# ACCOUNTING FOR ACCOUNTS RECEIVABLE

## Key Terms and Concepts to Know

**Accounts Receivable:**
- Result from sales on account (credit sales), not cash sales.
- May also result from credit card sales if there is a delay between when sale is made and when the cash is received from the credit card company.

**Accounting for Uncollectible Accounts:**
- Not all sales on account result in cash being collected from the customer.
- Account receivables that are not collected result in an operating expense.
- The matching principle requires that the expense be recorded in the period of sale, not the period when the account is determined to be uncollectible.
- The Allowance Method is GAAP and fulfills the matching principle.
- The Direct Write-off Method is not GAAP and may not be used unless the expense closely approximates the expense under the Allowance Method.

**Direct write-off method**
- When an account is determined to be uncollectible, the direct write-off method uses the following entry

| | | |
|---|---|---|
| Uncollectible account expense | xxx | |
| Accounts receivable | | xxx |

- This method violates the matching principle as the uncollectible account expense is not recorded in the same period as the related revenue

**Allowance method**
- The allowance method follows the matching principle by recording the uncollectible accounts expense in the same period as the related revenue. The account receivable is still written off in the period it is determined to be uncollectible
- The allowance account functions as a bridge between these two transactions, being credited when the expense is recorded and debited when the uncollectible account is identified

**Determining the Amount of Uncollectible Receivables and Bad Debt Expense:**

- Percent of Sales Method
  - Uses credit sales for the period to estimate bad debt expense for the period.
  - Sometimes referred to as the income statement method.
- Percent of Receivables Method
  - Analyses the balance in Accounts Receivable to estimate the balance in the Allowance for Uncollectible Accounts at the end of the period.
  - Sometimes referred to as the balance sheet method.

**Collection of an account receivable previously written off**

- Two journal entries to record subsequent customer payment: one to re-establish the account receivable and the second to record the receipt of cash

**Accounts Receivable on the Balance Sheet:**

- Net Realizable Value = balance of Accounts Receivable less balance of Allowance account

**Accounts Receivable Turnover and Average Collection Period Ratios**

- All turnover ratios have the same format:

$$\frac{\text{Income statement account balance}}{\text{Average balance sheet account balance}}$$

- Therefore Accounts Receivable Turnover ratio is:

$$\frac{\text{Net credit sales}}{\text{Average net accounts receivable}}$$

- Average Collection Period is:

$$\frac{365}{\text{Accounts receivable Turnover}}$$

# Key Topics to Know

## Allowance Method

The Allowance Method takes its name from the Allowance for Uncollectible Account that is used to properly value accounts receivable until the uncollectible account receivable can be written-off.

The Allowance Method debits bad debt expense in the period when the sale is recorded and credits a contra-asset account, Allowance for Uncollectible Accounts.

| | | |
|---|---|---|
| Uncollectible Accounts Expense | xxx | |
| Allowance for Uncollectible Accounts | | xxx |

In the period in which a specific account is determined to be uncollectible, the Allowance is debited and Accounts Receivable is credited.

| | | |
|---|---|---|
| Allowance for Uncollectible Accounts | xxx | |
| Accounts Receivable | | xxx |

Uncollectible Accounts Expense is reported on the Income Statement. The Allowance for Uncollectible (Doubtful) Accounts is a contra asset account and is reported on the Balance Sheet as a deduction from Accounts Receivable. The result is called Net Realizable Value:

| | |
|---|---|
| Current Assets: | |
| Accounts Receivable | $25,000 |
| less allowance for doubtful accounts | 3,000 |
| Net Realizable Value | 22,000 |

Sometimes a customer will pay the accounts receivable after it was written off. Recording the receipt of cash is always a two-step process: first, the account receivable is reinstated (added back into the general ledger) and second, the cash is recorded and accounts receivable is reduced for the payment.

To reinstate the accounts receivable:

| | | |
|---|---|---|
| Accounts Receivable | xxx | |
| Allowance for Uncollectible Accounts | | xxx |

To apply the cash received:

| | | |
|---|---|---|
| Cash | xxx | |
| Accounts Receivable | | xxx |

**Example #1**

C Company provided the following information related to its accounts receivable:

| | | |
|---|---|---|
| Last year | 12/31 | Estimated that $7,000 of accounts receivable would become uncollectible. |
| Current year | 1/05 | Wrote-off the $800 balance owed by J Company and the $500 balance owed by F Company |
| | 3/18 | Reinstated the account of J Company that had been written off as Uncollectible upon receipt of payment in full |

Required: Journalize the transactions

**Solution #1**

| | | |
|---|---|---|
| Uncollectible Accounts Expense | 7,000 | |
| Allowance for Uncollectible Accounts | | 7,000 |
| | | |
| Allowance for Uncollectible Accounts | 1,300 | |
| Accounts Receivable-Camp | | 800 |
| Accounts Receivable-Friends | | 500 |
| | | |
| Accounts Receivable-Camp | 800 | |
| Allowance for Uncollectible Accounts | | 800 |
| | | |
| Cash | 800 | |
| Accounts Receivable-Camp | | 800 |

## Methods for Estimating the Uncollectible Amount

In the period of sale, the customer that eventually will not pay, the amount that will not be paid and the period in which the customer's account will become uncollectible cannot be determined. Therefore, the uncollectible accounts expense must be estimated at the end of each accounting period.

## Percentage of Sales Method

The Percent of Sales Method uses one income statement account, Sales, to estimate the change in another income statement account, Bad Debt Expense, for the period. This is the amount of the required adjusting entry. This method is typically used by businesses with a large number of customers with relatively uniform accounts receivable balances.

The balance in the Allowance account is the balance in the ledger before adjustment plus the adjusting entry for bad debt expense.

The bad debt expense for the period is calculated by multiplying the uncollectible percentage times the credit sales in the period to determine the uncollectible accounts expense for the period. This will be the amount of the adjusting entry.

**Example #2**

Uncollectible accounts expense is estimated at ¼ of 1% of net sales of $4,000,000 for the year. The current balance in Allowance for Doubtful Accounts is $300 credit.

Required:
a) What is the uncollectible accounts expense for the year?
b) Prepare the adjusting entry to be made on December 31.
c) What is the balance in Allowance for Doubtful Accounts after adjustment?

**Solution #2**

a) 4,000,000 * .0025 = $10,000

b)

| | | |
|---|---|---|
| Uncollectible Accounts Expense | 10,000 | |
| Allowance for Uncollectible Accounts | | 10,000 |

c) $300 credit balance + 10,000 additional credit = $10,300 credit balance

## Percent of Accounts Receivable Method

The Percent of Receivables Method uses the balance in one balance sheet account, Accounts Receivable, to estimate the balance in another balance sheet account, Allowance for Uncollectible Accounts, at the end of the period.

The adjusting entry for bad debt expense is the difference between the balance in the ledger for the allowance account before adjustment and the estimated balance in the allowance account.

The current balance of accounts receivable is analyzed by use of an aging schedule to determine the desired ending balance for the Allowance for Doubtful Accounts. The uncollectible accounts expense for the period is determined based on the current (unadjusted) balance in the Allowance, the desired ending balance in the Allowance account and any write-offs of uncollectible accounts during the period.

Allowance for Doubtful Accounts

| | |
|---|---|
| | Beginning balance |
| Write-offs | Solve for bad debt expense |
| | Ending balance |

Bad debt expense = ending balance + write-offs – beginning balance

However, if there have been more write-offs than expected, the balance before adjustment in the allowance account may be a debit:

| Allowance for Doubtful Accounts | |
|---|---|
| Beginning balance | |
| Write-offs | Solve for bad debt expense |
| | Ending balance |

Bad debt expense = ending balance + write-offs+ beginning balance

**Example #3**

The balance of Allowance for Doubtful Accounts before adjustment at the end of the period is $400 debit. Based on an analysis of Accounts Receivable, it was estimated that $9,000 would become uncollectible.

Required:
a) Determine the uncollectible accounts expense for the year.
b) Prepare the adjusting entry to be made of December 31.
c) Determine the balance in Allowance for Doubtful Accounts after adjustment.

**Solution #3**

a)

| Allowance for Doubtful Accounts | | |
|---|---|---|
| Balance | 400 | |
| | | Uncollectible accounts expense = ? |
| Accounts receivable written-off = 0 | | |
| | | 9,000 ending balance |

Uncollectible accounts expense = 400 + 9,000 -0 = 9,400

b)

| | | |
|---|---|---|
| Uncollectible accounts expense | 9,400 | |
| Allowance for doubtful accounts | | 9,400 |

c) 9,000

# Direct Write-off Method

The Direct Write-off Method records uncollectible accounts expense in the period when the customer's account is determined to be uncollectible. The entry to write-off the account receivable is

| | | |
|---|---|---|
| Uncollectible accounts expense | xxx | |
| Accounts receivable | | xxx |

The Direct Write-off Method violates the matching principle because it does not match revenues and expenses in the same period.

# Practice Problems

## Practice Problem #1

The F Company uses the allowance method is used to account for uncollectible receivables. It had the following transactions during the year:

| | |
|---|---|
| 05/14 | Received 75% of the $20,000 balance owed by Webb Co., a bankrupt business. Wrote off remainder as uncollectible. |
| 06/20 | Reinstated the account of Zorn Co., which had been written off in the preceding year as uncollectible. Received $5,225 cash as full payment of Zorn's account. |
| 07/27 | Wrote off the $2,500 balance owed by Schmich, Inc. which had no assets. |
| 12/31 | Based on an analysis of Accounts Receivable, it is determined that $11,500 will become uncollectible. The balance in Allowance for Doubtful Accounts on December 31 prior to adjustment is $200 credit. |

Required:

a) Journalize the transactions
b) The balance in Allowance for Doubtful Accounts after adjustment.
c) The Net Realizable Value of Accounts Receivable if the balance of Accounts Receivable is $62,000.
d) Redo the entry for 12/31 and questions b) and c) if the percent of sales method had been used to estimate uncollectible accounts expense at the rate of ½ of 1% of net sales of $2,000,000.

**Practice Problem #2**

At the end of the year, two similar companies were in the process of calculating bad debt expense for the year. Each company had credit sales of $1,000,000 and a debit balance in Allowance for Uncollectible Accounts of $2,000 before any year-end adjustment. The amount of accounts receivable written off during the year for both companies was $8,000. The balance of Accounts Receivable is $180,000.

A Company estimates that 5% of accounts receivable will not be collected over the next year. B Company estimates that 5% of credit sales will not be collected over the next year.

Required: For each company, determine:

a) The uncollectible accounts expense for the year.
b) The adjusting entry to be made of December 31.
c) The balance in Allowance for Doubtful Accounts after adjustment.

**Practice Problem #3**

During its first year of operations, G Company provides services on account of $250,000. By the end of the year, cash collections on these accounts total $130,000. The company estimates that 10% of accounts receivable will be uncollectible at the end of the year. On March 13, G Company writes off a customer's account of $3,800. On June 3, the customer unexpectedly pays the $3,800 balance. G Company uses the allowance method.

Required:

a) Determine the uncollectible accounts expense for the year.
b) Prepare the entries required on March 15 and June 3.
c) The adjusting entry to be made of December 31.
d) The balance in Allowance for Doubtful Accounts after adjustment.
e) The net realizable value of the accounts receivable

**Practice Problem #4**

At the end of the year, Q Company has a balance in Allowance for Uncollectible Accounts of $200 (*debit*) before any year-end adjustment. The balance of Accounts Receivable is $15,000. Total sales were $280,000, of which $20,000 was in cash. The company estimates that 5% of sales on account were not collected during the year.

Required:
- a) Assuming that Q Company did not record any uncollectible accounts expense during the year, prepare the year-end adjustment for uncollectible accounts expense.
- b) What is the balance in the allowance account at year-end?
- c) What would have been the likely entry that created the $200 debit balance in the allowance account?

**Practice Problem #5**

At the end of the year, W Company has a balance in Allowance for Uncollectible Accounts of $2,000 (*debit*) before any year-end adjustment. The balance of Accounts Receivable is $150,000. Total sales were $3,000,000. $12,000 of accounts receivable were written off during the year. The company estimates that 5% of the ending accounts receivable balance would not be collected during the year.

Required:
- a) What is the balance in the allowance account at year-end?
- b) Assuming that Q Company did not record any uncollectible accounts expense during the year; prepare the year-end adjustment for uncollectible accounts expense.

# True / False Questions

1. The Allowance for Uncollectible Accounts is a contra asset account representing the amount of accounts receivable that the company does not expect to collect.
   True False

2. Under the allowance method, when a company writes off an account receivable as an actual bad debt, it records an expense.
   True False

3. A credit balance in the Allowance for Uncollectible Accounts before adjustment indicates that last year's estimate of uncollectible accounts was too high.
   True False

4. The direct write-off method violates the matching principle.
   True False

5. Even though the percentage-of-receivables method and the percentage-of-credit-sales method use different accounts to estimate future uncollectible accounts, the amount of bad debt expense reported in the income statement will always be the same under the two methods.
   True False

6. From an income statement perspective, the percentage-of-credit-sales method is typically preferable because it better matches the revenues (credit sales) with their related expenses (bad debts).
   True False

7. From a balance sheet perspective, the percentage-of-receivables method is typically preferable because assets (net accounts receivable) are reported closer to their net realizable value.
   True False

8. The best estimate for the amount of cash a company expects to collect from its accounts receivable is the face value of the receivables.
   True False

9. When an uncollectible account receivable is written off, the amount of total assets is unchanged.
   True False

10. When a company receives payment from a customer whose account was previously written off, the customer's account receivable should be reinstated.
True False

# Multiple Choice Questions

1. The two methods of accounting for uncollectible receivables are the direct write-off method and the:
   a) Percentage of receivables method
   b) Aging of credit sales method
   c) Interest method
   d) Allowance method

2. The Allowance for Doubtful Accounts has a debit balance of $1,000 at the end of the year (before adjustment), and uncollectible accounts expense is estimated at 2% of net sales. If net sales are $600,000, the amount of the adjusting entry to record the provision for doubtful accounts is:
   a) $1,000
   b) $13,000
   c) $11,000
   d) $12,000

3. The Allowance for Doubtful Accounts has an unadjusted debit balance of $1,000 at the end of the year. Estimate uncollectible accounts are $10,000. If accounts receivable are $600,000, the amount of the adjusting entry is:
   a) $10,000
   b) $11,000
   c) $9,000
   d) $16,000

4. Allowance for Doubtful Accounts has a credit balance of $500 at the end of the year (before adjustment), and an analysis of customers' accounts indicates doubtful accounts of $11,500. Which of the following entries records the proper provision for doubtful accounts?
   a) Debit Uncollectible Accounts Expense, $11,000; credit Allowance for Doubtful Accounts, $11,000.
   b) Debit Uncollectible Accounts Expense, $12,000; credit Allowance for Doubtful Accounts, $12,000.
   c) Debit Allowance for Doubtful Accounts, $12,000; credit Uncollectible Accounts Expense, $12,000.
   d) Debit Allowance for Doubtful Accounts, $11,000; credit Uncollectible Accounts Expense, $11,000.

5. If the direct write-off method of accounting for uncollectible receivables is used, what general ledger account is debited to write off a customer's account as uncollectible?
   a) Uncollectible Accounts Payable
   b) Accounts Receivable
   c) Uncollectible Accounts Expense
   d) Allowance for Doubtful Accounts

6. Receivables are usually listed in order
   a) Of liquidity
   b) Of the due date
   c) Of the size
   d) Alphabetically

7. Accounts Receivable Turnover measures
   a) Number of days outstanding
   b) Fair market value of Accounts Receivables
   c) The efficiency of the accounts payable function
   d) How frequently during the year the Accounts Receivable are converted to cash

8. The Number of Days Sales in Receivables
   a) Measures the number of times the receivables turn over each year
   b) Is Net Credit Sales divided by Average Receivables
   c) Is not meaningful and therefore not used
   d) Is an estimate of the length of time the receivables have been outstanding

9. Accounts receivable are reported on the balance sheet at their
   a) Fair market value
   b) Present value
   c) Net realizable value
   d) Maturity value

10. When an account is written off under the allowance method the
    a) Uncollectible Accounts Expense account is debited.
    b) Accounts Receivable account is debited.
    c) Allowance for Doubtful Accounts is debited.
    d) Loss on Accounts Receivable account is debited.

11. On June 1, L Company wrote off Green's $2,500 account using the allowance method.. What effect will this write-off have on L Company's balance sheet?
    a) An increase to stockholders' equity and a decrease to liabilities.
    b) No effect.
    c) An increase to assets and an increase to stockholders' equity.
    d) A decrease to assets and a decrease to stockholders' equity

12. On January 1, D Company had balances in Accounts Receivable and Allowance for Uncollectible Accounts of $53,600 and $1,325, respectively. During the year, D Company wrote off $1,465 in accounts receivable and determined that there should be an allowance for uncollectible accounts of $1,280 at December 31. Bad debt expense for 2016 would be:
    a) $1,280.
    b) $1,465.
    c) $1,420.
    d) $1,140.

13. At the beginning of the year, the balance in J Company's Allowance for Uncollectible Accounts was $31,800. During the year, the company wrote off $38,000 of accounts receivable. Writing off the bad debts would include a:
    a) Debit to Bad Debt Expense; credit to the Allowance for Uncollectible Accounts.
    b) Debit to Bad Debt Expense.
    c) Credit to the Allowance for Uncollectible Accounts.
    d) Credit to Accounts Receivable.

14. The allowance method based on the idea that a given percent of a company's credit sales for the period will be uncollectible determines:
    a) The bad debt expense for the period
    b) The ending balance in the allowance for uncollectible accounts
    c) The beginning balance in the allowance for uncollectible accounts
    d) The amount of accounts receivable to be written off.

15. A Company expects 5% of its newer accounts receivable to be uncollectible and 20% of its older accounts to be uncollectible. If the company has $40,000 of newer accounts and $5,000 of older accounts, the balance in the allowance of uncollectible accounts should be:
    a) $3,000
    b) $10,500
    c) $42,000
    d) $0

# Solutions to Practice Problems

## Practice Problem #1

| | | | |
|---|---|---|---|
| 05/14 | Cash | 15,000 | |
| | Allowance for Doubtful Accts | 5,000 | |
| | Accounts Receivable-Webb | | 20,000 |
| | | | |
| 06/20 | Accounts Receivable | 5,225 | |
| | Allowance for Doubtful Accts | | 5,225 |
| | Cash | 5,225 | |
| | Accounts Receivable | | 5,225 |
| | | | |
| 07/27 | Allowance for Doubtful Accts | 2,500 | |
| | Accounts Receivable | | 2,500 |
| | | | |
| 12/31 | Uncollectible Accounts Expense | 11,300 | |
| | Allowance for Doubtful Accts | | 11,300 |
| | *11,500 – 200 credit balance= 11,300* | | |
| | | | |
| a) | 11,500 *(based on analysis of A/R)* | | |
| | | | |
| b) | Accounts receivable | $62,000 | |
| | Less: Allowance for doubtful accounts | 11,500 | |
| | Net Realizable Value | $50,500 | |
| | | | |
| 12/31 | Uncollectible Accounts Expense | 10,000 | |
| | Allowance for Doubtful Accts | | 10,000 |
| | *2,000,000 x .01 x .5 = 10,000* | | |
| | | | |
| a) | 10,200 = 10,000 + 200 credit balance | | |
| | | | |
| b) | Accounts receivable | $62,000 | |
| | Less: Allowance for doubtful accounts | 10,200 | |
| | Net Realizable Value | $51,800 | |

**Practice Problem #2**

Company A

a)

| Allowance for Doubtful Accounts | |
|---|---|
| Balance 2,000 | |
| | Uncollectible accounts expense = ? |
| Accounts receivable written-off =8,000 | |
| | 9,000 ending balance |

Uncollectible accounts expense = 9,000 + 8,000 + 2,000 = 19,000

b)

| | | |
|---|---|---|
| Uncollectible accounts expense | 19,000 | |
| Allowance for doubtful accounts | | 19,000 |

c) 9,000

Company B

d)

| Allowance for Doubtful Accounts | |
|---|---|
| Balance 2,000 | |
| | Uncollectible accounts expense = 50,000<br>*1,000,000 x .05* |
| Accounts receivable written-off =8,000 | |
| | 40,000 ending balance |

Allowance of Doubtful Accounts balance = -2,000 + 50,000 – 8,000 = 40,000

e)

| | | |
|---|---|---|
| Uncollectible accounts expense | 50,000 | |
| Allowance for doubtful accounts | | 50,000 |

f) 40,000

**Practice Problem #3**

Accounts Receivable

| | |
|---|---|
| Balance $0 | |
| 250,000 Sales on account | |
| | 130,000 Cash collections |
| | 3,800 Accounts written-off |
| 3,800 Account reinstated | |
| | 3,800 Cash collections |
| | $116,200 Ending balance |

Allowance for Doubtful Accounts

| | |
|---|---|
| | Balance $0 |
| 3,800 Accounts written-off | |
| | 3,800 Account reinstated |
| | 11,620 Uncollectible accounts expense |
| | $11,620 Ending balance *= 116,200 x 10%* |

a)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| $11,620 | + | 3,800 | - | 3,800 | - | 0 | = | $11,620 |
| Ending Balance | | written-off | | reinstated | | Beginning balance | | Expense |

b)

| | | | |
|---|---|---|---|
| 3/15 | Allowance for Doubtful Accts | 3,800 | |
| | Accounts Receivable | | 3,800 |
| | | | |
| 6/3 | Accounts Receivable | 3,800 | |
| | Allowance for Doubtful Accts | | 3,800 |
| | Cash | 3,800 | |
| | Accounts Receivable | | 3,800 |

c)

| | | | |
|---|---|---|---|
| 6/3 | Uncollectible accounts expense | 11,620 | |
| | Allowance for Doubtful Accts | | 11,620 |

d) $11,620 = $116,200 x 10%

e) Net Realizable Value = $116,200 – 11,620 = $104,580

**Practice Problem #4**

a)

Sales on account = $280,000 – 20,000 = $260,000

Uncollectible accounts expense = $260,000 x 5% = $13,000

b)

Allowance for Doubtful Accounts

| | | | |
|---|---|---|---|
| Balance | $200 | | |
| | | 13,000 | Year-end adjustment |
| | | $12,800 | Ending balance |

| | | |
|---|---|---|
| Uncollectible accounts expanse | 13,000 | |
| Allowance for Doubtful Accts | | 13,000 |

c)

| | | |
|---|---|---|
| Allowance for Doubtful Accts | 200 | |
| Accounts Receivable | | 200 |

*To write-off uncollectible accounts receivable*

**Practice Problem #5**

a)
Allowance for uncollectible accounts balance = $150,000 x 5% = $7,500

b)

Allowance for Doubtful Accounts

| Debit | | Credit | |
|---|---|---|---|
| Balance | $2,000 | | |
| Write-offs | 12,000 | | |
| | | 21,500 | Year-end adjustment |
| | | $7,500 | Ending balance |

| Account | Debit | Credit |
|---|---|---|
| Uncollectible accounts expanse | 21,500 | |
| Allowance for Doubtful Accts | | 21,500 |

# Solutions to True / False Problems

1. True
2. False - writing off an account receivable has no effect on expenses.
3. False – a credit balance in the allowance account indicates the amount of accounts receivable considered uncollectible.
4. True
5. False - bad debt expense will typically differ between the two methods.
6. True
7. True
8. False - The best estimate for the amount of cash a company expects to collect is the net realizable value of its accounts receivable.
9. True
10. True

# Solutions to Multiple Choice Questions

| | |
|---|---|
| 1. | D |
| 2. | D |
| 3. | B |
| 4. | A |
| 5. | C |
| 6. | A |
| 7. | D |
| 8. | D |
| 9. | C |
| 10. | C |
| 11. | B |
| 12. | C |
| 13. | D |
| 14. | A |
| 15. | A |