults-the failure to make a payment on a debt by the due date-sprouted in February 2009 to a 20 -year-high.
* $74 \%$ of monthly college spending is with cash and debit cards. Only $7 \%$ is with credit cards.
* The average college graduate has nearly $\$ 20,000$ in debt; average credit card debt has increased 47\% between 1989 and 2004 for 25 - to 34 -year-olds and $11 \%$ for 18 - to 24 -year-olds. Nearly one in five 18 to 24 -year-olds is in "debt hardship," up from $12 \%$ in 1989.
* Foreclosure filings nationwide soared $30 \%$ in January 2009 over the same month in the previous year. Nevada, California, and Florida had the highest foreclosure rates. One in every 440 U.S. homes received a foreclosure filing in February 2009.


## * About the Numbers

Presented below is a chart that shows the major causes of personal financial problems. Note the excessive use of credit, which is cited as the number-one cause. This often translates into addiction to credit cards.

## Causes of Personal Financial Problems


$\square$ Excessive use of credit/Overobligation $39 \%$

- Reduced income/

Unemployment 24\%
$\square$ Poor money
management $15 \%$
$\square$ Di
Separation 8\%
Other 14\%

Source: Debt Solutions of America, www.becomedebtfree.com (accessed May 2006).

## ※ What Do You Think?

Should you cut up your credit card(s)?
YES: Americans are carrying huge personal debt burdens. Credit cards encourage unnecessary, spontaneous expenditures. The interest rates on credit cards are extremely high, which causes debt problems to escalate exponentially.
NO: Credit cards are a necessity for transactions in today's economy. In fact, many transactions are difficult or impossible to carry out without a credit card. People should learn to use credit cards responsibly.

[^1]
## Comprehensive <br> Do it

The following selected transactions relate to Falcetto Company.
Mar. 1 Sold $\$ 20,000$ of merchandise to Potter Company, terms $2 / 10, n / 30$.
11 Received payment in full from Potter Company for balance due.
12 Accepted Juno Company's \$20,000, 6-month, $12 \%$ note for balance due.
13 Made Falcetto Company credit card sales for $\$ 13,200$.
15 Made Visa credit card sales totaling \$6,700. A 3\% service fee is charged by Visa.
Apr. 11 Sold accounts receivable of $\$ 8,000$ to Harcot Factor. Harcot Factor assesses a service charge of $2 \%$ of the amount of receivables sold.
13 Received collections of \$8,200 on Falcetto Company credit card sales and added finance charges of $1.5 \%$ to the remaining balances.
May 10 Wrote off as uncollectible $\$ 16,000$ of accounts receivable. Falcetto uses the percentage-of-sales basis to estimate bad debts.
June 30 Credit sales recorded during the first 6 months total $\$ 2,000,000$. The bad debt percentage is $1 \%$ of credit sales. At June 30, the balance in the allowance account is $\$ 3,500$.
July 16 One of the accounts receivable written off in May was from J. Simon, who pays the amount due, $\$ 4,000$, in full.

## Instructions

Prepare the journal entries for the transactions.

## Solution to Comprehensive Do it!

Mar. 1 Accounts Receivable—Potter Sales
(To record sales on account)
11 | Cash
Sales Discounts $(2 \% \times \$ 20,000)$
Accounts Receivable-Potter
(To record collection of accounts receivable)
| $20,000| | 20,000$
Notes Receivable
Accounts Receivable-Juno
(To record acceptance of Juno Company note)

13 Accounts Receivable Sales
(To record company credit card sales)
15
Cash
Service Charge Expense ( $3 \% \times \$ 6,700$ ) Sales
(To record credit card sales)

Apr. 11 Cash
Service Charge Expense $(2 \% \times \$ 8,000)$
Accounts Receivable
(To record sale of receivables to factor)
13
Cash
Accounts Receivable
(To record collection of accounts receivable)
Accounts Receivable [(\$13,200 - \$8,200) $\times 1.5 \%$ ]
Interest Revenue
(To record interest on amount due)

May 10 || Allowance for Doubtful Accounts Accounts Receivable
(To record write-off of accounts receivable)
June 30 || Bad Debts Expense ( $\$ 2,000,000 \times 1 \%$ )
Allowance for Doubtful Accounts
(To record estimate of uncollectible accounts)
July 16 || Accounts Receivable-J. Simon
Allowance for Doubtful Accounts
(To reverse write-off of accounts receivable)
Cash
Accounts Receivable-J. Simon
(To record collection of accounts receivable)

| 16,000 | 16,000 |
| :---: | :---: |
| 20,000 | 20,000 |
| 4,000 | 4,000 |
| 4,000 | 4,000 |

## SUMMARY OF STUDY OBJECTIVES

1 Identify the different types of receivables. Receivables are frequently classified as (1) accounts, (2) notes, and (3) other. Accounts receivable are amounts customers owe on account. Notes receivable are claims for which lenders issue formal instruments of credit as proof of the debt. Other receivables include nontrade receivables such as interest receivable, loans to company officers, advances to employees, and income taxes refundable.
2 Explain how companies recognize accounts receivable. Companies record accounts receivable at invoice price. They are reduced by sales returns and allowances. Cash discounts reduce the amount received on accounts receivable. When interest is charged on a past due receivable, the company adds this interest to the accounts receivable balance and recognizes it as interest revenue.
3 Distinguish between the methods and bases companies use to value accounts receivable. There are two methods of accounting for uncollectible accounts: the allowance method and the direct write-off method. Companies may use either the percentage-of-sales or the percentage-ofreceivables basis to estimate uncollectible accounts using the allowance method. The percentage-of-sales basis emphasizes the expense recognition principle. The percentage-ofreceivables basis emphasizes the cash realizable value of the accounts receivable. An aging schedule is often used with this basis. Unless bad debt losses are insignificant, the direct writeoff method is not acceptable for financial reporting purposes.
4 Describe the entries to record the disposition of accounts receivable. When a company collects an account receivable, it credits Accounts Receivable. When a company sells (factors) an account receivable, a service charge expense reduces the amount received.
5 Compute the maturity date of and interest on notes receivable. For a note stated in months, the maturity date is found by counting the months from the date of issue. For a note stated in days, the number of days is counted, omitting the issue date and counting the due date. The formula for computing interest is: Face value $\times$ Interest rate $\times$ Time.

6 Explain how companies recognize notes receivable. Companies record notes receivable at face value. In some cases, it is necessary to accrue interest prior to maturity. In this case, companies debit Interest Receivable and credit Interest Revenue.
7 Describe how companies value notes receivable. As with accounts receivable, companies report notes receivable at their cash (net) realizable value. The notes receivable allowance account is the Allowance for Doubtful Accounts. The computation and estimations involved in valuing notes receivable at cash realizable value, and in recording the proper amount of bad debts expense and related allowance are similar to those for accounts receivable.
8 Describe the entries to record the disposition of notes receivable. Notes can be held to maturity. At that time the face value plus accrued interest is due, and the note is removed from the accounts. In many cases, the holder of the note speeds up the conversion by selling the receivable to another party (a factor). In some situations, the maker of the note dishonors the note (defaults), in which case the company transfers the note and accrued interest to an account receivable or writes off the note.
9 Explain the statement presentation and analysis of receivables. Companies should identify in the balance sheet or in the notes to the financial statements each major type of receivable. Short-term receivables are considered current assets. Companies report the gross amount of receivables and the allowance for doubtful accounts. They report bad debts and service charge expenses in the multiplestep income statement as operating (selling) expenses; interest revenue appears under other revenues and gains in the nonoperating activities section of the statement. Managers and investors evaluate accounts receivable for liquidity by computing a turnover ratio and an average collection period.

## GLOSSARY

Accounts receivable Amounts owed by customers on account. (p. 358).
Accounts receivable turnover ratio A measure of the liquidity of accounts receivable; computed by dividing net credit sales by average net accounts receivable. (p. 374).
Aging the accounts receivable The analysis of customer balances by the length of time they have been unpaid. (p. 364).
Allowance for Doubtful Accounts An account that shows the estimated amount of claims on customers that the company expects will become uncollectible in the future. (p. 362).
Allowance method A method of accounting for bad debts that involves estimating uncollectible accounts at the end of each period. (p. 361).
Average collection period The average amount of time that a receivable is outstanding; calculated by dividing 365 days by the accounts receivables turnover ratio. (p.375).

Bad Debts Expense An expense account to record uncollectible receivables. (p. 360).
Cash (net) realizable value The net amount a company expects to receive in cash. (p. 361).
Direct write-off method A method of accounting for bad debts that involves expensing accounts at the time they are determined to be uncollectible. (p. 360).

Dishonored note A note that is not paid in full at maturity. (p.373).

Factor A finance company or bank that buys receivables from businesses and then collects the payments directly from the customers. (p. 367).
Maker The party in a promissory note who is making the promise to pay. (p. 369).
Notes receivable Claims for which formal instruments of credit are issued as proof of the debt. (p. 358).
Other receivables Various forms of nontrade receivables, such as interest receivable and income taxes refundable. (p. 358).

Payee The party to whom payment of a promissory note is to be made. (p. 369).
Percentage-of-receivables basis Management estimates what percentage of receivables will result in losses from uncollectible accounts. (p. 364).
Percentage-of-sales basis Management estimates what percentage of credit sales will be uncollectible. (p.364).
Promissory note A written promise to pay a specified amount of money on demand or at a definite time. (p.369).
Receivables Amounts due from individuals and other companies. (p. 358).
Trade receivables Notes and accounts receivable that result from sales transactions. (p. 358).

## SELF-STUDY QUESTIONS

## Answers are at the end of the chapter.

(SO 1) 1. Receivables are frequently classified as:
a. accounts receivable, company receivables, and other receivables.
b. accounts receivable, notes receivable, and employee receivables.
c. accounts receivable and general receivables.
d. accounts receivable, notes receivable, and other receivables.
(SO 2) 2. Buehler Company on June 15 sells merchandise on account to Chaz Co. for $\$ 1,000$, terms $2 / 10, n / 30$. On June 20, Chaz Co. returns merchandise worth $\$ 300$ to Buehler Company. On June 24, payment is received from Chaz Co. for the balance due. What is the amount of cash received?
a. $\$ 700$.
c. $\$ 686$.
b. $\$ 680$.
d. None of the above.
(SO 3) 3. Which of the following approaches for bad debts is best described as a balance sheet method?
a. Percentage-of-receivables basis.
b. Direct write-off method.
c. Percentage-of-sales basis.
d. Both $a$ and $b$.
4. Hughes Company has a credit balance of $\$ 5,000$ in its Allowance for Doubtful Accounts before any adjustments are made at the end of the year. Based on review and aging of its accounts receivable at the end of the year, Hughes estimates that $\$ 60,000$ of its receivables are uncollectible. The amount of bad debts expense which should be reported for the year is:
a. $\$ 5,000$.
b. $\$ 55,000$.
c. $\$ 60,000$.
d. $\$ 65,000$.
5. Use the same information as in question 4 , except that (SO 3) Hughes has a debit balance of $\$ 5,000$ in its Allowance for Doubtful Accounts before any adjustments are made at the end of the year. In this situation, the amount of bad debt expense that should be reported for the year is:
a. $\$ 5,000$.
b. $\$ 55,000$.
c. $\$ 60,000$.
d. $\$ 65,000$.
6. Net sales for the month are $\$ 800,000$, and bad debts are expected to be $1.5 \%$ of net sales. The company uses the percentage-of-sales basis. If the Allowance for Doubtful Accounts has a credit balance of $\$ 15,000$ before adjustment, what is the balance after adjustment?
a. $\$ 15,000$.
b. $\$ 27,000$.
c. $\$ 23,000$.
d. $\$ 31,000$.
(SO 3) 7. In 2011, Roso Carlson Company had net credit sales of $\$ 750,000$. On January 1, 2011, Allowance for Doubtful Accounts had a credit balance of $\$ 18,000$. During 2011, $\$ 30,000$ of uncollectible accounts receivable were written off. Past experience indicates that $3 \%$ of net credit sales become uncollectible. What should be the adjusted balance of Allowance for Doubtful Accounts at December 31, 2011 ?
a. $\$ 10,050$
b. $\$ 10,500$.
c. $\$ 22,500$.
d. $\$ 40,500$
(SO 3) 8. An analysis and aging of the accounts receivable of Prince Company at December 31 reveals the following data.
Accounts receivable
\$800,000
Allowance for doubtful accounts per books before adjustment

50,000
Amounts expected to become uncollectible

65,000
The cash realizable value of the accounts receivable at December 31, after adjustment, is:
a. $\$ 685,000$.
b. $\$ 750,000$.
c. $\$ 800,000$.
d. $\$ 735,000$.
9. One of the following statements about promissory notes is incorrect. The incorrect statement is:
a. The party making the promise to pay is called the maker.
b. The party to whom payment is to be made is called the payee.
c. A promissory note is not a negotiable instrument.
d. A promissory note is often required from high-risk customers.
(SO 4) 10. Which of the following statements about Visa credit card sales is incorrect?
a. The credit card issuer makes the credit investigation of the customer.
b. The retailer is not involved in the collection process.
c. Two parties are involved.
d. The retailer receives cash more quickly than it would from individual customers on account.
11. Blinka Retailers accepted $\$ 50,000$ of Citibank Visa credit card charges for merchandise sold on July 1. Citibank charges $4 \%$ for its credit card use. The entry to record this transaction by Blinka Retailers will include a credit to Sales of $\$ 50,000$ and a debit(s) to:
a. Cash
\$48,000
\$ 2,000
and Service Charge Expense
b. Accounts Receivable and Service Charge Expense
\$48,000
\$ 2,000
c. Cash
\$50,000
d. Accounts Receivable
\$50,000
12. Foti Co. accepts a $\$ 1,000,3$-month, $12 \%$ promissory note (SO 6) in settlement of an account with Bartelt Co. The entry to record this transaction is as follows.

| a. Notes Receivable Accounts Receivable | 1,030 | 1,030 |
| :---: | :---: | :---: |
| b. Notes Receivable Accounts Receivable | 1,000 | 1,000 |
| c. Notes Receivable Sales | 1,000 | 1,000 |
| d. Notes Receivable Accounts Receivable | 1,020 | 1,020 |

13. Ginter Co. holds Kolar Inc.'s $\$ 10,000,120-$ day, $9 \%$ note. (SO 8) The entry made by Ginter Co. when the note is collected, assuming no interest has been previously accrued, is:
a. Cash
b. Cash Notes Receivable
c. Accounts Receivable Notes Receivable Interest Revenue

## d. Cash

Notes Receivable Interest Revenue

| 10,300 | 10,300 |
| ---: | ---: |
| 10,000 | 10,000 |
| 10,300 |  |
|  | 10,000 |
| 10,300 | 300 |
|  | 10,000 |
|  | 300 |

14. Accounts and notes receivable are reported in the current (SO 9) assets section of the balance sheet at:
a. cash (net) realizable value
b. net book value.
c. lower-of-cost-or-market value.
d. invoice cost.
15. Oliveras Company had net credit sales during the year of (SO 9) $\$ 800,000$ and cost of goods sold of $\$ 500,000$. The balance in accounts receivable at the beginning of the year was $\$ 100,000$, and the end of the year it was $\$ 150,000$. What were the accounts receivable turnover ratio and the average collection period in days?
a. 4.0 and 91.3 days.
b. 5.3 and 68.9 days.
c. 6.4 and 57 days.
d. 8.0 and 45.6 days.

Go to the book's companion website, www.wiley.com/college/weygandt, for Additional Self-Study Questions.

## QUESTIONS

1. What is the difference between an account receivable and a note receivable?
2. What are some common types of receivables other than accounts receivable and notes receivable?
3. Texaco Oil Company issues its own credit cards. Assume that Texaco charges you $\$ 40$ on an unpaid balance. Prepare the journal entry that Texaco makes to record this revenue.
4. What are the essential features of the allowance method of accounting for bad debts?
5. Jerry Gatewood cannot understand why cash realizable value does not decrease when an uncollectible account is written off under the allowance method. Clarify this point for Jerry Gatewood.
6. Distinguish between the two bases that may be used in estimating uncollectible accounts.
7. Eaton Company has a credit balance of $\$ 3,500$ in Allowance for Doubtful Accounts. The estimated bad debts expense under the percentage-of-sales basis is $\$ 4,100$. The total estimated uncollectibles under the percentage-ofreceivables basis is $\$ 5,800$. Prepare the adjusting entry under each basis.
8. How are bad debts accounted for under the direct write-off method? What are the disadvantages of this method?
9. DeVito Company accepts both its own credit cards and national credit cards. What are the advantages of accepting both types of cards?
10. An article recently appeared in the Wall Street Journal indicating that companies are selling their receivables at a record rate. Why are companies selling their receivables?
11. Pinkston Textiles decides to sell $\$ 600,000$ of its accounts receivable to First Factors Inc. First Factors assesses a service charge of $3 \%$ of the amount of receivables sold. Prepare the journal entry that Pinkston Textiles makes to record this sale.
12. Your roommate is uncertain about the advantages of a promissory note. Compare the advantages of a note receivable with those of an account receivable.
13. How may the maturity date of a promissory note be stated?
14. Indicate the maturity date of each of the following promissory notes:
Date of Note
(a) March 13
(b) May 4
(c) June 20
(d) July 1

Terms
one year after date of note
3 months after date
30 days after date
60 days after date
15. Compute the missing amounts for each of the following notes.

| Principal | Annual Interest Rate | Time | Total Interest |
| :---: | :---: | :---: | :---: |
| (a) ? | 9\% | 120 days | \$ 600 |
| (b) $\$ 30,000$ | 10\% | 3 years | ? |
| (c) $\$ 60,000$ | ? | 5 months | \$2,000 |
| (d) $\$ 45,000$ | 8\% | ? | \$1,200 |

16. In determining interest revenue, some financial institutions use 365 days per year and others use 360 days. Why might a financial institution use 360 days?
17. Cain Company dishonors a note at maturity. What are the options available to the lender?
18. General Motors Corporation has accounts receivable and notes receivable. How should the receivables be reported on the balance sheet?
19. The accounts receivable turnover ratio is 8.14 , and average net receivables during the period are $\$ 400,000$. What is the amount of net credit sales for the period?
20. PEPSICO What percentage does PepsiCo's allowance for doubtful accounts represent as a percent of its gross receivables in 2008 ?

BRIEF EXERCISES
PLUUS

BE8-1 Presented below are three receivables transactions. Indicate whether these receivables are reported as accounts receivable, notes receivable, or other receivables on a balance sheet.
(a) Sold merchandise on account for $\$ 64,000$ to a customer.
(b) Received a promissory note of $\$ 57,000$ for services performed.
(c) Advanced $\$ 10,000$ to an employee.

BE8-2 Record the following transactions on the books of Keyser Co.
(a) On July 1, Keyser Co. sold merchandise on account to Maxfield Inc. for $\$ 15,200$, terms 2/10, $\mathrm{n} / 30$.
(b) On July 8, Maxfield Inc. returned merchandise worth $\$ 3,800$ to Keyser Co.
(c) On July 11, Maxfield Inc. paid for the merchandise.

BE8-3 During its first year of operations, Henley Company had credit sales of $\$ 3,000,000$; $\$ 600,000$ remained uncollected at year-end. The credit manager estimates that $\$ 35,000$ of these receivables will become uncollectible.
(a) Prepare the journal entry to record the estimated uncollectibles.
(b) Prepare the current assets section of the balance sheet for Henley Company. Assume that in addition to the receivables it has cash of $\$ 90,000$, merchandise inventory of $\$ 130,000$, and prepaid expenses of $\$ 7,500$.

BE8-4 At the end of 2011, Delong Co. has accounts receivable of $\$ 700,000$ and an allowance for doubtful accounts of $\$ 54,000$. On January 24, 2012, the company learns that its receivable from Ristau Inc. is not collectible, and management authorizes a write-off of $\$ 5,400$.
(a) Prepare the journal entry to record the write-off.
(b) What is the cash realizable value of the accounts receivable (1) before the write-off and (2) after the write-off?

Identify different types of receivables.
(SO 1)

Record basic accounts receivable transactions.
(SO 2)

Prepare entry for allowance method and partial balance sheet.
(SO 3, 9)

Prepare entry for write-off; determine cash realizable value. (SO 3)

Prepare entries for collection of bad debts write-off.
(SO 3)
Prepare entry using percentage-of-sales method.
(SO 3)
Prepare entry using percentage-of-receivables method.
(SO 3)

Prepare entries to dispose of accounts receivable.
(SO 4)

Compute interest and determine maturity dates on notes.
(SO 5)

Determine maturity dates and compute interest and rates on notes.
(SO 5)

Prepare entry for notes receivable exchanged for account receivable.
(SO 6)
Compute ratios to analyze receivables.
(SO 9)

BE8-5 Assume the same information as BE8-4. On March 4, 2012, Delong Co. receives payment of $\$ 5,400$ in full from Ristau Inc. Prepare the journal entries to record this transaction.
BE8-6 Nieto Co. elects to use the percentage-of-sales basis in 2011 to record bad debts expense. It estimates that $2 \%$ of net credit sales will become uncollectible. Sales are $\$ 800,000$ for 2011, sales returns and allowances are $\$ 45,000$, and the allowance for doubtful accounts has a credit balance of $\$ 9,000$. Prepare the adjusting entry to record bad debts expense in 2011.
BE8-7 Linhart Co. uses the percentage-of-receivables basis to record bad debts expense. It estimates that $1 \%$ of accounts receivable will become uncollectible. Accounts receivable are $\$ 450,000$ at the end of the year, and the allowance for doubtful accounts has a credit balance of \$1,500.
(a) Prepare the adjusting journal entry to record bad debts expense for the year.
(b) If the allowance for doubtful accounts had a debit balance of $\$ 800$ instead of a credit balance of $\$ 1,500$, determine the amount to be reported for bad debts expense.

BE8-8 Presented below are two independent transactions.
(a) St. Pierre Restaurant accepted a Visa card in payment of a $\$ 150$ lunch bill. The bank charges a 4\% fee. What entry should St. Pierre make?
(b) Jamar Company sold its accounts receivable of $\$ 60,000$. What entry should Jamar make, given a service charge of $3 \%$ on the amount of receivables sold?

BE8-9 Compute interest and find the maturity date for the following notes.

|  | Date of Note | Principal | Interest Rate (\%) | Terms |
| :---: | :---: | :---: | :---: | :---: |
| (a) | June 10 | \$80,000 | 6\% | 60 days |
| (b) | July 14 | \$50,000 | 7\% | 90 days |
| (c) | April 27 | \$12,000 | 8\% | 75 days |

BE8-10 Presented below are data on three promissory notes. Determine the missing amounts.

| Date of Note | Terms | Maturity Date | Principal | Annual Interest Rate | Total Interest |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (a) April 1 | 60 days | ? | \$600,000 | 9\% | ? |
| (b) July 2 | 30 days | ? | 90,000 | ? | \$600 |
| (c) March 7 | 6 months | ? | 120,000 | 10\% | ? |

BE8-11 On January 10, 2011, Edmunds Co. sold merchandise on account to Jeff Gallup for $\$ 13,600, n / 30$. On February 9, Jeff Gallup gave Edmunds Co. a $10 \%$ promissory note in settlement of this account. Prepare the journal entry to record the sale and the settlement of the account receivable.
BE8-12 The financial statements of Minnesota Mining and Manufacturing Company (3M) report net sales of $\$ 20.0$ billion. Accounts receivable (net) are $\$ 2.7$ billion at the beginning of the year and $\$ 2.8$ billion at the end of the year. Compute 3 M 's receivables turnover ratio. Compute 3M's average collection period for accounts receivable in days.

## Do ith Review

Do it: 8-1 Etienne Company has been in business several years. At the end of the current year, the ledger shows:

| Accounts Receivable | $\$ 310,000 \mathrm{Dr}$. |
| :--- | ---: |
| Sales | $2,200,000 \mathrm{Cr}$. |
| Allowance for Doubtful Accounts | $6,100 \mathrm{Cr}$. |

Bad debts are estimated to be $7 \%$ of receivables. Prepare the entry to adjust the Allowance for Doubtful Accounts.

Prepare entry for factored accounts.
(SO 4)

Do it: 8-2 Ronald Distributors is a growing company whose ability to raise capital has not been growing as quickly as its expanding assets and sales. Ronald's local banker has indicated that the company cannot increase its borrowing for the foreseeable future. Ronald's suppliers are demanding payment for goods acquired within 30 days of the invoice date, but Ronald's customers are slow in paying for their purchases (60-90 days). As a result, Ronald has a cash flow problem.

Ronald needs $\$ 960,000$ to cover next Friday's payroll. Its balance of outstanding accounts receivable totals $\$ 1,000,000$. What might Ronald do to alleviate this cash crunch? Record the entry that Ronald would make when it raises the needed cash. (Assume a $2 \%$ service charge.)

Do itt 8-3 Galen Wholesalers accepts from Picard Stores a \$6,200, 4-month, $12 \%$ note dated May 31 in settlement of Picard's overdue account. (a) What is the maturity date of the note? (b) What is the entry made by Galen at the maturity date, assuming Picard pays the note and interest in full at that time?

Do it: 8-4 In 2011, Drew Gooden Company has net credit sales of $\$ 1,600,000$ for the year. It had a beginning accounts receivable (net) balance of $\$ 101,000$ and an ending accounts receivable (net) balance of $\$ 107,000$. Compute Drew Gooden Company's (a) accounts receivable turnover and (b) average collection period in days.

Prepare entries for notes receivable.
(SO 5, 8)

Compute ratios for receivables. (SO 9)

## EXERCISES

E8-1 Presented below are selected transactions of Pale Force Company. Pale Force sells in large quantities to other companies and also sells its product in a small retail outlet.
March 1 Sold merchandise on account to CC Company for $\$ 3,000$, terms 2/10, $n / 30$.
3 CC Company returned merchandise worth $\$ 500$ to Pale Force.
9 Pale Force collected the amount due from CC Company from the March 1 sale.
15 Pale Force sold merchandise for $\$ 400$ in its retail outlet. The customer used his Pale Force credit card.
31 Pale Force added $1.5 \%$ monthly interest to the customer's credit card balance.

## Instructions

Prepare journal entries for the transactions above.

## E8-2 Presented below are two independent situations.

(a) On January 6, Arneson Co. sells merchandise on account to Cortez Inc. for $\$ 9,000$, terms $2 / 10$, $\mathrm{n} / 30$. On January 16, Cortez Inc. pays the amount due. Prepare the entries on Arneson's books to record the sale and related collection.
(b) On January 10, Mary Dawes uses her Pierson Co. credit card to purchase merchandise from Pierson Co. for $\$ 9,000$. On February 10, Dawes is billed for the amount due of $\$ 9,000$. On February 12, Dawes pays $\$ 5,000$ on the balance due. On March 10, Dawes is billed for the amount due, including interest at $2 \%$ per month on the unpaid balance as of February 12. Prepare the entries on Pierson Co.'s books related to the transactions that occurred on January 10, February 12, and March 10.
E8-3 The ledger of Hixson Company at the end of the current year shows Accounts Receivable $\$ 120,000$, Sales $\$ 840,000$, and Sales Returns and Allowances $\$ 30,000$.

## Instructions

(a) If Hixson uses the direct write-off method to account for uncollectible accounts, journalize the adjusting entry at December 31, assuming Hixson determines that Fell's $\$ 1,400$ balance is uncollectible.
(b) If Allowance for Doubtful Accounts has a credit balance of $\$ 2,100$ in the trial balance, journalize the adjusting entry at December 31, assuming bad debts are expected to be (1) $1 \%$ of net sales, and (2) $10 \%$ of accounts receivable.
(c) If Allowance for Doubtful Accounts has a debit balance of $\$ 200$ in the trial balance, journalize the adjusting entry at December 31, assuming bad debts are expected to be (1) $0.75 \%$ of net sales and (2) $6 \%$ of accounts receivable.

E8-4 Ingles Company has accounts receivable of \$93,100 at March 31. An analysis of the accounts shows the information on the next page.

Journalize entries related to accounts receivable.
(SO 2)

Journalize entries for recognizing accounts receivable.
(SO 2)

Journalize entries to record allowance for doubtful accounts using two different bases. (SO 3)

Determine bad debts expense; prepare the adjusting entry for bad debts expense.
(SO 3)

Journalize write-off and recovery.
(SO 3)

Journalize percentage-of-sales basis, write-off, recovery. (SO 3)

Journalize entries for the sale of accounts receivable. (SO 4)

Journalize entries for credit card sales.
(SO 4)

Journalize credit card sales, and indicate the statement presentation of financing charges and service charge expense. (SO 4)

| Month of Sale |  | Balance, March 31 |
| :--- | ---: | ---: |
| March |  | $\$ 60,000$ |
| February | 8,600 |  |
| January | 8,500 |  |
| Prior to January | $\underline{7,000}$ |  |
|  | $\underline{\$ 93,100}$ |  |

Credit terms are $2 / 10, \mathrm{n} / 30$. At March 31, Allowance for Doubtful Accounts has a credit balance of $\$ 1,200$ prior to adjustment. The company uses the percentage-of-receivables basis for estimating uncollectible accounts. The company's estimate of bad debts is as follows.


## Instructions

(a) Determine the total estimated uncollectibles.
(b) Prepare the adjusting entry at March 31 to record bad debts expense.

E8-5 At December 31, 2010, Braddock Company had a balance of $\$ 15,000$ in the Allowance for Doubtful Accounts. During 2011, Braddock wrote off accounts totaling $\$ 13,000$. One of those accounts ( $\$ 1,800$ ) was later collected. At December 31, 2011, an aging schedule indicated that the balance in the Allowance for Doubtful Accounts should be $\$ 19,000$.

## Instructions

Prepare journal entries to record the 2011 transactions of Braddock Company.
E8-6 On December 31, 2011, Jarnigan Co. estimated that $2 \%$ of its net sales of $\$ 400,000$ will become uncollectible. The company recorded this amount as an addition to Allowance for Doubtful Accounts. On May 11, 2012, Jarnigan Co. determined that Terry Frye's account was uncollectible and wrote off $\$ 1,100$. On June 12,2012 , Frye paid the amount previously written off.

## Instructions

Prepare the journal entries on December 31, 2011, May 11, 2012 and June 12, 2012.
E8-7 Presented below are two independent situations.
(a) On March 3, Cornwell Appliances sells $\$ 680,000$ of its receivables to Marsh Factors Inc. Marsh Factors assesses a finance charge of $3 \%$ of the amount of receivables sold. Prepare the entry on Cornwell Appliances' books to record the sale of the receivables.
(b) On May 10, Dale Company sold merchandise for $\$ 3,500$ and accepted the customer's America Bank MasterCard. America Bank charges a 4\% service charge for credit card sales. Prepare the entry on Dale Company's books to record the sale of merchandise.
E8-8 Presented below are two independent situations.
(a) On April 2, Nancy Hansel uses her J. C. Penney Company credit card to purchase merchandise from a J. C. Penney store for $\$ 1,500$. On May 1, Hansel is billed for the $\$ 1,500$ amount due. Hansel pays $\$ 700$ on the balance due on May 3. On June 1, Hansel receives a bill for the amount due, including interest at $1.0 \%$ per month on the unpaid balance as of May 3. Prepare the entries on J. C. Penney Co.'s books related to the transactions that occurred on April 2, May 3, and June 1.
(b) On July 4, Kimble's Restaurant accepts a Visa card for a $\$ 200$ dinner bill. Visa charges a $3 \%$ service fee. Prepare the entry on Kimble's books related to this transaction.
E8-9 Topeka Stores accepts both its own and national credit cards. During the year the following selected summary transactions occurred.
Jan. 15 Made Topeka credit card sales totaling $\$ 18,000$. (There were no balances prior to January 15.)
20 Made Visa credit card sales (service charge fee 2\%) totaling \$4,300.
Feb. 10 Collected $\$ 10,000$ on Topeka credit card sales.
15 Added finance charges of $1 \%$ to Topeka credit card balance.

## Instructions

(a) Journalize the transactions for Topeka Stores.
(b) Indicate the statement presentation of the financing charges and the credit card service charge expense for Topeka Stores.
E8-10 Orosco Supply Co. has the following transactions related to notes receivable during the last 2 months of 2011.

Nov. 1 Loaned $\$ 15,000$ cash to Sally Givens on a 1-year, $10 \%$ note.
Dec. 11 Sold goods to John Countryman, Inc., receiving a \$6,750, 90-day, 8\% note.
16 Received a $\$ 4,000$, 6-month, $9 \%$ note in exchange for Bob Reber's outstanding accounts receivable.
31 Accrued interest revenue on all notes receivable.

## Instructions

(a) Journalize the transactions for Orosco Supply Co.
(b) Record the collection of the Givens note at its maturity in 2012.

E8-11 Record the following transactions for Sandwich Co. in the general journal.
2011
May 1 Received a \$7,500, 1-year, $10 \%$ note in exchange for Julia Gonzalez's outstanding accounts receivable.
Dec. 31 Accrued interest on the Gonzalez note.
Dec. 31 Closed the interest revenue account.
$\underline{2012}$
May 1 Received principal plus interest on the Gonzalez note. (No interest has been accrued in 2012.)

E8-12 Singletary Company had the following select transactions.
Apr. 1, 2011 Accepted Wilson Company's 1-year, 12\% note in settlement of a \$20,000 account receivable.
July 1, 2011 Loaned \$25,000 cash to Richard Dent on a 9-month, 10\% note.
Dec. 31, 2011 Accrued interest on all notes receivable.
Apr. 1, 2012 Received principal plus interest on the Wilson note.
Apr. 1, 2012 Richard Dent dishonored its note; Singletary expects it will eventually collect.

## Instructions

Prepare journal entries to record the transactions. Singletary prepares adjusting entries once a year on December 31.

E8-13 On May 2, Kleinsorge Company lends \$7,600 to Everhart, Inc., issuing a 6-month, 9\% note. At the maturity date, November 2, Everhart indicates that it cannot pay.

## Instructions

(a) Prepare the entry to record the issuance of the note.
(b) Prepare the entry to record the dishonor of the note, assuming that Kleinsorge Company expects collection will occur.
(c) Prepare the entry to record the dishonor of the note, assuming that Kleinsorge Company does not expect collection in the future.
E8-14 Bledel Company had accounts receivable of $\$ 100,000$ on January 1, 2011. The only transactions that affected accounts receivable during 2011 were net credit sales of $\$ 1,000,000$, cash collections of $\$ 900,000$, and accounts written off of $\$ 30,000$.

Journalize entries for notes receivable transactions.
(SO 5, 6)

Journalize entries for notes receivable.
(SO 5, 6)

Prepare entries for note receivable transactions.
(SO 5, 6, 8)

Journalize entries for dishonor of notes receivable.

## Instructions

(a) Compute the ending balance of accounts receivable.
(b) Compute the accounts receivable turnover ratio for 2011.
(c) Compute the average collection period in days.

## EXERCISES: SET B AND CHALLENGE EXERCISES

Visit the book's companion website at www.wiley.com/college/weygandt, and choose the Student Companion site, to access Exercise Set B and a set of Challenge Exercises.

## PROBLEMS: SET A

Prepare journal entries related to bad debts expense.
(SO 2, 3, 9)
(b) Accounts receivable \$1,210,000
ADA \$14,000
(c) Bad debts expense \$101,000

Compute bad debts amounts. (SO 3)

GLS

P8-1A At December 31,2010, Leis Co. reported the following information on its balance sheet.

| Accounts receivable | $\$ 960,000$ |
| :--- | ---: |
| Less: Allowance for doubtful accounts | 80,000 |

During 2011, the company had the following transactions related to receivables.

1. Sales on account
\$3,200,000
2. Sales returns and allowances

50,000
3. Collections of accounts receivable

2,810,000
4. Write-offs of accounts receivable deemed uncollectible

90,000
5. Recovery of bad debts previously written off as uncollectible 24,000

## Instructions

(a) Prepare the journal entries to record each of these five transactions. Assume that no cash discounts were taken on the collections of accounts receivable.
(b) Enter the January 1, 2011, balances in Accounts Receivable and Allowance for Doubtful Accounts, post the entries to the two accounts (use T accounts), and determine the balances.
(c) Prepare the journal entry to record bad debts expense for 2011, assuming that an aging of accounts receivable indicates that expected bad debts are $\$ 115,000$.
(d) Compute the accounts receivable turnover ratio for 2011.

P8-2A Information related to Hermesch Company for 2011 is summarized below.

| Total credit sales | $\$ 2,200,000$ |
| :--- | ---: |
| Accounts receivable at December 31 | 825,000 |
| Bad debts written off | 33,000 |

## Instructions

(a) What amount of bad debts expense will Hermesch Company report if it uses the direct writeoff method of accounting for bad debts?
(b) Assume that Hermesch Company estimates its bad debts expense to be $2 \%$ of credit sales. What amount of bad debts expense will Hermesch record if it has an Allowance for Doubtful Accounts credit balance of $\$ 4,000$ ?
(c) Assume that Hermesch Company estimates its bad debts expense based on $6 \%$ of accounts receivable. What amount of bad debts expense will Hermesch record if it has an Allowance for Doubtful Accounts credit balance of $\$ 3,000$ ?
(d) Assume the same facts as in (c), except that there is a $\$ 3,000$ debit balance in Allowance for Doubtful Accounts. What amount of bad debts expense will Hermesch record?
(e) What is the weakness of the direct write-off method of reporting bad debts expense?

P8-3A Presented below is an aging schedule for Zillmann Company.


At December 31, 2011, the unadjusted balance in Allowance for Doubtful Accounts is a credit of \$12,000.

## Instructions

(a) Journalize and post the adjusting entry for bad debts at December 31, 2011.
(b) Journalize and post to the allowance account the following events and transactions in the year 2012 .
(1) On March 31, a $\$ 1,000$ customer balance originating in 2011 is judged uncollectible.
(2) On May 31, a check for $\$ 1,000$ is received from the customer whose account was written off as uncollectible on March 31.
(c) Journalize the adjusting entry for bad debts on December 31, 2012, assuming that the unadjusted balance in Allowance for Doubtful Accounts is a debit of $\$ 800$ and the aging schedule indicates that total estimated bad debts will be $\$ 28,600$.

P8-4A Wall Inc. uses the allowance method to estimate uncollectible accounts receivable. The company produced the following aging of the accounts receivable at year-end.


## Instructions

(a) Calculate the total estimated bad debts based on the above information.
(b) Prepare the year-end adjusting journal entry to record the bad debts using the aged uncollectible accounts receivable determined in (a). Assume the current balance in Allowance for Doubtful Accounts is a $\$ 8,000$ debit.
(c) Of the above accounts, $\$ 5,000$ is determined to be specifically uncollectible. Prepare the journal entry to write off the uncollectible account.
(d) The company collects $\$ 5,000$ subsequently on a specific account that had previously been determined to be uncollectible in (c). Prepare the journal entry(ies) necessary to restore the account and record the cash collection.
(e) Comment on how your answers to (a)-(d) would change if Wall Inc. used 3\% of total accounts receivable, rather than aging the accounts receivable. What are the advantages to the company of aging the accounts receivable rather than applying a percentage to total accounts receivable?

P8-5A At December 31, 2011, the trial balance of Worcester Company contained the following amounts before adjustment.

|  | Debits <br> Accounts Receivable | Credits <br> Allowance for Doubtful Accounts | $\$ 385,000$ |
| :--- | :---: | :---: | :---: |
|  |  | $\$ 2,000$ |  |
| Sales |  |  | 950,000 |

## Instructions

(a) Based on the information given, which method of accounting for bad debts is Worcester Company using-the direct write-off method or the allowance method? How can you tell?
(b) Prepare the adjusting entry at December 31, 2011, for bad debts expense under each of the following independent assumptions.
(1) An aging schedule indicates that $\$ 11,750$ of accounts receivable will be uncollectible.
(2) The company estimates that $1 \%$ of sales will be uncollectible.
(c) Repeat part (b) assuming that instead of a credit balance there is an $\$ 2,000$ debit balance in Allowance for Doubtful Accounts.
(d) During the next month, January 2012, a $\$ 3,000$ account receivable is written off as uncollectible. Prepare the journal entry to record the write-off.
(e) Repeat part (d) assuming that Worcester uses the direct write-off method instead of the allowance method in accounting for uncollectible accounts receivable.
(f)

What type of account is Allowance for Doubtful Accounts? How does it affect how accounts receivable is reported on the balance sheet at the end of the accounting period?
(a) Bad debts expense \$30,610
(c) Bad debts expense \$29,400

Journalize transactions related to bad debts.
(SO 2, 3)
(a) Tot. est. bad debts \$10,500

Journalize entries to record transactions related to bad debts.
(SO 3)
(b) (2) $\$ 9,500$

Prepare entries for various notes receivable transactions. (SO 2, 4, 5, 8, 9)
(b) Accounts receivable \$16,510
(c) Total receivables $\$ 32,630$

Prepare entries for various receivable transactions. (SO 2, 4, 5, 6, 7, 8)

P8-6A Mendosa Company closes its books monthly. On September 30, selected ledger account balances are:

| Notes Receivable | $\$ 33,000$ |
| :--- | ---: |
| Interest Receivable | 170 |

Notes Receivable include the following.

| Date | Maker | Face | Term | Interest |
| :---: | :---: | :---: | :---: | :---: |
| Aug. 16 | Chang Inc. | \$8,000 | 60 days | 8\% |
| Aug. 25 | Hughey Co. | 9,000 | 60 days | 10\% |
| Sept. 30 | Skinner Corp. | 16,000 | 6 months | 9\% |

Interest is computed using a 360-day year. During October, the following transactions were completed.
Oct. 7 Made sales of $\$ 6,900$ on Mendosa credit cards.
12 Made sales of $\$ 900$ on MasterCard credit cards. The credit card service charge is $3 \%$.
15 Added $\$ 460$ to Mendosa customer balance for finance charges on unpaid balances.
15 Received payment in full from Chang Inc. on the amount due.
24 Received notice that the Hughey note has been dishonored. (Assume that Hughey is expected to pay in the future.)

## Instructions

(a) Journalize the October transactions and the October 31 adjusting entry for accrued interest receivable.
(b) Enter the balances at October 1 in the receivable accounts. Post the entries to all of the receivable accounts.
(c) Show the balance sheet presentation of the receivable accounts at October 31.

P8-7A On January 1, 2011, Kloppenberg Company had Accounts Receivable \$139,000, Notes Receivable $\$ 25,000$, and Allowance for Doubtful Accounts $\$ 13,200$. The note receivable is from Sara Rogers Company. It is a 4-month, $12 \%$ note dated December 31, 2010. Kloppenberg Company prepares financial statements annually. During the year the following selected transactions occurred.
Jan. 5 Sold \$20,000 of merchandise to Dedonder Company, terms n/15.
20 Accepted Dedonder Company's $\$ 20,000,3$-month, $9 \%$ note for balance due.
Feb. 18 Sold $\$ 8,000$ of merchandise to Ludwig Company and accepted Ludwig's $\$ 8,000$, 6-month, $9 \%$ note for the amount due.
Apr. 20 Collected Dedonder Company note in full.
30 Received payment in full from Sara Rogers Company on the amount due.
May 25 Accepted Jenks Inc.'s \$4,000, 3-month, $7 \%$ note in settlement of a past-due balance on account.
Aug. 18 Received payment in full from Ludwig Company on note due.
25 The Jenks Inc. note was dishonored. Jenks Inc. is not bankrupt; future payment is anticipated.
Sept. 1 Sold $\$ 12,000$ of merchandise to Lena Torme Company and accepted a $\$ 12,000,6-$ month, $10 \%$ note for the amount due.

## Instructions

Journalize the transactions.

## PROBLEMS: SET B

Prepare journal entries related to bad debts expense.
(SO 2, 3, 9)

P8-1B At December 31, 2010, Dill Imports reported the following information on its balance sheet.

| Accounts receivable | $\$ 250,000$ |
| :--- | ---: |
| Less: Allowance for doubtful accounts | 15,000 |

During 2011, the company had the following transactions related to receivables.

1. Sales on account
\$2,400,000
2. Sales returns and allowances

45,000
3. Collections of accounts receivable

2,250,000
4. Write-offs of accounts receivable deemed uncollectible

12,000
5. Recovery of bad debts previously written off as uncollectible 3,000

## Instructions

(a) Prepare the journal entries to record each of these five transactions. Assume that no cash discounts were taken on the collections of accounts receivable.
(b) Enter the January 1, 2011, balances in Accounts Receivable and Allowance for Doubtful Accounts. Post the entries to the two accounts (use T accounts), and determine the balances.
(c) Prepare the journal entry to record bad debts expense for 2011, assuming that an aging of accounts receivable indicates that estimated bad debts are $\$ 22,000$.
(d) Compute the accounts receivable turnover ratio for the year 2011.

P8-2B Information related to Bee Company for 2011 is summarized below.

| Total credit sales | $\$ 1,100,000$ |
| :--- | ---: |
| Accounts receivable at December 31 | 369,000 |
| Bad debts written off | 22,150 |

## Instructions

(a) What amount of bad debts expense will Bee Company report if it uses the direct write-off method of accounting for bad debts?
(b) Assume that Bee Company decides to estimate its bad debts expense to be $2 \%$ of credit sales. What amount of bad debts expense will Bee record if Allowance for Doubtful Accounts has a credit balance of $\$ 3,000$ ?
(c) Assume that Bee Company decides to estimate its bad debts expense based on $6 \%$ of accounts receivable. What amount of bad debts expense will Bee Company record if Allowance for Doubtful Accounts has a credit balance of $\$ 4,000$ ?
(d) Assume the same facts as in (c), except that there is a $\$ 2,000$ debit balance in Allowance for Doubtful Accounts. What amount of bad debts expense will Bee record?
(e) What is the weakness of the direct write-off method of reporting bad debts expense?

P8-3B Presented below is an aging schedule for Jafar Company.


At December 31, 2011, the unadjusted balance in Allowance for Doubtful Accounts is a credit of $\$ 16,000$.

## Instructions

(a) Journalize and post the adjusting entry for bad debts at December 31, 2011.
(b) Journalize and post to the allowance account the following events and transactions in the year 2012.
(1) March 1, a $\$ 1,900$ customer balance originating in 2011 is judged uncollectible.
(2) May 1, a check for $\$ 1,900$ is received from the customer whose account was written off as uncollectible on March 1.
(c) Journalize the adjusting entry for bad debts on December 31, 2012. Assume that the unadjusted balance in Allowance for Doubtful Accounts is a debit of $\$ 2,000$, and the aging schedule indicates that total estimated bad debts will be $\$ 42,300$.
(b) Accounts receivable \$343,000 ADA \$6,000
(c) Bad debts expense \$16,000

Compute bad debts amounts.
(SO 3)


Journalize entries to record transactions related to bad debts.
(SO 2, 3)

(a) Bad debts expense \$38,570
(c) Bad debts expense \$44,300

Journalize transactions related to bad debts．
（SO 2，3）

P8－4B The following represents selected information taken from a company＇s aging schedule to estimate uncollectible accounts receivable at year end．

| 区 Worksheet．xls |  |  |  |  |  |  |  |  | －回区 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | File | Edit | View | sert Format |  | $\frac{\text { Data }}{}$ | $\begin{gathered} \text { Window } \\ \hline E \end{gathered}$ | Help |  |  |
|  | A |  |  | B | C |  |  | F | G | 会 |
| 1 |  |  |  | Total | Number of Days Outstanding |  |  |  |  |  |
| 3 |  |  |  | 0－30 | 31－60 | 61－90 | 91－120 | Over 120 |  |  |
| 4 | Accounts receivable |  |  |  | \＄375，000 | \＄220，000 | \＄90，000 | \＄40，000 | \＄10，000 | \＄15，000 |  |
| 5 | \％uncollectible |  |  | 1\％ |  | 4\％ | 5\％ | 8\％ | 10\％ |  |
| 6 | Estimated bad debts |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  | － |
| 4 | IIII |  |  |  |  |  |  |  |  | $\square$ |

## Instructions

（a）Calculate the total estimated bad debts based on the above information．
（b）Prepare the year－end adjusting journal entry to record the bad debts using the allowance method and the aged uncollectible accounts receivable determined in（a）．Assume the cur－ rent balance in the Allowance for Doubtful Accounts account is a $\$ 3,000$ credit．
（c）Of the above accounts，$\$ 1,600$ is determined to be specifically uncollectible．Prepare the jour－ nal entry to write off the uncollectible accounts．
（d）The company subsequently collects $\$ 700$ on a specific account that had previously been determined to be uncollectible in（c）．Prepare the journal entry（ies）necessary to restore the account and record the cash collection．
（e）Explain how establishing an allowance account satisfies the expense recognition principle．
P8－5B At December 31，2011，the trial balance of Liquid Snake Company contained the fol－ lowing amounts before adjustment．

|  | Debits |  | Credits |
| :--- | :---: | :---: | ---: |
| Accounts Receivable | $\$ 250,000$ |  |  |
| Allowance for Doubtful Accounts |  |  | 1,100 |
| Sales |  |  | 600,000 |

## Instructions

（a）Prepare the adjusting entry at December 31，2011，to record bad debts expense under each of the following independent assumptions．
（1）An aging schedule indicates that $\$ 12,500$ of accounts receivable will be uncollectible．
（2）The company estimates that $2 \%$ of sales will be uncollectible．
（b）Repeat part（a）assuming that instead of a credit balance，there is a $\$ 1,100$ debit balance in Allowance for Doubtful Accounts．
（c）During the next month，January 2012，a $\$ 3,200$ account receivable is written off as uncol－ lectible．Prepare the journal entry to record the write－off．
（d）Repeat part（c）assuming that Liquid Snake Company uses the direct write－off method instead of the allowance method in accounting for uncollectible accounts receivable．
（e）What are the advantages of using the allowance method in accounting for uncol－ lectible accounts as compared to the direct write－off method？

P8－6B Marty Co．closes its books monthly．On June 30，selected ledger account balances are：

| Notes Receivable | $\$ 57,000$ |
| :--- | ---: |
| Interest Receivable | 420 |

Notes Receivable include the following．

| Date | Maker | Face | Term | Interest |
| :---: | :---: | :---: | :---: | :---: |
| May 16 | Rice Inc． | \＄12，000 | 60 days | 10\％ |
| May 25 | Smelter Co． | 30，000 | 60 days | 9\％ |
| June 30 | Kupp Corp． | 15，000 | 6 months | 12\％ |

During July, the following transactions were completed.
July 5 Made sales of \$7,200 on Marty Co. credit cards.
14 Made sales of $\$ 1,000$ on Visa credit cards. The credit card service charge is $3 \%$.
14 Added \$510 to Marty Co. credit card customer balances for finance charges on unpaid balances.
15 Received payment in full from Rice Inc. on the amount due.
25 Received notice that the Smelter Co. note has been dishonored. (Assume that Smelter Co. is expected to pay in the future.)

## Instructions

(a) Journalize the July transactions and the July 31 adjusting entry for accrued interest receivable. (Interest is computed using 360 days.)
(b) Enter the balances at July 1 in the receivable accounts. Post the entries to all of the receivable accounts.
(c) Show the balance sheet presentation of the receivable accounts at July 31.

P8-7B On January 1, 2011, Furball Company had Accounts Receivable \$98,000 and Allowance for Doubtful Accounts $\$ 8,100$. Furball Company prepares financial statements annually. During the year the following selected transactions occurred.
Jan. 5 Sold $\$ 10,800$ of merchandise to Kandle Company, terms n/30.
Feb. 2 Accepted a $\$ 10,800$, 4 -month, $10 \%$ promissory note from Kandle Company for the balance due.
12 Sold $\$ 13,500$ of merchandise to Lowe Company and accepted Lowe's $\$ 13,500$, 2-month, $10 \%$ note for the balance due.
26 Sold $\$ 7,000$ of merchandise to Barrel Co., terms n/10.
Apr. 5 Accepted a $\$ 7,000,3-$ month, $8 \%$ note from Barrel Co. for the balance due.
12 Collected Lowe Company note in full.
June 2 Collected Kandle Company note in full.
July 5 Barrel Co. dishonors its note of April 5. It is expected that Barrel will eventually pay the amount owed.
15 Sold \$12,000 of merchandise to Bushel Co. and accepted Bushel's \$12,000, 3-month, $12 \%$ note for the amount due.
Oct. 15 Bushel Co.'s note was dishonored. Bushel Co. is bankrupt, and there is no hope of future settlement.
(b) Accounts receivable \$38,160
(c) Total receivables $\$ 53,310$

Prepare entries for various receivable transactions.
(SO 2, 4, 5, 6, 7, 8)

## Instructions

Journalize the transactions.

## PROBLEMS: SET C

Visit the book's companion website at www.wiley.com/college/weygandt, and choose the Student Companion site, to access Problem Set C.

## CONTINUING COOKIE CHRONICLE

(Note: This is a continuation of the Cookie Chronicle from Chapters 1 through 7.)
CCC8 One of Natalie's friends, Curtis Lesperance, runs a coffee shop where he sells specialty coffees and prepares and sells muffins and cookies. He is eager to buy one of Natalie's fine European mixers, which would enable him to make larger batches of muffins and cookies. However, Curtis cannot afford to pay for the mixer for at least 30 days. He asks Natalie if she would be willing to sell him the mixer on credit. Natalie comes to you for advice.

Go to the book's companion website, www.wiley.com/college/weygandt, to see the completion of this problem.

## BROADENING YOUR PERSPECTIVE

## FINANCIAL REPORTING AND ANALYSIS

## Financial Reporting Problem: SEK Company

BYP8-1 SEK Company sells office equipment and supplies to many organizations in the city and surrounding area on contract terms of $2 / 10, n / 30$. In the past, over $75 \%$ of the credit customers have taken advantage of the discount by paying within 10 days of the invoice date.

The number of customers taking the full 30 days to pay has increased within the last year. Current indications are that less than $60 \%$ of the customers are now taking the discount. Bad debts as a percentage of gross credit sales have risen from the $2.5 \%$ provided in past years to about $4.5 \%$ in the current year.

The company's Finance Committee has requested more information on the collections of accounts receivable. The controller responded to this request with the report reproduced below.

SEK COMPANY<br>Accounts Receivable Collections<br>May 31, 2011

The fact that some credit accounts will prove uncollectible is normal. Annual bad debts writeoffs have been $2.5 \%$ of gross credit sales over the past 5 years. During the last fiscal year, this percentage increased to slightly less than $4.5 \%$. The current Accounts Receivable balance is $\$ 1,400,000$. The condition of this balance in terms of age and probability of collection is as follows.

| $\underline{\text { Proportion of Total }}$ | Age Categories | Probability of Collection |
| :---: | :---: | :---: |
| 62\% | not yet due | 98\% |
| 20\% | less than 30 days past due | 96\% |
| 9\% | 30 to 60 days past due | 94\% |
| 5\% | 61 to 120 days past due | 91\% |
| $21 / 2 \%$ | 121 to 180 days past due | 75\% |
| $1 \frac{1}{2} \%$ | over 180 days past due | 30\% |

The Allowance for Doubtful Accounts had a credit balance of $\$ 29,500$ on June 1, 2010. SEK has provided for a monthly bad debts expense accrual during the current fiscal year based on the assumption that $4.5 \%$ of gross credit sales will be uncollectible. Total gross credit sales for the 2010-11 fiscal year amounted to $\$ 2,900,000$. Write-offs of bad accounts during the year totaled $\$ 102,000$.

## Instructions

(a) Prepare an accounts receivable aging schedule for SEK Company using the age categories identified in the controller's report to the Finance Committee showing the following.
(1) The amount of accounts receivable outstanding for each age category and in total.
(2) The estimated amount that is uncollectible for each category and in total.
(b) Compute the amount of the year-end adjustment necessary to bring Allowance for Doubtful Accounts to the balance indicated by the age analysis. Then prepare the necessary journal entry to adjust the accounting records.
(c) In a recessionary environment with tight credit and high interest rates:
(1) Identify steps SEK Company might consider to improve the accounts receivable situation.
(2) Then evaluate each step identified in terms of the risks and costs involved.

## Comparative Analysis Problem: PepsiCo, Inc. vs. The Coca-Cola Company

BYP8-2 PepsiCo, Inc.'s financial statements are presented in Appendix A. Financial statements of The Coca-Cola Company are presented in Appendix B.

## Instructions

(a) Based on the information in these financial statements, compute the following 2008 ratios for each company. (Assume all sales are credit sales and that PepsiCo's receivables on its balance sheet are all trade receivables.)
(1) Accounts receivable turnover ratio.
(2) Average collection period for receivables.
(b) What conclusions about managing accounts receivable can you draw from these data?

## Exploring the Web

BYP8-3 Purpose: To learn more about factoring services.
Address: www.invoicebankers.com, or go to www.wiley.com/college/weygandt
Steps: Go to the website and answer the following questions.
(a) What are some of the benefits of factoring?
(b) What is the range of the percentages of the typical discount rate?
(c) If a company factors its receivables, what percentage of the value of the receivables can it expect to receive from the factor in the form of cash, and how quickly will it receive the cash?

## CRITICAL THINKING

## Decision Making Across the Organization

BYP8-4 Molly and Joe Mayne own Campus Fashions. From its inception Campus Fashions has sold merchandise on either a cash or credit basis, but no credit cards have been accepted. During the past several months, the Maynes have begun to question their sales policies. First, they have lost some sales because of refusing to accept credit cards. Second, representatives of two metropolitan banks have been persuasive in almost convincing them to accept their national credit cards. One bank, City National Bank, has stated that its credit card fee is $4 \%$.

The Maynes decide that they should determine the cost of carrying their own credit sales. From the accounting records of the past 3 years they accumulate the following data.

|  | 2011 | 2010 | 2009 |
| :---: | :---: | :---: | :---: |
| Net credit sales | \$500,000 | \$600,000 | \$400,000 |
| Collection agency fees for slow-paying customers | 2,450 | 2,500 | 2,400 |
| Salary of part-time accounts receivable clerk | 4,100 | 4,100 | 4,100 |

Credit and collection expenses as a percentage of net credit sales are: uncollectible accounts $1.6 \%$, billing and mailing costs $0.5 \%$, and credit investigation fee on new customers $0.15 \%$.

Molly and Joe also determine that the average accounts receivable balance outstanding during the year is $5 \%$ of net credit sales. The Maynes estimate that they could earn an average of $8 \%$ annually on cash invested in other business opportunities.

## Instructions

With the class divided into groups, answer the following.
(a) Prepare a table showing, for each year, total credit and collection expenses in dollars and as a percentage of net credit sales.
(b) Determine the net credit and collection expense in dollars and as a percentage of sales after considering the revenue not earned from other investment opportunities.
(c) Discuss both the financial and nonfinancial factors that are relevant to the decision.

## Communication Activity

BYP8-5 Rene Mai, a friend of yours, overheard a discussion at work about changes her employer wants to make in accounting for uncollectible accounts. Rene knows little about accounting, and she asks you to help make sense of what she heard. Specifically, she asks you to explain the differences between the percentage-of-sales, percentage-of-receivables, and the direct write-off methods for uncollectible accounts.

## Instructions

In a letter of one page (or less), explain to Rene the three methods of accounting for uncollectibles. Be sure to discuss differences among these methods.

## Ethics Case

BYP8-6 The controller of Ruiz Co. believes that the yearly allowance for doubtful accounts for Ruiz Co. should be $2 \%$ of net credit sales. The president of Ruiz Co., nervous that the stockholders might expect the company to sustain its $10 \%$ growth rate, suggests that the controller increase the allowance for doubtful accounts to $4 \%$. The president thinks that the lower net income, which reflects a $6 \%$ growth rate, will be a more sustainable rate for Ruiz Co.

## Instructions

(a) Who are the stakeholders in this case?
(b) Does the president's request pose an ethical dilemma for the controller?
(c) Should the controller be concerned with Ruiz Co.'s growth rate? Explain your answer.

## *

## "All About You" Activity

BYP8-7 As the All About You feature in this chapter (page 376) indicates, credit card usage in the United States is substantial. Many startup companies use credit cards as a way to help meet short-term financial needs. The most common forms of debt for startups are use of credit cards and loans from relatives.

Suppose that you start up Brothers Sandwich Shop. You invested your savings of \$20,000 and borrowed $\$ 70,000$ from your relatives. Although sales in the first few months are good, you see that you may not have sufficient cash to pay expenses and maintain your inventory at acceptable levels, at least in the short term. You decide you may need to use one or more credit cards to fund the possible cash shortfall.

## Instructions

(a) Go to the Web and find two sources that provide insight into how to compare credit card terms.
(b) Develop a list, in descending order of importance, as to what features are most important to you in selecting a credit card for your business.
(c) Examine the features of your present credit card. (If you do not have a credit card, select a likely one online for this exercise.) Given your analysis above, what are the three major disadvantages of your present credit card?

## FASB Codification Activity

BYP8-8 Access the FASB Codification at http://asc.fasb.org to prepare responses to the following.
(a) How are receivables defined in the Codification?
(b) What are the conditions under which losses from uncollectible receivables (Bad Debts Expense) should be reported?

## 7

## Answers to Insight and Accounting Across

## the Organization Questions

## p. 367 When Investors Ignore Warning Signs

Q: When would it be appropriate for a company to lower its allowance for doubtful accounts as a percentage of its receivables?
A: It could do so if the company's collection experience had improved, or was expected to improve, and therefore the company expected lower defaults as a percentage of receivables.
p. 367 How Does a Credit Card Work?

Q: Assume that Nordstrom prepares a bank reconciliation at the end of each month. If some credit card sales have not been processed by the bank, how should Nordstrom treat these transactions on its bank reconciliation?
A: Nordstrom would treat the credit card receipts as deposits in transit. It has already recorded the receipts as cash. Its bank will increase Nordstrom's cash account when it receives the receipts.

## Authors' Comments on All About You:

## Should You Be Carrying Plastic? (p. 376)

We aren't going to tell you to cut up your credit card(s). Well, we aren't going to tell all of you to do so. Credit cards, when used properly, can serve a very useful purpose. They provide great convenience, are widely accepted, and can be a source of security in an emergency. But too many Americans use credit cards inappropriately. When businesses purchase short-term items such as inventory and supplies, they use short-term credit, which they expect to pay back very quickly. The same should be true of your credit card. When you make purchases of everyday items, you should completely pay off those items within a month or two. If you don't, you are living beyond your means, and you will soon dig yourself a deep financial pit.

Longer-term items should not be purchased with credit cards, since the interest rate is too high. If you currently have a large balance on your credit card(s), we encourage you to cut up your card(s) until you have paid off your balance(s).

## Answers to Self-Study Questions

1. d 2. c 3.
2. b
3. d
4. b
5. b
6. d
7. c
8. c
9. a
10. b
11. d

## 14. a 15. c

Remember to go back to the Navigator box on the chapter-opening page and check off your completed work.


[^0]:    Interest revenue is often substantial for many retailers.

[^1]:    Sources: Debtsmart, www.debtsmart.com/pages/debt_stats.htmI; New York Times, February 23, 2009; Demos.org, "The Economic State of Young America," May 2008.

