



This is “In Financial Reporting, What Information Is Conveyed about Receivables?”, chapter 7 from the book [Business Accounting \(index.html\)](#) (v. 2.0).

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Chapter 7

In Financial Reporting, What Information Is Conveyed about Receivables?

Video Clip

[\(click to see video\)](#)

In this video, Professor Joe Hoyle introduces the essential points covered in [Chapter 7 "In Financial Reporting, What Information Is Conveyed about Receivables?"](#).

7.1 Accounts Receivable and Net Realizable Value

LEARNING OBJECTIVES

At the end of this section, students should be able to meet the following objectives:

1. Understand that accounts receivable are reported at net realizable value.
2. Know that net realizable value is an estimation of the amount of cash to be collected from a particular asset.
3. Appreciate the challenge that uncertainty poses in the reporting of accounts receivable.
4. List the factors to be considered by officials when estimating the net realizable value of a company's accounts receivable.

Reporting Accounts Receivable

Question: The goal of financial accounting is to paint a fairly presented portrait that enables decision makers to make a reasonable assessment of an organization's financial health and future prospects. This likeness should be communicated based on a set of generally accepted accounting principles (either U.S. GAAP or IFRS) with no material misstatements included. The success of the conveyance is dependent on the ability of the accountants to prepare financial statements that meet this rigorous standard.

Equally as important, every party analyzing the resulting statements must possess the knowledge necessary to understand the multitude of reported figures and explanations. If appropriate decisions are to result based on this information, both the preparer and the reader need an in-depth knowledge of the reporting standards.

For example, the asset section of the balance sheet produced by Dell Inc. as of January 28, 2011, indicates that the company held "accounts receivable, net" amounting to \$6.493 billion. What does this figure reflect? What information is communicated to decision makers about a company and its accounts receivable when a single number such as \$6.493 billion is reported?

Answer: One of the most satisfying results of mastering the terminology, rules, and principles of financial accounting is the ability to understand the meaning of amounts and disclosures reported about an organization. Such information is presented and analyzed daily in magazines, newspapers, radio, television, and the Internet. As with any language, failure to comprehend elements of the discussion leaves the listener lost and feeling vulnerable. However, with a reasonable amount of study, the informational content begins to make sense and quickly becomes useful in arriving at logical decisions.

In previous chapters, the asset **accounts receivable**¹ was introduced to report monetary amounts owed to a reporting entity by its customers. Individual balances are generated by sales made on credit. Businesses sell on credit, rather than demanding cash, as a way to increase the number of customers and the related revenue. According to U.S. GAAP, the figure presented on a balance sheet for accounts receivable is its **net realizable value**²—the amount of cash the company estimates will be collected over time from these accounts.

Consequently, officials for **Dell Inc.** analyzed its accounts receivable as of January 28, 2011, and determined that \$6.493 billion was the best guess as to the cash that would be collected. The actual total of receivables was higher than that figure but an estimated amount of doubtful accounts had been subtracted in recognition that a portion of these debts could never be collected. For this reason, the asset is identified on the balance sheet as “accounts receivable, net” or, sometimes, “accounts receivable, net of allowance for doubtful accounts” to explain that future losses have already been anticipated and removed.

1. An asset that reports the amounts generated by credit sales that are still owed to an organization by its customers.
2. The amount of cash that is expected to be generated by an asset after costs necessary to obtain the cash are removed; as related to accounts receivable, it is the amount an organization estimates will ultimately be collected from customers.

TEST YOURSELF

Question:

Hawthorne Corporation operates a local hardware store in Townsville, Louisiana. The company's accountant recently prepared a set of financial statements to help justify a loan that is being sought from a bank. The balance sheet reports net accounts receivable of \$27,342. What does that figure reflect?

- a. Sales made to customers on account.
- b. An estimation of the amount that will be collected from the debts now owed by customers.
- c. The historical cost of the goods that were sold to customers who have not yet made payment.
- d. The total amount owed by customers as of the balance sheet date.

Answer:

The correct answer is choice b: An estimation of the amount that will be collected from the debts now owed by customers.

Explanation:

According to U.S. GAAP, accounts receivable should be reported at net realizable value, the amount expected to be collected. This approach requires an estimation to be made of the amount of the present balances that will prove to be uncollectible so that the net receivable balance can be established for reporting purposes.

Lack of Exactness in Reporting Receivables

Question: As discussed in previous chapters, many of the figures reported in financial accounting cannot be absolutely correct. Although \$6.493 billion is the asset balance shown by Dell, the cash eventually collected will likely be somewhat higher or lower. Should the lack of exactness in reporting receivables cause concern for decision makers?

Answer: No one will ever be able to predict the precise amount of cash to be received from nearly \$6.5 billion in accounts receivable. In fact, Note One to **Dell's** financial statements specifically states, "The preparation of financial statements in accordance with GAAP requires the use of management's estimates. These estimates are subjective in nature and involve judgments that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at fiscal year-end, and the reported amounts of revenues and expenses during the fiscal year. Actual results could differ from those estimates."

Knowledgeable decision makers understand that a degree of uncertainty exists in reporting all such balances. However, a very specific figure does appear on **Dell's** balance sheet for accounts receivable. By communicating this one amount, company officials are asserting that they believe sufficient evidence is available to provide reasonable assurance that the amount collected will not be a materially different figure. The independent auditors will also analyze the same available evidence and must agree that it is sufficient to serve as the basis for rendering reasonable assurance that the financial statements are presented fairly before an unqualified opinion can be released.

This is the meaning of any accounts receivable balance presented according to U.S. GAAP. All parties involved should understand what the figure represents. Actual receipts are expected to be so close to \$6.493 billion that an interested party can rely on this number in arriving at decisions about the reporting company's financial health and future prospects. Officials believe that the discrepancy between this balance and the cash collected will be so small that the same decisions would have been made even if the exact outcome had been known. In other words, any difference between reported and actual figures will be inconsequential. Once again, though, absolute assurance is not given for the reported amount but merely reasonable assurance.

Clearly, the reporting of receivables moves the coverage of financial accounting into more complicated territory. In the transactions and events analyzed previously, uncertainty was rarely encountered. The financial impact of signing a bank loan or the payment of a salary can be described to the penny except in unusual situations. Here, the normal reporting of accounts receivable introduces the challenge of preparing statements where the ultimate outcome is literally unknown. The very nature of such uncertainty forces the accounting process to address such problems in some logical fashion.

Determining Net Realizable Value

Question: Inherent uncertainty is associated with the reporting of receivables. No one can know exactly how much cash will be collected. How do company officials obtain sufficient evidence to provide reasonable assurance that the balance is not materially misstated? How does any business ever anticipate the amount of cash that will be collected from what can be a massive number of accounts receivable?

Answer: In accounting, reported balances never represent random guesses. Considerable investigation and analysis goes into arriving at financial statement figures. To determine the net realizable value appropriate for accounts receivable, company officials consider the following relevant factors:

- Historical experience of the company in collecting its receivables
- Efficiency of the company's credit verification policy
- Current economic conditions
- Industry averages and trends
- Percentage of overdue accounts at present
- Efficiency of company's collection procedures

Dell Inc. explains this process within the notes to its financial statements by indicating that this estimation “is based on an analysis of historical bad debt experience, current receivables aging, and expected future write-offs, as well as an assessment of specific identifiable customer accounts considered at risk or uncollectible.”

Additional information disclosed by **Dell** indicates that the company actually held \$6.589 billion in accounts receivable, but—at the date of the balance sheet—\$96 million of these accounts were anticipated to be uncollectible. Thus, the amount of cash estimated from the receivables is the reported \$6.493 billion net balance (\$6.589 billion total less \$96 million expected to be uncollectible). Quite obviously, decision makers studying the company will be interested in comparing such data to figures disclosed by **Dell** in previous years as well as the information disseminated by competing organizations such as **Hewlett-Packard** and **Apple**. Just determining whether \$96 million in uncollectible accounts is a relatively high or low figure is quite significant in evaluating the efficiency of **Dell's** current operations.

TEST YOURSELF

Question:

Gerwitz Corporation manufactures and sells shoes. At the end of the current year, the company holds \$954,850 in accounts receivable and is presently assessing the amount of uncollectible accounts in that total. Which of the following is least likely to be relevant information in making this estimation?

- a. A current recession is taking place in the country.
- b. The company monitors its inventory levels very carefully.
- c. The company only sells to customers who have undergone an extensive credit check.
- d. Of the receivables held on the previous balance sheet date, 3 percent were never collected.

Answer:

The correct answer is choice b: The company monitors its inventory levels very carefully.

Explanation:

Companies study as much relevant information as possible in estimating uncollectible accounts. Economic conditions are considered (such as a recession, which might reduce payments) and previous collection trends. In addition, the methods by which the company extends credit and pushes for payment can impact the amount to be received. Although monitoring inventory levels is important because it can reduce theft and breakage, no information is provided as to the collectability of receivables.

KEY TAKEAWAY

Because of various uncertainties, many of the figures reported in a set of financial statements represent estimations. Therefore, as discussed previously, such figures cannot be exactly accurate. No one can predict the future with such precision. The accountant only holds that reported balances contain no material misstatements. Accounts receivable is shown at its net realizable value, the amount of cash expected to be collected. Losses from bad accounts are anticipated and removed based on historical trends and other relevant information. Thus, the figure reported in the asset section of the balance sheet is lower than the total amount of receivables held by the company on that date.

7.2 Accounting for Uncollectible Accounts

LEARNING OBJECTIVES

At the end of this section, students should be able to meet the following objectives:

1. Understand the reason for reporting a separate allowance account on the balance sheet in connection with accounts receivable.
2. Know that bad debt expenses must be anticipated and recorded in the same time period as the related sales revenue to conform to the matching principle.
3. Prepare the adjusting entry to reduce accounts receivable to net realizable value and recognize the resulting bad debt expense.

The Allowance for Doubtful Accounts

Question: Based on the information provided by Dell Inc., companies seem to maintain two separate ledger accounts in order to report accounts receivables at net realizable value. One is the sum of all accounts outstanding and the other is an estimation of the amount within the total that will never be collected. Interestingly, the first is a fact and the second is an opinion. The two are then combined to arrive at the net realizable value figure shown on the balance sheet. Is the amount reported for accounts receivable actually the net of the total due from customers less the anticipated doubtful accounts?

Answer: Yes, companies do maintain two separate T-accounts for accounts receivables, but that is solely because of the uncertainty involved. If the balance to be collected was known, one account would suffice for reporting purposes. However, that level of certainty is rarely possible.

3. A contra asset account reflecting the amount of accounts receivable that the reporting company estimates will eventually fail to be collected, also referred to as the allowance for uncollectible accounts.

- An accounts receivable T-account monitors the total due from all of a company's customers.
- A second account (often called the **allowance for doubtful accounts**³ or the allowance for uncollectible accounts) reflects the estimated amount that will eventually have to be written off as uncollectible.

Whenever a balance sheet is produced, these two accounts are netted to arrive at net realizable value, the figure to be reported for this particular asset.

The allowance for doubtful accounts is an example of a **contra account**⁴, one that always appears with another account but as a direct reduction to lower the reported value. Here, the allowance decreases the receivable balance to its estimated net realizable value. As a contra asset account, debit and credit rules are applied that are opposite of the normal asset rules. Thus, the allowance increases with a credit (creating a decrease in the net receivable balance) and decreases with a debit. The more accounts receivable a company expects to be bad, the larger the allowance. This increase, in turn, reduces the net realizable value shown on the balance sheet.

By establishing two T-accounts, **Dell** can manage a total of \$6.589 billion in accounts receivables while setting up a separate allowance balance of \$96 million. As a result, the reported figure—as required by U.S. GAAP—is the estimated net realizable value of \$6.493 billion.

Anticipating Bad Debt Expense

Question: Accounts receivable and the offsetting allowance for doubtful accounts are netted with the resulting figure reported as an asset on the balance sheet. Some companies include both accounts on the balance sheet to indicate the origin of the reported balance. Others show only the single net figure with explanatory information provided in the notes to the financial statements. How does the existence of doubtful accounts affect the income statement? Sales are made on account, but a portion of the resulting receivables must be reduced because collection is rarely expected to be 100 percent. Does the presence of bad accounts create an expense for the reporting company?

4. An offset to a reported account that decreases the total balance to a net amount; in this chapter, the allowance for doubtful accounts reduces reported accounts receivable to the amount expected to be collected.

5. Estimated expense from making sales on account to customers who will never pay; because of the matching principle, the expense is recorded in the same period as the sales revenue.

Answer: Previously, an expense was defined as a measure of decreases in or outflows of net assets (assets minus liabilities) incurred in connection with the generation of revenues. If receivables are recorded that will eventually have to be decreased because they cannot be collected, an expense must be recognized. In financial reporting, terms such as **bad debt expense**⁵, “doubtful accounts expense,” or “the provision for uncollectible accounts” are often encountered for that purpose.

The inherent uncertainty as to the amount of cash that will be received affects the physical recording process. How is a reduction reported if the amount will not be known until sometime in the future?

To illustrate, assume that a company makes sales on account to one hundred different customers late in Year One for \$1,000 each. The earning process is substantially complete at the time of sale and the amount of cash to be received can be reasonably estimated. According to the revenue realization principle within accrual accounting, the company should immediately recognize the \$100,000 revenue generated by these transactions. Because the focus of the discussion here is on accounts receivable and their collectability, the recognition of cost of goods sold as well as the possible return of any merchandise will be omitted at this time.

Figure 7.1 Journal Entry—Year One—Sales Made on Credit

Accounts Receivable	100,000		
Sales		100,000	(increase a revenue—credit)

Assume further that the company’s past history and other relevant information lead officials to estimate that approximately 7 percent of all credit sales will prove to be uncollectible. An expense of \$7,000 (7 percent of \$100,000) is anticipated because only \$93,000 in cash is expected from these receivables rather than the full \$100,000 that was recorded.

The specific identity and the actual amount of these bad accounts will probably not be known for many months. No physical evidence exists at the time of sale to indicate which will become worthless (buyers rarely make a purchase and then immediately declare bankruptcy or leave town). For convenience, accountants wait until financial statements are to be produced before making this estimation of net realizable value. The necessary reduction is then recorded by means of an adjusting entry.

In the adjustment, an expense is recognized. This method of presentation has a long history in financial accounting. However, recently FASB has been discussing whether a direct reduction in revenue might not be a more appropriate approach to portray bad debts. Financial accounting rules are under constant scrutiny, which leads to continual evolution.

Bad Debts and the Matching Principle

Question: This company holds \$100,000 in accounts receivable but only expects to collect \$93,000 based on available evidence. The \$7,000 reduction in the asset is an expense. When should the expense be recognized? These sales were made in Year One but the specific identity of the customers who fail to pay and the actual uncollectible amounts will not be determined until Year Two. Should bad debt expense be recognized in the same year as the sales by relying on an estimate or delayed until the actual results are eventually finalized? How is the uncertainty addressed?

Answer: This situation illustrates how accrual accounting plays such a key role within financial reporting. As discussed previously, the timing of expense recognition according to accrual accounting is based on the matching principle. Where possible, expenses are recorded in the same period as the revenues they helped generate. The guidance is clear. Thus, every company should handle uncollectible accounts in the same manner. The expected expense is the result of making sales to customers who ultimately will never pay. Because the revenue was reported at the time of sale in Year One, the related expense is also recognized in that year. This handling is appropriate according to accrual accounting even though the \$7,000 is only an estimated figure.

Therefore, as shown in [Figure 7.2 "Adjusting Entry—End of Year One—Recognition of Bad Debt Expense for the Period"](#), when the company produces financial statements at the end of Year One, an adjusting entry is made to (1) reduce the receivables balance to its net realizable value and (2) recognize the expense in the same period as the related revenue.

Figure 7.2 Adjusting Entry—End of Year One—Recognition of Bad Debt Expense for the Period

Bad Debt Expense	7,000		(increase an expense—debit)
Allowance for Doubtful Accounts		7,000	(increase a contra asset—credit)

After this entry is made and posted to the ledger, the Year One financial statements contain the information shown in [Figure 7.3 "Year One—Financial Statements"](#) based on the adjusted T-account balances (assuming for convenience that no other sales were made during the year):

Figure 7.3 Year One—Financial Statements

<u>Income Statement (Partial) for Year One</u>	
Revenue	
Sales	\$100,000
Operating Expenses	
Bad Debt Expense	7,000
<u>Balance Sheet (Partial) at End of Year One</u>	
Current Assets	
Accounts Receivable	\$100,000
Allowance for Doubtful Accounts	7,000
Accounts Receivable, Net	<u>\$93,000</u>

From this information, anyone studying these financial statements should understand that an expense estimated at \$7,000 was incurred this year because the company made sales of that amount that will never be collected. In addition, year-end accounts receivable total \$100,000 but have an anticipated net realizable value of only \$93,000. Neither the \$7,000 nor the \$93,000 figure is expected to be exact but the eventual amounts should not be materially different. With an understanding of financial accounting, the reported information is clear.

TEST YOURSELF

Question:

A company's general ledger includes a balance for bad debt expense and another for the allowance for doubtful accounts. Which of the following statements is true?

- a. Both bad debt expense and the allowance for doubtful accounts are reported on the income statement.
- b. Both bad debt expense and the allowance for doubtful accounts are reported on the balance sheet.
- c. Bad debt expense is reported on the income statement; the allowance for doubtful accounts is reported on the balance sheet.
- d. Bad debt expense is reported on the balance sheet; the allowance for doubtful accounts is reported on the income statement.

Answer:

The correct answer is choice c: Bad debt expense is reported on the income statement; the allowance for doubtful accounts is reported on the balance sheet.

Explanation:

Bad debt expense is reported on the income statement to show the amount of sales recognized this year that the company estimates will not be collected. The allowance for doubtful accounts is a contra asset account reported on the balance sheet to reduce accounts receivable to their estimated net realizable value.

The Need for a Separate Allowance Account

Question: When financial statements are prepared, an expense must be recognized and the receivable balance reduced to net realizable value. However, in the previous adjusting entry, why was the accounts receivable account not directly decreased by \$7,000 to the anticipated balance of \$93,000? This approach is simpler as well as easier to understand. Why was the \$7,000 added to this contra asset account? In reporting receivables, why does the accountant go to the trouble of creating a separate allowance for reduction purposes?

Answer: When the company prepares the adjustment in [Figure 7.2 "Adjusting Entry—End of Year One—Recognition of Bad Debt Expense for the Period"](#) at the end of Year One, the actual accounts that will not be collected are unknown. Officials are only guessing that \$7,000 will prove worthless. Plus, on the balance sheet date, the company does hold \$100,000 in accounts receivable. That figure cannot be reduced directly until the specific identity of the accounts to be written off has been established. Utilizing a separate allowance allows the company to communicate the expected amount of cash while still maintaining a record of all balances in the accounts receivable T-account.

KEY TAKEAWAY

A sale on account and the eventual decision that the cash will never be collected can happen months, if not years, apart. During the interim, bad debts are estimated and recorded on the income statement as an expense and on the balance sheet by means of an allowance account, a contra asset. Through this process, the receivable balance is shown at net realizable value while expenses are recognized in the same period as the sale to correspond with the matching principle. When financial statements are prepared, an estimation of the uncollectible amounts is made and an adjusting entry recorded. Thus, the expense, the allowance account, and the accounts receivable are all presented according to financial accounting standards.

7.3 The Problem with Estimations

LEARNING OBJECTIVES

At the end of this section, students should be able to meet the following objectives:

1. Record the impact of discovering that a specific receivable is uncollectible.
2. Understand the reason an expense is not recognized when a receivable is deemed to be uncollectible.
3. Record the collection of a receivable that has previously been written off as uncollectible.
4. Recognize that estimated figures often prove to be erroneous, but changes in previous year figures are not made if the reported balance was a reasonable estimate.

The Write-Off of an Uncollectible Account

Question: The company in the above illustration expects to collect cash from its receivables that will not materially differ from \$93,000. The \$7,000 bad debt expense is recorded in the same period as the revenue through a Year One adjusting entry.

What happens when an actual account is determined to be uncollectible? For example, assume that on March 13, Year Two, a \$1,000 balance is judged to be worthless. The customer dies, declares bankruptcy, disappears, or just refuses to make payment. This \$1,000 is not a new expense. A total of \$7,000 was already anticipated and recognized in Year One. It is merely the first discovery. How does the subsequent write-off of an uncollectible receivable affect the various T-account balances?

Answer: When an account proves to be uncollectible, the receivable T-account is decreased. The \$1,000 balance is simply removed. It is not viewed as an asset because it has no future economic benefit. Furthermore, the amount of bad accounts within the receivables is no longer anticipated as \$7,000. Because this first worthless receivable has been identified and eliminated, only \$6,000 remains in the allowance for doubtful accounts.

In Figure 7.4 "Journal Entry during Year Two—Write-Off of Specific Account as Uncollectible", the journal entry is shown to write off this account. Throughout the year, this entry is repeated whenever a balance is found to be worthless. No additional expense is recognized. The expense was estimated and recorded in the previous period to comply with accrual accounting and the matching principle.

Figure 7.4 *Journal Entry during Year Two—Write-Off of Specific Account as Uncollectible*

Allowance for Doubtful Accounts	1,000		(decrease a contra asset—debit)
Accounts Receivable		1,000	(decrease an asset—credit)

Two basic steps in the recording of doubtful accounts are shown here.

1. **Reporting of uncollectible accounts in the year of sale based on estimation.** The amount of bad accounts is estimated whenever financial statements are to be produced. An adjusting entry then recognizes the expense in the same period as the sales revenue. It also increases the allowance for doubtful accounts (to reduce the reported receivable balance to its anticipated net realizable value).
2. **Write-off of an account judged to be uncollectible.** Subsequently, whenever a specific account is deemed to be worthless, the balance is removed from both the accounts receivable and the allowance-for-doubtful-accounts T-accounts. The related expense has been recognized previously and is not affected by the removal of a specific uncollectible account.

These two steps are followed consistently throughout the reporting of sales made on account and the subsequent collection (or write-off) of the balances.

TEST YOURSELF

Question:

Near the end of Year One, a company is beginning to prepare financial statements. Accounts receivable total \$320,000, but the net realizable value is only expected to be \$290,000. On the last day of the year, the company realizes that a \$3,000 receivable has become worthless and must be written off. The debtor had declared bankruptcy and will never be able to pay. What is the impact of this decision?

- a. The net amount reported for receivables goes down.
- b. The net amount reported for receivables stays the same.
- c. The net amount reported for receivables goes up.
- d. A company cannot write off an account at the end of the year in this manner.

Answer:

The correct answer is choice b: The net amount reported for receivables stays the same.

Explanation:

The allowance for doubtful accounts is \$30,000 (\$320,000 total less a net realizable value of \$290,000). Writing off a \$3,000 account reduces the receivable total from \$320,000 to \$317,000. In addition, the allowance drops from \$30,000 to \$27,000. The net balance to be reported remains \$290,000 (\$317,000 less \$27,000). The company still expects to collect \$290,000 from its receivables and reports that balance. Writing an account off as uncollectible does not impact the anticipated figure.

Collecting Accounts Previously Written Off

Question: An account receivable is judged as a bad debt and an adjusting entry is prepared to remove it from the ledger accounts. What happens then? After a receivable has been written off as uncollectible, does the company cease in its attempts to collect the amount due from the customer?

Answer: Organizations always make every possible effort to recover money they are owed. Writing off an account simply means that the chances of collection are deemed to be slim. Efforts to force payment will continue, often with increasingly aggressive techniques. If money is ever received from a written off account, the company first reinstates the account by reversing the earlier entry (Figure 7.5 "Journal Entry—Reinstate Account Previously Thought to Be Worthless"). Then, the cash received is recorded in the normal fashion (Figure 7.6 "Journal Entry—Collection of Reinstated Account"). The two entries shown here are appropriate if the above account is eventually collected from this customer. Some companies combine these entries by simply debiting cash and crediting the allowance. That single entry has the same overall impact as Figure 7.5 "Journal Entry—Reinstate Account Previously Thought to Be Worthless" and Figure 7.6 "Journal Entry—Collection of Reinstated Account".

Figure 7.5 *Journal Entry—Reinstate Account Previously Thought to Be Worthless*

Accounts Receivable	1,000		(increase an asset—debit)
Allowance for Doubtful Accounts		1,000	(increase a contra asset—credit)

Figure 7.6 *Journal Entry—Collection of Reinstated Account* Many companies combine these two entries for convenience. The debit to accounts receivable in the first entry exactly offsets the credit in the second. Thus, the same recording impact is achieved by simply debiting cash and crediting the allowance for doubtful accounts. However, the rationale for that single entry is not always as evident to a beginning student.

Cash	1,000		(increase an asset—debit)
Accounts Receivable		1,000	(decrease an asset—credit)

Reporting an Incorrect Estimation

Question: In this illustration, at the end of Year One, the company estimated that \$7,000 of its accounts receivable will ultimately prove to be uncollectible. However, in Year Two, that figure is likely to be proven wrong. It is merely a calculated guess. The actual amount might be \$6,000 or \$8,000 or many other numbers. When the precise figure is known, does a company return to its Year One financial statements and adjust them to the correct balance? Should a company continue reporting an estimated figure for a previous year even after it has been shown to be incorrect?

Answer: According to U.S. GAAP, if a number in an earlier year is reported based on a reasonable estimation, any subsequent differences with actual amounts are not handled retroactively (by changing the previously released figures). For example, if uncollectible accounts here prove to be \$8,000, the company does not adjust the balance reported as the Year One bad debt expense from \$7,000 to \$8,000. It continues to report \$7,000 on the income statement for that period even though that number is now known to be wrong.

There are several practical reasons for the accountant's unwillingness to adjust previously reported estimations unless they were clearly unreasonable or fraudulent:

1. Most decision makers are well aware that many reported figures represent estimates. Discrepancies are expected and should be taken into consideration when making decisions based on numbers presented in a set of financial statements. In analyzing this company and its financial health, educated investors and creditors anticipate that the total of bad accounts will ultimately turn out to be an amount that is not materially different from \$7,000 rather than exactly \$7,000.
2. Because an extended period of time often exists between issuing statements and determining actual balances, most parties will have already used the original information to make their decisions. Knowing the exact number now does not allow them to undo those prior actions. There is no discernable benefit from having updated figures as long as the original estimate was reasonable.
3. Financial statements contain numerous estimations and nearly all will prove to be inaccurate to some degree. If exactness were required, correcting each of these previously reported figures would become virtually a never-ending task for a company and its accountants. Scores of updated statements might have to be issued before a "final" set of financial figures became available after several years. For example, the exact life of a building might not be known for 50 years or more. Decision makers want information that is usable as soon as possible. Speed in reporting is far more important than absolute precision.
4. At least theoretically, half of the differences between actual and anticipated results should make the reporting company look better and half make it look worse. If so, the corrections needed to rectify all previous estimation errors will tend to offset and have little overall impact on a company's reported income and financial condition.

Thus, no change is made in financial figures that have already been released whenever a reasonable estimation proves to be wrong. However, differences that

arise should be taken into consideration in creating current and subsequent statements. For example, if the Year One bad debts were expected to be 7 percent, but 8 percent actually proved to be uncollectible, the accountant might well choose to use a higher percentage at the end of Year Two to reflect this new knowledge.

Recording Receivable Transactions in Subsequent Years

Question: To carry the previous illustration one step further, assume that \$400,000 in new credit sales are made during Year Two while cash of \$330,000 is collected. Uncollectible receivables totaling \$10,000 are written off in that year. What balances appear in the various T-accounts at the end of a subsequent year to reflect sales, collections, and the write-off of uncollectible receivables?

Answer: Sales and bad debt expense were reported previously for Year One. However, as income statement accounts, both were closed out in order to begin Year Two with zero balances. They are temporary accounts. In contrast, accounts receivable and the allowance for doubtful accounts appear on the balance sheet and retain their ending figures going into each subsequent period. They are permanent accounts. Thus, these two T-accounts still show \$100,000 and \$7,000 respectively at the beginning of Year Two.

Assuming that no adjusting entries have yet been recorded, these four accounts hold the balances shown in Figure 7.7 "End of Year Two—Sales, Receivables, and Bad Debt Balances" at the end of Year Two. Notice that the bad debt expense account remains at zero until the end-of-year estimation is made and recorded.

Figure 7.7 End of Year Two—Sales, Receivables, and Bad Debt Balances

Sales			
	0		Beginning Balance (Year Two)
	400,000		Credit Sales
	400,000		Ending Balance to Date
Bad Debt Expense			
Beginning Balance (Year Two)	0		
Accounts Receivable			
Beginning Balance (Year Two)	100,000		
Credit Sales	400,000	330,000	Cash Collections
		10,000	Accounts Written Off
	500,000	340,000	
Ending Balance to Date	160,000		
Allowance for Doubtful Accounts			
		7,000	Beginning Balance (Year Two)
Accounts Written Off	10,000		
	10,000	7,000	
Ending Balance to Date	3,000		

Residual Balance in the Allowance for Doubtful Accounts

Question: In the T-accounts in Figure 7.7 "End of Year Two—Sales, Receivables, and Bad Debt Balances", the balances represent account totals for Year Two prior to year-end adjusting entries. Why does a debit balance of \$3,000 appear in the allowance for doubtful accounts before recording the necessary adjustment for the current year? When a debit balance is found in the allowance for doubtful accounts, what does this figure signify?

Answer: When Year One financial statements were produced, \$7,000 was estimated as the amount of receivables that would eventually be identified as uncollectible. In Year Two, the actual total written off turned out to be \$10,000. The original figure was too low by \$3,000. This difference is now reflected by the debit remaining in the allowance account. Until the estimation for the current year is determined and recorded, the balance residing in the allowance account indicates a previous underestimation (an ending debit balance) or overestimation (a credit) of the amount of worthless accounts. The \$3,000 debit figure is assumed here for convenience to be solely the result of underestimating uncollectible accounts in Year One. Several other factors may also be present. For example, the balance in the allowance for doubtful accounts will be impacted by credit sales made in the

current year that are discovered to be worthless before the end of the period. Such accounts actually reduce the allowance T-account prior to the recognition of an expense. The residual allowance balance is also affected by the collection of accounts that were written off as worthless in an earlier year. As described earlier, the allowance is actually increased by that event. However, the financial reporting is not altered by the actual cause of the final allowance figure.

KEY TAKEAWAY

Bad debt expense is estimated and recorded in the period of sale to correspond with the matching principle. Subsequent write-offs of specific accounts do not affect the expense further. Rather, both the asset and the allowance for doubtful accounts are decreased at that time. If a written off account is subsequently collected, the allowance account is increased to reverse the previous impact. Estimation errors are anticipated in financial accounting; perfect predictions are rarely possible. When the amount of uncollectible accounts differs from the original figure recognized, no retroactive adjustment is made to restate earlier figures as long as a reasonable estimate was made. Decisions have already been made by investors and creditors based on the original data and cannot be reversed. These decision makers should have understood that the information they were using could not possibly reflect exact amounts.

7.4 The Actual Estimation of Uncollectible Accounts

LEARNING OBJECTIVES

At the end of this section, students should be able to meet the following objectives:

1. Estimate and record bad debts when the percentage of sales method is applied.
2. Estimate and record bad debts when the percentage of receivables method is applied.
3. Explain the reason that bad debt expense and the allowance for doubtful accounts normally report different figures.
4. Understand the reason for maintaining a subsidiary ledger.

Two Methods for Estimating Uncollectible Accounts

Question: The final step in reporting receivables for Year Two is the estimation of the bad accounts incurred during this period. This calculation enables the preparation of the year-end adjusting entry. According to the ledger balances in Figure 7.7 "End of Year Two—Sales, Receivables, and Bad Debt Balances", sales on credit for the year were \$400,000, remaining accounts receivable amount to \$160,000, and a \$3,000 debit sits in the allowance for doubtful accounts. No recording has yet been made for the Year Two bad debt expense. How does the accountant arrive at the estimation of uncollectible accounts each year?

Answer: Much of financial accounting is quite standardized. However, estimations can be made by any method that is considered logical. After all, it is an estimate. Over the decades, two different approaches have come to predominate when predicting the amount of uncollectible receivables. As long as company officials obtain sufficient evidence to support the reported numbers, either way can be applied.

6. An income statement approach for estimating uncollectible accounts that computes bad debt expense by multiplying sales (or just credit sales) by the percentage that are not expected to be collected.

Percentage of sales method⁶. This approach computes the current period expense by anticipating the percentage of sales (or credit sales) that will eventually fail to be collected. The percentage of sales method is sometimes referred to as an income statement approach because the only number being estimated (bad debt expense) appears on the income statement.

Percentage of receivables method⁷. Here, the proper balance for the allowance for doubtful accounts is determined based on the percentage of ending accounts receivable that are presumed to be uncollectible. This method is identified as a balance sheet approach because the only figure being estimated (the allowance for doubtful accounts) is found on the balance sheet. A common variation applied by many companies is the **aging method**⁸, which first classifies all receivable balances by age and then multiplies each of those individual totals by a different percentage. Normally, a higher rate is used for accounts that are older because they are considered more likely to become uncollectible.

Applying the Percentage of Sales Method

Question: Assume that this company chooses to use the percentage of sales method. All available evidence is studied by officials who come to believe that 8 percent of the credit sales made during Year Two will prove to be worthless. In applying the percentage of sales method, what adjusting entry is made at the end of the year so that financial statements can be prepared and fairly presented?

Answer: According to the ledger account in Figure 7.7 "End of Year Two—Sales, Receivables, and Bad Debt Balances", sales of \$400,000 were made during Year Two. If uncollectible accounts are expected to be 8 percent of that amount, the expense for the period is \$32,000 ($\$400,000 \times 8$ percent). Bad debt expense (the figure being estimated) must be raised from its present zero balance to \$32,000. Bad debt expense must be reported as \$32,000 when the process is completed.

Figure 7.8 *Adjusting Entry for Year Two—Uncollectible Accounts Estimated as a Percentage of Sales*

Bad Debt Expense	32,000		(increase an expense—debit)
Allowance for Doubtful Accounts		32,000	(increase a contra asset—credit)

The adjustment in Figure 7.8 "Adjusting Entry for Year Two—Uncollectible Accounts Estimated as a Percentage of Sales" does increase the expense to the \$32,000 figure, the proper percentage of the sales figure. However, prior to adjustment, the allowance account held a residual \$3,000 debit balance (\$7,000 Year One estimation less \$10,000 accounts written off). As can be seen in Figure 7.9 "Resulting T-Accounts, Based on Percentage of Sales Method", the \$32,000 recorded expense for Year Two results in only a \$29,000 balance for the allowance for doubtful accounts.

- 7. A balance sheet approach for estimating uncollectible accounts that computes the allowance for doubtful accounts by multiplying ending accounts receivable by the percentage that are not expected to be collected.
- 8. A variation of the percentage of receivables method where all receivables are first classified by age; the total of each category is then multiplied by an appropriate percentage and summed to determine the allowance balance to be reported.

Figure 7.9 Resulting T-Accounts, Based on Percentage of Sales Method

Bad Debt Expense	
Beginning Balance	0
Expense Adjustment	32,000
Ending Balance	32,000

Allowance for Doubtful Accounts	
	7,000 Beginning Balance
Accounts Written Off	32,000 Expense Adjustment
10,000	39,000
10,000	29,000 Ending Balance

After this adjustment, the figures appearing in the financial statements for Year Two are shown in [Figure 7.10 "Uncollectible Accounts Estimated Based on 8 Percent of Sales"](#).

Figure 7.10 Uncollectible Accounts Estimated Based on 8 Percent of Sales

Income Statement (Partial) for Year Two	
Revenue	
Sales	\$400,000
Operating Expenses	
Bad Debt Expense	32,000

Balance Sheet (Partial) at End of Year Two	
Current Assets	
Accounts Receivable	\$160,000
Allowance for Doubtful Accounts	29,000
Accounts Receivable, Net	<u>\$131,000</u>

TEST YOURSELF

Question:

The Travers Corporation starts operations in Year One and makes credit sales of \$300,000 per year while collecting cash of only \$200,000 per year. During each year, \$15,000 in accounts are judged to be uncollectible. The company estimates that 8 percent of its credit sales will eventually prove to be worthless. What is reported as the allowance for doubtful accounts on the company's balance sheet at the end of Year Two?

- a. \$15,000
- b. \$18,000
- c. \$24,000
- d. \$30,000

Answer:

The correct answer is choice b: \$18,000.

Explanation:

At the end of Year One, the allowance account will show a \$15,000 debit for the accounts written off and a 24,000 credit for the estimated bad debt expense ($\$300,000 \times 8$ percent) for a reported total of \$9,000. During Year Two, another \$15,000 debit is recorded because of the accounts written off and a second \$24,000 credit is recorded to recognize the current year's expense. The allowance balance is now \$18,000 ($\$9,000 - \$15,000 + \$24,000$).

The Difference Between Bad Debt Expense and the Allowance for Doubtful Accounts

Question: Figure 7.10 "Uncollectible Accounts Estimated Based on 8 Percent of Sales" presents the financial statement figures for this company for Year Two. How can bad debt expense be reported on the income statement as \$32,000, whereas the allowance for doubtful accounts on the balance sheet shows only \$29,000? Should those two numbers not be identical in every set of financial statements?

Answer: The difference in these two accounts is caused by the failure of previous estimations to be accurate. In Year One, bad debt expense for this company was reported as \$7,000 but accounts with balances totaling \$10,000 actually proved to be uncollectible in Year Two. That caused an additional \$3,000 reduction in the allowance as can be seen in [Figure 7.7 "End of Year Two—Sales, Receivables, and Bad Debt Balances"](#). This amount carries through and causes the allowance for doubtful account to be \$3,000 lower at the end of Year Two. The reported expense is the estimated amount (\$32,000), but the allowance (\$29,000) is \$3,000 less because of the difference in the actual and expected amounts for Year One.

Students are often concerned because these two reported numbers differ. However, both are merely estimates. The actual amount of worthless accounts is quite likely to be a number entirely different from either \$29,000 or \$32,000. Therefore, the lingering impact of the \$3,000 Year One underestimation should not be an issue as long as company officials believe that neither of the two reported balances is materially misstated.

Applying the Percentage of Receivables Method

Question: The percentage of receivables method handles the calculation of bad debts a bit differently. Assume that the Year Two adjusting entry has not yet been made so that bad debt expense remains at zero and the allowance for doubtful accounts still holds a \$3,000 debit balance as shown in [Figure 7.7 "End of Year Two—Sales, Receivables, and Bad Debt Balances"](#). Also assume that the company has now chosen to use the percentage of receivables method rather than the percentage of sales method. Officials have looked at all available evidence and come to the conclusion that 15 percent of ending accounts receivable ($\$160,000 \times 15$ percent or \$24,000) are likely to prove uncollectible. How does application of the percentage of receivables method affect the recording of doubtful accounts?

Answer: The percentage of receivables method (or the aging method if that variation is used) views the estimated figure of \$24,000 as the proper total for the allowance for doubtful accounts. Thus, the accountant must turn the \$3,000 debit balance residing in that contra asset account into the proper \$24,000 credit. That change can only be accomplished by recognizing an expense of \$27,000 as shown in [Figure 7.11 "Adjusting Entry for Year Two—Uncollectible Accounts Estimated as a Percentage of Receivables"](#). Under the percentage of receivables method, after the adjustment has been recorded, the allowance balance will equal the estimate (\$24,000). The bad debt expense is not computed directly; it is the amount needed to arrive at this allowance figure.

Figure 7.11 *Adjusting Entry for Year Two—Uncollectible Accounts Estimated as a Percentage of Receivables*

Bad Debt Expense	27,000		(increase an expense—debit)
Allowance for Doubtful Accounts		27,000	(increase a contra asset—credit)

As shown in [Figure 7.12 "Resulting T-Accounts, Based on Percentage of Receivables Method"](#), this entry successfully changes the allowance from a \$3,000 debit balance to the desired \$24,000 credit. Because bad debt expense had a zero balance prior to this entry, it now reports the \$27,000 amount needed to establish the proper allowance.

Figure 7.12 *Resulting T-Accounts, Based on Percentage of Receivables Method*

Allowance for Doubtful Accounts		
	7,000	Beginning Balance
Accounts Written Off	10,000	Expense Adjustment
	<u>10,000</u>	
	27,000	
	<u>34,000</u>	
	24,000	Ending Balance
Bad Debt Expense		
Beginning Balance	0	
Expense Adjustment	27,000	
Ending Balance	<u>27,000</u>	

After this adjusting entry has been posted, the balances appearing in [Figure 7.13 "Uncollectible Accounts Estimated Based on 15 Percent of Receivables"](#) appear in the financial statements for Year Two.

Figure 7.13 *Uncollectible Accounts Estimated Based on 15 Percent of Receivables*

<u>Income Statement (Partial) for Year Two</u>	
Revenue	
Sales	\$400,000
Operating Expenses	
Bad Debt Expense	27,000
<u>Balance Sheet (Partial) at End of Year Two</u>	
Current Assets	
Accounts Receivable	\$160,000
Allowance for Doubtful Accounts	24,000
Accounts Receivable, Net	<u>\$136,000</u>

Once again, the reported expense (\$27,000) is \$3,000 higher than the allowance (\$24,000). As before, the difference is the result of the estimation being too low in the prior year. The additional write-offs led to this lower balance in the allowance T-account.

Either approach can be used as long as adequate support is gathered for the numbers reported. They are just two alternatives to arrive at an estimate. However, financial accounting does stress the importance of consistency to help make numbers comparable from year to year. Once a method is selected, it normally must continue to be applied in all subsequent periods.

- Under the percentage of sales method, the expense account is aligned with the volume of sales.
- In applying the percentage of receivables method, the uncollectible portion of ending receivables is determined and reported as the allowance for doubtful accounts.

Regardless of the approach, both bad debt expense and the allowance for doubtful accounts are simply the result of estimating the final outcome of an uncertain event—the collection of accounts receivable.

TEST YOURSELF

Question:

The Yarrow Corporation starts operations in Year One and makes credit sales of \$400,000 per year while collecting cash of only \$300,000 per year. During each year, \$12,000 in accounts are judged to be uncollectible. The company estimates that 10 percent of its ending accounts receivable each year will eventually prove to be worthless. What is reported as bad debt expense on the company's income statement for Year Two?

- a. \$17,600
- b. \$20,800
- c. \$28,800
- d. \$32,000

Answer:

The correct answer is choice b: \$20,800.

Explanation:

In Year One, accounts receivable total \$88,000 (\$400,000 sales less \$300,000 collections and \$12,000 accounts written off). The allowance is \$8,800 or 10 percent of the total. In Year Two, receivables rise to \$176,000 (\$88,000 plus \$400,000 less \$300,000 and \$12,000). The allowance holds a debit of \$3,200 (\$8,800 beginning balance less \$12,000 in write-offs). The allowance needs to be \$17,600 (10 percent). To turn the \$3,200 debit into a \$17,600 credit, an expense of \$20,800 is recognized.

The Purpose of a Subsidiary Ledger

Question: A company such as Dell Inc. must have thousands or even hundreds of thousands of separate receivables. The accounts receivable T-account in the ledger maintains the total of all amounts owed to a company but does not indicate the balance due from each individual customer. How does an accounting system monitor all the specific receivable amounts? Those balances must be essential information for any organization for billing and collection purposes.

Answer: As indicated, a ledger account only reflects a single total at the present time. In many cases, as with accounts receivable, the composition of that balance is also essential information. For those T-accounts, the accounting system can be expanded to include a **subsidiary ledger**⁹ to maintain data about the various individual components making up the account total.

In the previous illustration, the company reports \$160,000 as the total of its accounts receivable at the end of Year Two. A separate subsidiary ledger should also be in place to monitor the amounts owed by each customer (Mr. A, Ms. B, and so on). The general ledger figure is used whenever financial statements are to be produced. The subsidiary ledger allows the company to access individual balances so that appropriate action can be taken when collection is received or if specific receivables grow too large or become overdue.

When a subsidiary ledger is maintained, the accounting system can be programmed so that each entry into the general ledger T-account requires an immediate parallel increase or decrease to the appropriate individual account. Thus, a \$75 sale on credit to Mr. A raises the accounts receivable T-account total by that amount while also increasing the balance listed specifically for Mr. A in the subsidiary ledger.

Subsidiary ledgers can be established in connection with any general ledger account where the availability of component information is helpful. Other than accounts receivable, subsidiary ledgers are commonly set up for inventory, equipment, and accounts payable. As might be imagined, large enterprises maintain additional records for virtually every T-account, whereas small companies are likely to limit use to accounts receivable and—possibly—a few other significant balances.

Before computer systems became common, manually keeping the total of thousands of individual accounts in a subsidiary ledger in agreement with the corresponding general ledger T-account balance was an arduous task. Mechanical errors (mathematical problems as well as debit and credit mistakes) tended to abound. However, current electronic systems are typically designed so that the totals reconcile automatically.

9. A group of individual accounts whose sum agrees with (and, therefore, explains) a general ledger account balance.

KEY TAKEAWAY

Each year, an estimation of uncollectible accounts must be made as a preliminary step in the preparation of financial statements. Some companies use the percentage of sales method, which calculates the reported expense, an amount that is also added to the allowance for doubtful accounts. Other companies use the percentage of receivable method (or a variation known as the aging method). It determines the ending balance for the allowance. Bad debt expense is the amount required to adjust the allowance balance to this ending total. Both methods provide no more than an approximation of net realizable value based on the validity of the numerical percentages that are applied. Because actual and expected uncollectible amounts will differ, the expense and the allowance almost always report different balances. Regardless of the method employed, virtually all companies maintain a subsidiary ledger to provide the individual balances that comprise the total found in the general ledger T-account.

7.5 Reporting Foreign Currency Balances

LEARNING OBJECTIVES

At the end of this section, students should be able to meet the following objectives:

1. Recognize that transactions denominated in a foreign currency have become extremely common.
2. Understand the necessity of remeasuring the value of foreign currency balances into a company's functional currency prior to the preparation of financial statements.
3. Appreciate the problem that fluctuations in exchange rates cause when foreign currency balances are reported in a set of financial statements.
4. Know which foreign currency balances are reported using a historical exchange rate and which balances are reported using the currency exchange rate in effect on the date of the balance sheet.
5. Understand that gains and losses are reported on a company's income statement when foreign currency balances are remeasured using current exchange rates.

Reporting Balances Denominated in a Foreign Currency

Question: In today's global economy, many U.S. companies make a sizable portion of their sales internationally. The Coca-Cola Company, for example, generated 69.7 percent of its revenues in 2010 outside of the United States. For McDonald's Corporation, foreign revenues were 66.4 percent of the reported total.

In such cases, U.S. dollars might still be the currency received. However, U.S. companies frequently make sales that will be settled in a foreign currency such as the Mexican peso or the Japanese yen. For example, a sale made today might call for the transfer of 20,000 pesos in two months. What reporting problems are created when a credit sale is denominated in a foreign currency?

Answer: This situation is a perfect example of why authoritative standards, such as U.S. GAAP, are so important in financial accounting. Foreign currency balances are common in today's world. Although a company will have a functional currency in

which it normally operates (probably the U.S. dollar for a U.S. company), transactions often involve a number of currencies. For many companies, sales, purchases, expenses, and the like can be denominated in dozens of different currencies. A company's financial statements may report U.S. dollars because that is its functional currency, but underlying amounts to be paid or received might be set in another currency such as the euro or the pound. Mechanically, many methods of reporting such foreign balances have been developed, each with a significantly different type of impact.

Without standardization, a decision maker would likely face a daunting task trying to analyze similar companies if they employed different approaches for reporting foreign currency figures. Assessing the comparative financial health and future prospects of organizations that do not use the same accounting always poses a difficult challenge for investors and creditors. That problem would be especially serious if optional approaches were allowed in connection with foreign currencies. Therefore, U.S. GAAP has long had an authoritative standard for this reporting.

The basic problem with reporting foreign currency balances is that exchange rates are constantly in flux. The price of one euro in terms of U.S. dollars changes many times each day. If these rates remained constant, a single conversion value could be determined at the time of the initial transaction and then used consistently for reporting purposes. However, currency exchange rates are rarely fixed; they often change moment by moment. For example, if a sale is made on account by a U.S. company with the money to be received in a foreign currency in 60 days, the relative worth of that balance in terms of U.S. dollars will probably move up and down countless times before collection. Because such values float, the reporting of these foreign currency amounts poses a challenge with no easy resolution.

Accounting for Changes in Currency Exchange Rates

Question: Exchange rates that vary over time create a reporting problem for companies operating in international markets. To illustrate, assume a U.S. company makes a sale of a service to a Mexican company on December 9, Year One, for 100,000 Mexican pesos that will be paid at a later date. Assume also that the exchange rate on the day when the sale was made was 1 peso equal to \$0.08. However, by the end of Year One when financial statements are produced, the exchange rate is different: 1 peso is now worth \$0.09. What reporting does a U.S. company make of transactions that are denominated in a foreign currency if the exchange rate changes as time passes? As has been stated previously, this is an introductory textbook. Thus, a more in-depth examination of many important topics, such as foreign currency balances, can be found in upper-level accounting texts. The coverage here of foreign currency balances is only designed to introduce students to basic reporting problems and their resolutions.

Answer: At the time of the sale, reporting is easy. The 100,000 pesos has an equivalent value of \$8,000 (100,000 pesos × \$0.08); thus, the journal entry in [Figure 7.14 "Journal Entry—December 9, Year One—Sale of Services Made for 100,000 Pesos"](#) is appropriate. Even though 100,000 pesos will be received, \$8,000 is reported so that all balances on the seller’s financial statements are stated in terms of U.S. dollars.

Figure 7.14 Journal Entry—December 9, Year One—Sale of Services Made for 100,000 Pesos

Accounts Receivable	8,000		(increase an asset—debit)
Sale of Services		8,000	(increase a revenue—credit)

By the end of the year, the exchange rate has changed so that 1 peso is equal to \$0.09. The Mexican peso is worth a penny more in terms of the U.S. dollar. Thus, 100,000 pesos are more valuable and can now be exchanged for \$9,000 (100,000 × \$0.09). There are numerous reasons why the relative value of these two currencies might have changed, but the cause is not important from an accounting perspective.

When adjusting entries are prepared in connection with the production of financial statements at the end of Year One, one or both of the account balances (accounts receivable and sales of services) could remain at \$8,000 or be updated to \$9,000. The sale took place when the exchange rate was \$0.08 but, now, before the money is collected, the peso has risen in value to \$0.09. Accounting needs a standard rule as to whether the historical rate (\$0.08) or the current rate (\$0.09) is appropriate for reporting such foreign currency balances. Communication is difficult without that type of structure. Plus, the standard needs to be logical. It needs to make sense.

For over 25 years, U.S. GAAP has required that **monetary assets and liabilities**¹⁰ denominated in a foreign currency be reported at the current exchange rate as of the balance sheet date. All other balances continue to be shown at the historical exchange rate in effect on the date of the original transaction. That is the approach that all organizations adhering to U.S. GAAP follow. Both the individuals who produce financial statements as well as the decision makers who use this information should understand the rule that is applied to resolve this reporting issue.

10. Amounts that are held by an organization as either cash or balances that will provide receipts or payments of a specified amount of cash in the future.

Monetary assets and liabilities are amounts currently held as cash or that will require a future transfer of a specified amount of cash. In the coverage here, for convenience, such monetary accounts will be limited to cash, receivables, and payables. Because these balances reflect current or future cash amounts, the current exchange rate is viewed as most relevant. In this illustration, the value of the receivable (a monetary asset) has changed in terms of U.S. dollars. The 100,000 pesos that will be collected have an equivalent value now of \$0.09 each rather than \$0.08. The reported receivable is updated to a value of \$9,000 (100,000 pesos × \$0.09).

Cash, receivables, and payables denominated in a foreign currency must be adjusted for reporting purposes whenever exchange rates fluctuate. All other account balances (equipment, sales, rent expense, dividends, and the like) reflect historical events and not future cash flows. Thus, they retain the rate in effect at the time of the original transaction and no further changes are ever needed. Because the sales figure is not a monetary asset or liability, the \$8,000 balance continues to be reported regardless of the relative value of the peso.

The Income Effect of a Change in Currency Exchange Rates

Question: Changes in exchange rates affect the reporting of monetary assets and liabilities. Those amounts are literally worth more or less U.S. dollars as the relative value of the currency fluctuates over time. For the two balances above, the account receivable has to be remeasured on the date of the balance sheet because it is a monetary asset whereas the sales balance remains reported as \$8,000 permanently. How is this change in the receivable accomplished? When monetary assets and liabilities denominated in a foreign currency are remeasured for reporting purposes, how is the increase or decrease in value reflected?

Answer: In this example, the value of the 100,000-peso receivable is raised from \$8,000 to \$9,000. When the amount reported for monetary assets and liabilities increases or decreases because of changes in currency exchange rates, a gain or loss is recognized on the income statement. Here, the reported receivable is now \$1,000 higher. The company's financial condition has improved and a gain is recognized. If the opposite occurs and the reported value of monetary assets declines (or the value of monetary liabilities increases), a loss is recognized. The adjusting entry shown in [Figure 7.15 "Adjusting Entry at December 31, Year One—Remeasurement of 100,000 Pesos Receivable"](#) is appropriate to reflect this change.

Figure 7.15 *Adjusting Entry at December 31, Year One—Remeasurement of 100,000 Pesos Receivable*

Accounts Receivable	1,000		(increase an asset—debit)
Gain in Value of Foreign Currency Receivable		1,000	(increase a revenue—credit)

On its balance sheet, this company now reports a receivable as of December 31, Year One, of \$9,000 while its income statement for that year shows sales revenue of \$8,000 as well as the above gain of \$1,000. Although the transaction was actually for 100,000 Mexican pesos, the company records these events in terms of its functional currency (the U.S. dollar) according to the provisions of U.S. GAAP.

TEST YOURSELF

Question:

The Hamerstein Company is considering opening a retail store in Kyoto, Japan. In April of Year One, the company buys an acre of land in Kyoto by signing a note for ninety million Japanese yen to be paid in ten years. On that date, one yen can be exchanged for \$0.012. By the end of Year One, one yen can be exchanged for \$0.01. In connection with the company's Year One financial statements, which of the following statements is not true?

- a. The company should report a loss because it held land during a time when the exchange rates changed.
- b. The company should report the note payable as \$900,000 on its year-end balance sheet.
- c. The company should report the land as \$1.08 million on its year-end balance sheet.
- d. The company should report a \$180,000 gain because it held the note payable during this time.

Answer:

The correct answer is choice d: The company should report a \$180,000 gain because it held the note payable during this time.

Explanation:

Because land is not a monetary account, it is initially recorded at \$1.08 million (90 million yen \times \$0.012). That figure is never changed by future currency exchange rate fluctuations. Thus, no gain or loss is created by the land account. As a monetary account, the note payable is initially recorded at the same \$1.08 million but is adjusted to \$900,000 at the end of the year (90 million yen \times \$0.01). That \$180,000 drop in the reported liability creates a reported gain of that amount.

KEY TAKEAWAY

Foreign currency balances are prevalent because many companies buy and sell products and services internationally. Although these transactions are frequently denominated in foreign currencies, they are reported in U.S. dollars when financial statements are produced for distribution in this country. Because exchange rates often change rapidly, many equivalent values could be calculated for these balances. According to U.S. GAAP, monetary assets and liabilities (cash as well as receivables and payables to be settled in cash) are updated for reporting purposes using the exchange rate at the current date. Changes in these balances create gains or losses to be recognized on the income statement. All other foreign currency balances (land, buildings, sales, expenses, and the like) continue to be shown at the historical exchange rate in effect at the time of the original transaction.

7.6 A Company's Vital Signs—Accounts Receivable

LEARNING OBJECTIVES

At the end of this section, students should be able to meet the following objectives:

1. Compute the current ratio, the amount of working capital, and other figures pertinent to the reporting of accounts receivable.
2. Describe the implications of a company's current ratio.
3. Describe the implications of a company's working capital balance.
4. Calculate the amount of time that passes before the average accounts receivable is collected and explain the importance of this information.
5. List techniques that a business can implement to speed up collection of its accounts receivable.

Current Ratio and Working Capital

Question: Individuals analyze financial statements to make logical and appropriate decisions about a company's financial health and well being. This process is somewhat similar to a medical doctor performing a physical examination on a patient. The doctor often begins by checking various vital signs, such as heart rate, blood pressure, weight, cholesterol level, and body temperature, looking for any signs of a serious change or problem. For example, if a person's heart rate is higher than expected or if blood pressure has increased significantly since the last visit, the doctor will investigate with special care. In analyzing the financial statements of a business or other organization, are there vital signs that should be measured and studied by a decision maker?

11. Formula measuring an organization's liquidity (the ability to pay debts as they come due); calculated by dividing current assets by current liabilities.

12. Formula measuring an organization's liquidity (the ability to pay debts as they come due); calculated by subtracting current liabilities from current assets.

Answer: Financial statements are extremely complex and most analysts have certain preferred figures or ratios that they believe are especially significant when investigating a company. For example, in a previous chapter, both the **current ratio**¹¹ and the amount of **working capital**¹² were computed using the balances reported for current assets (those that will be used or consumed within one year) and current liabilities (those that will be paid within one year):

current ratio = current assets/current liabilities

working capital = current assets – current liabilities

These figures reflect a company's liquidity, or its ability to pay its debts as they come due and still have enough monetary resources available to generate profits in the near future. Both investors and creditors frequently calculate, study, and analyze these two amounts. They are vital signs that help indicate the financial health of a business and its future prospects.

For example, on December 31, 2010, **Avon Products** reported a current ratio of 1.42 to 1.00 (current assets of \$4.184 billion divided by current liabilities of \$2.956 billion), which was down from 1.84 to 1.00 at the end of 2009. On the same date at the end of 2010, **Caterpillar** disclosed working capital of \$9.790 billion (current assets of \$31.810 billion less current liabilities of \$22.020 billion). **Caterpillar's** working capital increased by over \$1.5 billion from the previous year when it was reported as \$8.242 billion.

Whether these numbers are impressive or worrisome almost always depends on a careful comparison with other similar companies and results from prior years.

TEST YOURSELF

Question:

The Winsolie Corporation reports the following asset balances: cash—\$4,000, accounts receivable, net—\$17,000, inventory—\$13,000, and land—\$22,000. The company also has the following liabilities: salaries payable—\$6,000, accounts payable—\$4,000, note payable, due in seven months—\$5,000, and note payable, due in five years—\$14,000. What is the company's current ratio?

- a. 1.400 to 1.000
- b. 1.931 to 1.000
- c. 2.267 to 1.000
- d. 3.733 to 1.000

Answer:

The correct answer is choice c: 2.267 to 1.000.

Explanation:

Current assets are usually those that will be used or consumed within one year. For this company, that is cash, accounts receivable, and inventory that total to \$34,000. Current liabilities are debts that will be paid within one year: salaries payable of \$6,000, accounts payable of \$4,000, and note payable due in seven months of \$5,000. The current liability total for this company is \$15,000. Thus, the current ratio is \$34,000 divided by \$15,000 or 2.267 to 1.000.

Computing the Age of Accounts Receivable

Question: This chapter deals with the financial reporting of accounts receivable. What other vital signs might be studied in connection with a company's receivable balance?

Answer: One indication of a company's financial health is its ability to collect receivables in a timely fashion. Money cannot be put to productive use until it is received. For that reason, companies work to encourage customers to make

payments as quickly as possible. Furthermore, as stated previously in this chapter, the older a receivable becomes, the more likely it is to prove worthless.

Thus, interested parties (both inside a company as well as external) frequently monitor the time taken to collect receivables. Quick collection is normally viewed as desirable, whereas a slower rate can be a warning sign of possible problems. However, as with most generalizations, exceptions do exist so further investigation is always advised.

The age of a company's receivables is determined by dividing the receivable balance by the average sales made per day. Credit sales are used in this computation if known, but the total sales figure often has to serve as a substitute because of availability. The sales balance is first divided by 365 to derive the amount of sales per day. This daily balance is then divided into the reported receivable to arrive at the average number of days that the company waits to collect its money. A significant change in the age of receivables will be quickly noted by almost any interested party.

age of receivables = receivables/sales per day

For example, if a company reports sales for the current year of \$7,665,000 and currently holds \$609,000 in receivables, it requires 29 days on the average to collect a receivable.

sales per day = \$7,665,000/365 or \$21,000

age of receivables = \$609,000/\$21,000 or 29 days

As a practical illustration, for the year ended January 28, 2011, **Dell Inc.** reported net revenue of \$61.494 billion. The January 28, 2011, net accounts receivable balance for the company was \$6.493 billion, which was up from \$5.837 billion the year before. The daily sales figure is \$168.5 million (\$61.494 billion/365 days). Thus, the average age of **Dell's** ending receivable balance at this time was 38.5 days (\$6.493 billion/\$168.5 million). By itself, this figure is neither good nor bad. An assessment depends on the terms given to customers, the time of collection in other recent years, and comparable figures for companies in the same industry as **Dell**.

13. Formula measuring speed of an organization's collection of its accounts receivable; calculated by dividing sales by the average accounts receivable balance for the period.

A similar figure is referred to as the **receivables turnover**¹³ and is computed by the following formula:

receivables turnover = sales/average receivables.

For **Dell Inc.**, the average receivable balance for this year was \$6.165 billion ($[\$6.493 \text{ billion} + \$5.837]/2$). The receivables turnover for **Dell** for this period of time was 9.97 times:

$$\text{receivables turnover} = \$61.494 \text{ billion} / \$6.165 \text{ billion} = 9.97.$$

The higher the receivable turnover, the faster collections are being received.

TEST YOURSELF

Question:

The Yang Corporation recently extended the time that customers are given to pay their accounts receivable. Investors are interested in the impact of that decision. In Year One, the company had \$730,000 in sales with \$58,000 in accounts receivable on hand at the end of the year. In Year Two, sales grew to \$1,095,000 but accounts receivable also rose to \$114,000. Which of the following statements is true?

- a. The receivables turnover for Year Two was 9.61 times.
- b. The age of the receivables at the end of Year Two was thirty-three days.
- c. The receivables turnover for Year Two was 10.18 times.
- d. The age of the receivables at the end of Year Two was thirty-eight days.

Answer:

The correct answer is choice d: The age of the receivables at the end of Year Two was thirty-eight days.

Explanation:

The receivables turnover for Year Two is the sales for the year (\$1,095,000) divided by the average receivable balance of \$86,000 ($[\$58,000 + \$114,000] \text{ divided by } 2$). The receivables turnover is 12.73 ($\$1,095,000 / \$86,000$). Computing the age of receivables begins by calculating the average sales per day as \$3,000 ($\$1,095,000 / 365 \text{ days}$). That figure is divided into the ending receivable of \$114,000 to arrive at thirty-eight days. On average, that is the time between a sale being made and cash collected.

Reducing the Time It Takes to Collect Receivables

*Question: If members of management notice that the **average age of accounts receivable**¹⁴ for their company is getting older, what type of remedial actions can be taken? How does a company reduce the average number of days that are required to collect receivables so that cash is available more quickly?*

Answer: A number of strategies can be used by astute officials to shorten the time between a sale being made and cash collected. The following are just a few common examples. Unfortunately, all such actions have a cost and can cause a negative impact on the volume of sales or create expenses that might outweigh the benefits of quicker cash inflows. Management should make such decisions with extreme care.

- Require a tighter review of credit worthiness before selling to a customer on credit. If sales on account are only made to individuals and companies with significant financial strength, the quantity of delayed payments should decline.
- Work to make the company's own accounting system more efficient so that bills (sales invoices) are sent to customers in a timely manner. Payments are rarely made—even by the best customers—before initial notification is received. If the billing system is not well designed and effectively operated, that process can be unnecessarily slow.
- Offer a discount if a customer pays quickly. This action has an obvious cost, but such reductions provide a strong incentive to the customer for fast action.
- Send out second bills more quickly. Customers often need reminding that a debt is due. An invoice marked “late” or “overdue” will often push the recipient into making payment. A company might decide to send out this notice after 30 days—as an example—rather than wait for 45 days.
- Instigate a more aggressive collection policy for accounts that are not paid on time. Companies use numerous strategies to “encourage” payment and begin applying these steps at an earlier point in time.

14. Formula measuring the average length of time it takes to collect cash from sales; calculated by dividing either accounts receivable at a point in time or the average accounts receivable for the period by the average sales made per day.

Most companies monitor the age of receivables very carefully and use some combination of these strategies whenever any sign of problem is noted.

KEY TAKEAWAY

Decision makers analyzing a particular company often look beyond reported balances in search of clues as to financial strengths or weaknesses. Both the current ratio and the amount of working capital provide an indication of short-term liquidity (ability to pay debts as they come due) and profitability. The age of receivables and the receivables turnover are measures of the speed of cash collections. Any change in the time needed to obtain payments from customers should be carefully considered when studying a company. Management can work to shorten the number of days it takes to receive cash by altering credit, billing, and collection policies or possibly by offering discounts or other incentives for quick payment.

Talking with a Real Investing Pro (Continued)

Following is a continuation of our interview with Kevin G. Burns.

Question: Let's say that you are analyzing a particular company and are presently looking at its current assets. When you are studying a company's accounts receivable, what types of information tend to catch your attention?

Kevin Burns: I look at three areas specifically. First, how long does it take for the company to collect its accounts receivable especially compared to previous periods? I really don't like to see radical changes in the age of receivables without some logical explanation. Second, how lenient is the company in offering credit? Are they owed money by weak customers or a small concentration of customers? Third, does the company depend on interest income and late charges on their accounts receivable for a significant part of their revenue? Some companies claim to be in business to sell products but they are really finance companies because they make their actual profits from finance charges that are added to the accounts receivable. It is always important to know how a company earns money.

Video Clip

[\(click to see video\)](#)

Professor Joe Hoyle talks about the five most important points in [Chapter 7 "In Financial Reporting, What Information Is Conveyed about Receivables?"](#).

7.7 End-of-Chapter Exercises

QUESTIONS

1. A company reports a balance of \$3.6 million for its “accounts receivable.” What is meant by accounts receivable? How are accounts receivable reported in a set of financial statements?
2. How is the net realizable value of a company’s accounts receivable determined?
3. The Sylvester Corporation has accounts receivable that total \$4.5 million. However, the company does not expect to collect that much cash. Identify several factors that a company might consider when trying to determine the amount of these accounts receivable that will ultimately be collected.
4. What does the account “allowance for doubtful accounts” represent?
5. In financial reporting, what is the purpose of a “contra account?”
6. According to the matching principle, when should bad debt expense be reported?
7. Why do companies set up an allowance for doubtful accounts instead of just decreasing accounts receivable for the expected amount of uncollectible balances?
8. The Abraham Corporation discovered that one of its customers went into bankruptcy and will not be able to pay the \$8,700 balance that it owes. What entry does a company like Abraham make to write off a specific account receivable that has proven to be uncollectible?
9. A company writes off a \$12,000 receivable as uncollectible. How does that entry change the amount reported by the company as its net receivable balance?
10. A company writes off a \$2,200 receivable as uncollectible. How does that entry impact the reported net income of this company at that time?
11. In Year One, Jordan Company writes off nine accounts with a total balance of \$11,675 as uncollectible. During Year Two, one of these accounts is paid because the debtor company has received financing and grown in strength. What entry does Jordan make when this cash is received?
12. In Year One, the Castagna Company reported bad debt expense of \$37,000. However, in Year Two, the economy was weak and the company actually wrote off \$43,000 in accounts as uncollectible. The \$37,000 figure continued to be reported in the Year One financial statements. Why did Castagna not change the balance reported for Year One now that the actual number is known?
13. The Nagano Corporation is preparing financial statements for the latest year. The company sells on credit and, thus, must anticipate the amount of its bad accounts. What are the most common methods for making this estimation?

14. At the end of Year Two, before making adjusting entries and preparing financial statements, a company's allowance-for-doubtful-accounts T-account usually has a balance in it. What does that balance reflect?
15. In its Year Two financial statements, the Heather Company reported bad debt expense of \$35,000 and an allowance for doubtful accounts of \$34,000. Why are these figures not identical?
16. What is the purpose of a company maintaining an accounts receivable subsidiary ledger?
17. Why does the reporting of balances denominated in a foreign currency create challenges for the accountant when producing financial statements?
18. What are monetary assets and monetary liabilities?
19. The Lenoir Corporation has 47 T-accounts in its general ledger. Most of these balances are denominated in U.S. dollars, its functional currency. Some of the balances are dominated in a foreign currency. Which of these foreign currency balances are remeasured at historical exchange rates and which are remeasured at the current exchange rate for reporting purposes?
20. How is the current ratio calculated? How is the amount of working capital determined? What do these two computed amounts indicate about a company's financial health?
21. How do decision makers determine the average age of a reporting entity's accounts receivable?
22. How do decision makers determine the receivables turnover based on the information reported by a company?
23. The Pierce Company sells its merchandise on credit. At the end of Year One, company customers took an average of 23.3 days to pay for their goods. However, recently, that period has jumped to 27.5 days which concerns company officials. What actions could they take to reduce the number of days back to 23.3?

TRUE OR FALSE

1. ____ Companies use two separate T-accounts in order to monitor and report accounts receivable at its net realizable value.
2. ____ Bad debt expense is reported on the balance sheet as a contra account to reduce accounts receivable.
3. ____ Bad debt expense should be reported in the same period as related revenue regardless of when the receivable is determined to be uncollectible.
4. ____ A company has been in business for several years. In the current year, prior to preparing adjusting entries so that financial statements can be prepared, the bad expense T-account should report a zero balance.
5. ____ A company has been in business for several years. At the end of the current year, prior to any adjusting entries being prepared, the allowance for doubtful accounts holds a credit balance of \$5,000. The previous year estimation of uncollectible accounts was too low.
6. ____ According to U.S. GAAP, all companies are required to perform their estimation of uncollectible accounts in the same manner.
7. ____ On a set of financial statements, the amount of bad debt expense and the ending balance in the allowance for doubtful accounts will frequently differ.
8. ____ A company ends the current year with sales of \$600,000, accounts receivable of \$100,000, and an allowance for doubtful accounts with a \$1,000 debit balance. Bad debts are estimated to be 3 percent of sales. On financial statements, the allowance for doubtful accounts will be reported as having an \$18,000 credit balance.
9. ____ A company ends the current year with sales of \$600,000, accounts receivable of \$100,000, and an allowance for doubtful accounts with a \$1,000 credit balance. Bad debts are estimated to be 3 percent of sales. On financial statements, bad debt expense will be reported as having an \$18,000 debit balance.
10. ____ A company ends the current year with sales of \$600,000, accounts receivable of \$100,000, and an allowance for doubtful accounts with a \$1,000 debit balance. Uncollectible accounts at the end of the year are estimated to be 6 percent of receivables. Bad debt expense will be reported on the income statement as \$7,000.
11. ____ A company ends the current year with sales of \$600,000, accounts receivable of \$100,000, and an allowance for doubtful accounts with a \$1,000 credit balance. Uncollectible accounts at the end of the year are estimated to be 6 percent of receivables. Bad debt expense will be reported on the income statement as \$5,000.

12. ____ A company ends Year Two with bad debt expense of \$29,000 and an allowance for doubtful accounts of \$27,000. On April 8, Year Three, a \$1,900 receivable is written off as uncollectible. Net income is reduced by \$1,900 on that date.
13. ____ A company ends Year Two with bad debt expense of \$35,000 and an allowance for doubtful accounts of \$34,000. On April 12, Year Three, a \$2,300 receivable is written off as uncollectible. The net amount reported for accounts receivable is reduced by \$2,300 on that date.
14. ____ A U.S. company with the U.S. dollar as its functional currency makes a sale in a foreign country and agrees to receive 20,000 vilsecks, the local currency. A vilseck is worth \$0.42 on that date but is worth only \$0.39 later on the balance sheet date. The company should report a loss on its income statement of \$600 as a result of the change in the exchange rate.
15. ____ A U.S. company with the U.S. dollar as its functional currency makes a sale in a foreign country and agrees to receive 20,000 vilsecks, the local currency. A vilseck is worth \$0.42 on that date but is worth only \$0.39 later on the balance sheet date. On its income statement, the company should report a sale of \$7,800.
16. ____ A company makes sales of \$730,000 in Year Three. At the end of Year Three, the receivable balance is \$48,000. The average customer at that time is taking 27 days to make payment to the company.
17. ____ A company has a current ratio of 3.0:1.0. An account receivable of \$3,800 is collected. That transaction will cause an increase in the current ratio.
18. ____ A company has receivables of \$300,000 on the first day of the year. During the year the company makes sales of \$800,000 but only collects cash of \$600,000. No bad debts were expected or uncovered during the year. The receivables turnover for the period was 2.

MULTIPLE CHOICE

1. Which of the following would **not** be used to help a company determine the net realizable value of its accounts receivable?
 - a. Industry averages and trends
 - b. The company's ability to pay its own debts
 - c. Current economic conditions
 - d. Efficiency of the company's collection procedures

2. Which accounting principle guides the timing of the reporting of bad debt expense?
 - a. Matching principle
 - b. Going concern principle
 - c. Cost/benefit analysis
 - d. Measurement principle

3. SunFun Company manufactures lawn furniture that is sold to retail stores. During October, Year One, SunFun sold furniture to Home Place on account in the amount of \$40,000. At the end of Year One, the balance was still outstanding. In March, Year Two, SunFun decided to write off this particular account as it did not appear that the balance would ever be collected. Choose the correct journal entry for this write off.

a. *Figure 7.16*

Allowance for Doubtful Accounts Accounts Receivable	40,000	40,000
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b. *Figure 7.17*

Bad Debt Expense Allowance for Doubtful Accounts	40,000	40,000
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c. *Figure 7.18*

Bad Debt Expense	40,000	
Accounts Receivable		40,000

d. *Figure 7.19*

Cash	40,000	
Accounts Receivable		40,000

4. A company is preparing to produce a set of financial statements. The balance sheet being created shows a total for assets of \$800,000 and a total for liabilities of \$600,000. Just prior to the end of the year, one account receivable is determined to be uncollectible and is written off. Another receivable for \$5,000 is collected. No other event or adjustment is made. What should the company now report as the total of its assets after recording these final two events?
 - a. \$784,000
 - b. \$789,000
 - c. \$800,000
 - d. \$805,000

5. Gladson Corporation reports bad debt expense using the percentage of sales method. At the end of the year, Gladson has \$450,000 in accounts receivable and a \$4,000 credit in its allowance for doubtful accounts before any entry is made for bad debts. Sales for the year were \$1.9 million. The percentage that Gladson has historically used to calculate bad debts is 1 percent of sales. Which of the following is true?
 - a. Gladson's bad debt expense for the year is \$15,000.
 - b. Gladson's bad debt expense for the year is \$23,000.
 - c. Gladson would report an allowance for doubtful accounts of \$23,000.
 - d. Gladson would report an allowance for doubtful accounts of \$19,000.

6. On the first day of Year Two, the Raleigh Corporation holds accounts receivable of \$500,000 and an allowance for doubtful accounts of \$25,000 for a net realizable value of \$475,000. During the year, credit sales were \$520,000, and cash collections amounted to \$440,000. In addition, \$28,000 in receivables were written off as uncollectible. If 8 percent of sales is estimated as uncollectible each year, what is the net accounts receivable balance reported at the end of Year Two on Raleigh's balance sheet?
 - a. \$510,400
 - b. \$513,400
 - c. \$516,400
 - d. \$519,400

7. On the first day of Year Two, the Richmond Corporation holds accounts receivable of \$400,000 and an allowance for doubtful accounts of \$23,000 for a net realizable value of \$377,000. During the year, credit sales were \$450,000 and cash collections amounted to \$380,000. In addition, \$25,000 in receivables were written off as uncollectible. If 6 percent of ending accounts receivable is estimated as uncollectible, what bad debt expense is reported for Year Two on Richmond's income statement?
 - a. \$24,700
 - b. \$25,000
 - c. \$28,700
 - d. \$30,200

8. In Year One, the Simon Company wrote off a \$14,000 receivable as uncollectible. However, on May 17, Year Two, the customer returned and paid Simon the entire amount. Which of the following is correct as a result of this payment?
 - a. Accounts receivable goes down, but the allowance-for-doubtful-accounts account is not changed.
 - b. Accounts receivable goes down, and the allowance-for-doubtful-accounts account also goes down.
 - c. Accounts receivable stays the same, but the allowance for doubtful accounts goes up.

- d. Accounts receivable stays the same, and the allowance for doubtful accounts also stays the same.
9. A company ends Year Three with accounts receivable of \$300,000, an allowance for doubtful accounts of \$15,000, sales of \$900,000, and bad debt expense of \$27,000. In Year Four, sales of \$1 million more are made. Cash collections are \$800,000, and an additional \$13,000 in receivables are written off as uncollectible. The company always estimates that 5 percent of its ending accounts receivable will prove to be bad. On December 31, Year Four, company officials find another \$6,000 in receivables that might well be uncollectible. However, after further review, these receivables were not written off at this time. By how much did that decision not to write off these accounts change reported net income for Year Four?
- a. Reported net income was not affected.
 - b. The decision made reported net income \$300 higher.
 - c. The decision made reported net income \$5,700 higher.
 - d. The decision made reported net income \$6,000 higher.
10. A company ends Year Three with accounts receivable of \$300,000, an allowance for doubtful accounts of \$15,000, sales of \$900,000, and bad debt expense of \$27,000. In Year Four, sales of \$1 million more are made. Cash collections are \$800,000 and an additional \$13,000 in receivables are written off as uncollectible. The company always estimates that 3 percent of its sales each year will eventually prove to be bad. On December 31, Year Four, company officials find another \$6,000 in receivables that might well be uncollectible. However, after further review, these receivables were not written off at this time. By how much did that decision not to write off these accounts change reported net income for Year Four?
- a. Reported net income was not affected.
 - b. The decision made reported net income \$300 higher.
 - c. The decision made reported net income \$5,700 higher.
 - d. The decision made reported net income \$6,000 higher.
11. A U.S. company (with the U.S. dollar as its functional currency) buys inventory and immediately sells it to a customer in France

on November 28, Year One, for 10,000 euros. The inventory had cost 6,000 euros several days before, an amount which had been paid on the day of purchase. This merchandise is sold on account with the money to be paid by the customer on January 19, Year Two. On November 28, Year One, 1 euro was worth \$2.00 whereas on December 31, Year One, 1 euro is worth \$1.90. What is the impact on net income of the change in the exchange rate?

- a. \$600 gain
 - b. \$600 loss
 - c. \$1,000 gain
 - d. \$1,000 loss
12. On December 1, Year One, a company sells a service for 10,000 scoobies (the currency of the country where the sale was made) to be collected in six months. On that same day, the company pays 10,000 scoobies in cash for some inventory. This inventory was still held at year-end. On December 1, Year One, one scoobie is worth \$0.61. By December 31, Year One, one scoobie is worth \$0.73. The company is located in Ohio and is preparing to produce financial statements for Year One in terms of U.S. dollars. Which of the following will be reported on its balance sheet?
- a. Accounts receivable will be reported at \$6,100, and inventory will also be reported as \$6,100.
 - b. Accounts receivable will be reported at \$7,300, but inventory will be reported as \$6,100.
 - c. Accounts receivable will be reported at \$6,100, but inventory will be reported as \$7,300.
 - d. Accounts receivable will be reported at \$7,300, and inventory will also be reported as \$7,300.
13. The New Orleans Company has more current assets than current liabilities. Near the end of the current year, the company pays off its rent payable for \$5,000. What is the impact of this payment on the company current ratio?
- a. No change occurs in the current ratio
 - b. Current ratio goes up
 - c. Current ratio goes down

- d. The impact on the current ratio cannot be determined based on the information provided.
14. Darlene Corporation has \$300,000 in assets, 30 percent of which are current, and \$100,000 in liabilities, 40 percent of which are current. Which of the following is true?
- a. Darlene's current ratio is 3 to 1.
 - b. Darlene's working capital is \$200,000.
 - c. Darlene's working capital is \$50,000.
 - d. The current ratio and working capital are measures of a company's profitability.
15. Fifer Inc. began the current year with \$450,000 in accounts receivable and ended the year with \$590,000 in accounts receivable and \$4 million in sales. Last year Fifer's age of ending receivables was forty-six days and its receivables turnover was six times. Which of the following is **not** true?
- a. Fifer's age of ending receivables is 54 days.
 - b. Fifer's receivables turnover is 7.69 times.
 - c. Fifer's age of ending receivables is less than it was last year.
 - d. External decision makers monitor the time it takes a company to collect its receivables.
16. Company A made sales this year of \$400,000 and has ending accounts receivable of \$120,000. Company Z made sales this year of \$900,000 and has ending accounts receivable of \$280,000. Which of the following is true?
- a. It takes Company Z approximately 4 days longer to collect its accounts receivable than it takes Company A.
 - b. It takes Company A approximately 4 days longer to collect its accounts receivable than it takes Company Z.
 - c. It takes Company Z approximately 13 days longer to collect its accounts receivable than it takes Company A.
 - d. It takes Company A approximately 13 days longer to collect its accounts receivable than it takes Company Z.

VIDEO PROBLEMS

Professor Joe Hoyle discusses the answers to these two problems at the links that are indicated. After formulating your answers, watch each video to see how Professor Hoyle answers these questions.

1. Your roommate is an English major. The roommate's parents own a chain of ice cream shops throughout Florida. One day, while sitting in a restaurant waiting for a pizza, your roommate poses this question: "This year, my parents began to furnish ice cream for a number of local restaurants. It was an easy way for them to expand their business. But, for the first time, they were making sales on credit. This seems to have caused some confusion when they started to produce financial statements. In the past, all sales were made for cash. However, this year they made \$300,000 in sales to these restaurants on credit and they are still owed \$90,000. I know they are worried about some of those accounts proving to be bad because of the economic times. In fact, one restaurant that owed them \$2,000 filed for bankruptcy last fall and they didn't get a penny of what they were owed. How in the world do they report money that they have not received yet and might never receive?" How would you respond?

[\(click to see video\)](#)

2. Your uncle and two friends started a small office supply store several years ago. The company has expanded and now has several large locations. All sales to other companies are made on credit. Your uncle knows that you are taking a financial accounting class and asks you the following question: "When we sell on credit, we give customers 30 days to pay. We monitor our customers very carefully and, consequently, we have very few bad debts. Our accountant came to us last week and said that our average customer used to pay us in 22 days but recently that has changed to 27 days. How did he figure that out? And, so what? As long as we get paid, why should I care? All I want is to make sure we get our money. But, if we do need to get paid faster, what am I supposed to do? The customers are still paying within the 30 days that we allow them so why should this make any difference?" How would you respond?

[\(click to see video\)](#)

PROBLEMS

1. Nuance Company had net credit sales for the year of \$500,000. Nuance estimates that 2 percent of its net credit sales will never be collected.
 - a. Prepare the entry to record Nuance's bad debt expense for the year.
 - b. Nuance had accounts receivable of \$100,000 at the end of the year. Show how the net accounts receivable balance would be reported on the balance sheet. Assume that the allowance for doubtful accounts had an unadjusted credit balance at the end of the year of \$1,000.
 - c. Why is the accounts receivable balance shown at net rather than just showing the full amount?

2. Assume that Nuance in number 1 used the percentage of receivables method to estimate uncollectible accounts instead of the percentage of sales method. Nuance assumes that 5 percent of accounts receivable will never be collected.
 - a. Prepare the entry to record Nuance's bad debt expense for the year.
 - b. Show how the net accounts receivable balance would be reported on the balance sheet.
 - c. Why are companies allowed to choose between the percentage of sales and the percentage of receivables method?

3. The Alfonso Corporation begins operations in Year One. The company makes credit sales of \$800,000 each year while collecting cash of \$430,000. Every year, receivables of \$31,000 are written off as being doubtful. Company officials estimate that 5 percent of all credit sales will eventually prove to be uncollectible. What figures will be reported in the company's Year Two financial statements in connection with these credit sales?

4. The Fallston Corporation begins operations in Year One. The company makes credit sales of \$1.2 million each year while collecting cash of \$800,000. Every year, receivables of \$30,000 are written off as being doubtful. Company officials estimate that 5 percent of ending accounts receivable will eventually prove to be uncollectible. What figures will be

reported in the company's Year Two financial statements in connection with these credit sales?

5. Ray's GamePlace sells all the hottest gear and video games. On January 1, Year Three, Ray's had the following account balances:

Figure 7.20

Accounts Receivable	\$27,000
Less Allowance for Doubtful Accounts	(4,000)
Net Accounts Receivable	<u>\$23,000</u>

- a. During Year Three, Ray's wrote off \$6,000 in uncollectible accounts. Make this journal entry.
 - b. One account in the amount of \$500 that had been written off in (a) above was later collected during the year. Make the journal entries to reinstate the account and show its collection.
 - c. During Year Three, Ray's made credit sales of \$145,000 and collected \$115,000 of accounts receivable. Record these journal entries.
 - d. At the end of the year, Ray's determines that approximately 7 percent of its ending accounts receivable balance will not be collected. Make the necessary journal entry.
6. The Lawndale Company starts the current year with the following T-account balances:
- Accounts receivable = \$300,000 debit
 - Allowance for doubtful accounts = \$15,000 credit
- During the year, the following events take place:
- \$18,000 in receivables are written off as uncollectible.
 - Credit sales of \$800,000 are made
 - Cash of \$680,000 is collected from the receivables
 - A \$2,000 receivable written off above is collected (amount is not included in the \$680,000 figure).

Company officials believe that 5 percent of the ending accounts receivable will eventually prove to be uncollectible.

- a. On its balance sheet, what is reported as the net accounts receivable balance?
 - b. On its income statement, what is reported for bad debt expense?
7. Company A begins Year Two with accounts receivable of \$200,000 and an allowance for doubtful accounts of \$10,000 (credit balance). Company Z had the exact same balances. During Year Two, Company A made credit sales of \$700,000 and cash collections on those accounts of \$500,000. Uncollectible accounts of \$19,000 were written off during the year. However, one of these accounts (\$5,000) was actually collected later in the year (for convenience, that \$5,000 collection was not included in the \$500,000 figure above). Company Z has exactly the same transactions. In fact, the operations of these two companies are exactly the same. Officials for Company A anticipate that 2 percent of credit sales will prove uncollectible. As a result of this information (and other transactions), Company A reported net income of \$100,000. Officials for Company Z believe that 5 percent of ending accounts receivable will prove to be uncollectible. What net income will Company Z report?
8. The Springs Corporation started Year Four with \$200,000 in its accounts receivable T-account and an allowance for doubtful accounts of \$10,000 (credit balance). During that year, the company made additional sales of \$500,000 while collecting cash of \$400,000. In addition, \$7,000 in accounts were written off as uncollectible. Company officials for Springs estimated that 3 percent of sales would eventually prove to be uncollectible based on past history and current economic conditions. The adjusting entry was prepared and preliminary financial statements were created. These statements showed net income of \$80,000 and a total for all reported assets of \$460,000. At the last moment, on December 31, Year Four, company officials discovered another receivable of \$1,000 that needed to be written off because the debtor went bankrupt and was liquidated. What should the company report as its net income for the year and as its total for all reported assets as of the end of that year?
9. The Wallace Corporation started Year Four with \$500,000 in its accounts receivable T-account and an allowance for doubtful accounts of \$20,000 (credit balance). During that year, the company made additional sales of \$1.6 million while collecting cash of \$1.3 million. In addition, \$24,000 in

accounts were written off as uncollectible. Company officials for Wallace estimated that 4 percent of ending receivables would eventually prove to be uncollectible based on past history and current economic conditions. The adjusting entry was prepared and preliminary financial statements were created. These statements showed net income of \$220,000 and a total for all reported assets of \$1.1 million. At the last moment, on December 31, Year Four, company officials discovered another receivable of \$1,000 that needed to be written off because the debtor went bankrupt and was liquidated. What should the company report as its net income for the year and as its total for all reported assets as of the end of that year?

10. On November 1, Year One, a U.S. company acquires 1,000 widgets from a company in France for 8,000 euros on credit. The company still holds all of this inventory on December 31. The debt has not yet been paid. The company is getting ready to prepare its Year One financial statements in its functional currency, the U.S. dollar. On November 1, 1 euro was worth \$1.72, but on December 31, 1 euro is worth only \$1.61. What is reported on the company's Year One income statement? What is reported on the company's balance sheet as of December 31, Year One?
11. Medwear Corporation is a multinational dealer of uniforms for medical personnel. Medwear is headquartered in the United States and uses U.S. dollars as its functional currency. On March 17, Medwear sells a large quantity of uniforms to a hospital in Brussels, Belgium for exactly 267,000 euros to be paid in 45 days. On the date of the sale, the exchange rate was \$1.32 for every euro.
 - a. Record this transaction for Medwear on March 17 assuming that the uniforms are purchased on account.
 - b. On March 31, Medwear prepares financial statements. On this date, the exchange rate is \$1.27 per euro. Record the necessary adjusting entry for Medwear on this date.
12. The Boezi Corporation is beginning to report its financial statements at the end of Year Six. Preliminary information indicates that the company holds \$90,000 in current assets and \$210,000 in noncurrent assets. The company also plans to report current liabilities of \$40,000 and noncurrent liabilities of \$160,000. However, at the very end of the year, two final transactions take place. First, a \$12,000 payment is made on an account payable. Second, a \$21,000 collection is received from an account receivable.

- a. After recording these two transactions, what should the company report as the amount of its working capital?
 - b. After recording these two transactions, what should the company report as its current ratio?
13. On January 1, Year Two, a company reports accounts receivable of \$83,000. During Year Two, the company makes new credit sales of \$511,000 while collecting cash of \$437,000. No uncollectible accounts are expected or discovered. At the end of Year Two, how long does the average customer take to pay an account receivable balance?
 14. On January 1, Year Two, a company reports accounts receivable of \$83,000. During Year Two, the company makes new credit sales of \$511,000 while collecting cash of \$437,000. No uncollectible accounts are expected or discovered. What is the receivable turnover for Year Two?
 15. In Chapter 4 "How Does an Organization Accumulate and Organize the Information Necessary to Create Financial Statements?", Heather Miller started her own business, Sew Cool. The financial statements for December are shown next.

Figure 7.21

Sew Cool Income Statement As of December 31, 20X8	
Revenue	\$4,000
Cost of Goods	(2,000)
Gross Profit	<u>2,000</u>
Other Expenses	(1,695)
Earnings before Tax	<u>305</u>
Tax Expense	(107)
Net Income	<u>\$198</u>

Figure 7.22

Sew Cool Stmt. of Retained Earnings As of December 31, 20X8	
Retained Earnings, December 1, 20X8	\$500
Net Income	198
Dividends	<u>(158)</u>
Retained Earnings, December 31, 20X8	\$540

Figure 7.23

Sew Cool Balance Sheet December 31, 20X8			
Assets		Liabilities	
Current		Current	
Cash	\$940	Accounts Payable	\$900
Accounts Receivable	500	Income Tax Payable	<u>120</u>
Less Allowance for Doubtful Accounts	<u>(20)</u>	Total Current Liabilities	<u>\$1,020</u>
Net Accounts Receivable	480		
Inventory	<u>700</u>		
Total Current Assets	\$2,120		
Noncurrent		Noncurrent	
Equipment	\$1,000	Notes Payable	\$1,060
		Owners' Equity	
		Capital Stock	\$500
		Retained Earnings	<u>540</u>
		Total Owners' Equity	<u>\$1,040</u>
Total Assets	\$3,120	Total Liabilities & Owners' Equity	\$3,120

Based on the financial statements determine the following:

- Current ratio
- Working capital
- Age of receivables
- Receivables turnover—assuming that accounts receivable on January 1, 20X8 were \$460.

COMPREHENSIVE PROBLEM

This problem will carry through over several chapters to enable students to build their accounting skills using knowledge gained in previous chapters.

In Chapter 5 "Why Is Financial Information Adjusted Prior to the Production of Financial Statements?", Leon Jackson started Webworks, a Web site design and maintenance firm. At that time, an adjusted trial balance was prepared for June.

Here are Webworks financial statements as of June 30.

Figure 7.24

Webworks Income Statement As of June 30	
Revenue	\$1,050
Expenses	(380)
Earnings before Tax	<u>670</u>
Tax Expense	(200)
Net Income	<u>\$ 470</u>

Figure 7.25

Webworks Stmt. of Retained Earnings As of June 30	
Retained Earnings, June 1	\$0
Net Income	<u>470</u>
Retained Earnings, June 30	<u>\$470</u>

Figure 7.26

Webworks Balance Sheet June 30			
Assets		Liabilities	
Current		Current	
Cash	\$9,800	Accounts Payable	\$280
Accounts Receivable	450	Salaries Payable	100
Supplies Inventory	<u>100</u>	Unearned Revenue	<u>500</u>
Total Current Assets	\$10,350	Total Current Liabilities	\$880
Noncurrent		Noncurrent	
Equipment	\$3,000	Notes Payable	\$10,000
		Owners' Equity	
		Capital Stock	\$2,000
		Retained Earnings	<u>470</u>
		Total Owners' Equity	\$2,470
Total Assets	\$13,350	Total Liabilities & Owners' Equity	\$13,350

The following events occur during July:

- a. Webworks purchases additional equipment for \$4,000 cash.
- b. Webworks purchases supplies worth \$90 on account.
- c. Webworks pays off accounts payable and salaries payable from June.
- d. Webworks starts and completes four more sites and bills clients for \$1,800.
- e. In June, Webworks received \$500 in advance to design a restaurant Web site. Webworks completes this site during July.
- f. Webworks collects \$1,200 in accounts receivable.
- g. Webworks pays Nancy Po (the company employee hired in June) \$500 for her work during the first three weeks of July.
- h. Webworks receives \$200 in advance to work on a Web site for a local dry cleaner and \$300 in advance to work on a Web site for a local animal hospital. Work will not begin on these Web sites until August.
- i. Leon's parents decide to charge rent after seeing how successful the business is and how much space it is taking up in their house. They all agree that rent will be \$200 per month. Webworks pays \$600 for July, August, and September.
- j. Webworks pays taxes of \$300 in cash.

Required:

- a. Prepare journal entries for the previous events.
 - b. Post the journal entries to T-accounts.
 - c. Prepare an unadjusted trial balance for Webworks for July.
 - d. Prepare adjusting entries for the following and post them to T-accounts.
- k. Webworks owes Nancy Po \$200 for her work during the last week of July.
 - l. Leon's parents let him know that Webworks owes \$150 toward the electricity bill. Webworks will pay them in August.
 - m. Webworks determines that it has \$50 worth of supplies remaining at the end of July.
 - n. Prepaid rent should be adjusted for July's rent.
- o. Leon now believes that the company may not be able to collect all of its accounts receivable. A local CPA helps Leon determine that similar businesses report an allowance for bad debt at an average of 10 percent of their accounts receivable. Webworks will use this same approach.
- e. Prepare an adjusted trial balance.
 - f. Prepare financial statements for July.

RESEARCH ASSIGNMENT

Assume that you take a job as a summer employee for an investment advisory service. One of the partners for that firm is currently looking at the possibility of investing in **eBay Inc.** The partner is a bit concerned about the impact of the recession on this company, especially its accounts receivable. The partner asks you to look at the 2010 financial statements for **eBay Inc.** by following this path:

- Go to <http://www.ebay.com>.
 - At the bottom of this screen, click on “Company Info.”
 - On the left side of the next screen, click on “Investors.”
 - On the left side of the next screen, click on “Annual Reports & Proxy.”
 - In the center of the next screen, click on “2010 Annual Report” to download.
 - Go to page 86 and find the December 31, 2009, and December 31, 2010, balance sheets.
 - Go to page 87 and find the income statement for the year ended December 31, 2010.
 - Go to page 94 and read the note about the composition of the allowance for doubtful accounts.
- a. Using the figures found on the balance sheet and the income statement, determine the number of days **eBay** takes to collect its receivables at the end of 2010.
 - b. Using the figures found on the balance sheet and the income statement, determine the receivables turnover for **eBay** during 2010.
 - c. Using the figures found in the balance sheet and the information in the notes, determine the percentage of receivables as of December 31, 2010 that are expected to be uncollectible.