# Chapter 6 Reporting and Interpreting Sales Revenue, Receivables, and Cash 

## ANSWERS TO QUESTIONS

1. The difference between sales revenue and net sales is the amount of goods returned by customers because the goods were either unsatisfactory or not desired and also includes sales allowances given to customers (also refer to the answers given below to questions 3, 4 and 5).
2. Gross profit or gross margin on sales is the difference between net sales and cost of goods sold. It represents the average gross markup realized on the goods sold during the period. The gross profit ratio is computed by dividing the amount of gross profit by the amount of net sales. For example, assuming sales of $\$ 100,000$, and cost of goods sold of $\$ 60,000$, the gross profit on sales would be $\$ 40,000$. The gross profit ratio would be $\$ 40,000 / \$ 100,000=.40$. This ratio may be interpreted to mean that out of each $\$ 100$ of sales, $\$ 40$ was realized above the amount expended to purchase the goods that were sold.
3. A credit card discount is the fee charged by the credit card company for services. When a company deposits its credit card receipts in the bank, it only receives credit for the sales amount less the discount. The credit card discount account either decreases net sales (it is a contra revenue) or increases selling expense.
4. A sales discount is a discount given to customers for payment of accounts within a specified short period of time. Sales discounts arise only when goods are sold on credit and the seller extends credit terms that provide for a cash discount. For example, the credit terms may be $1 / 10, n / 30$. These terms mean that if the customer pays within 10 days, $1 \%$ can be deducted from the invoice price of the goods. Alternatively, if payment is not made within the 10-day period, no discount is permitted and the total invoice amount is due within 30 days from the purchase, after which the debt is past due. To illustrate, assume a $\$ 1,000$ sale with these terms. If the customer paid within 10 days, $\$ 990$ would have been paid. Thus, a sales discount of $\$ 10$ was granted for early payment.
5. A sales allowance is an amount allowed to a customer for unsatisfactory merchandise or for an overcharge in the sales price. A sales allowance reduces the amount the customer must pay, or if already paid, a cash refund is required. Sales allowances may occur whether the sale was for cash or credit. In contrast, a sales discount is a cash discount given to a customer who has bought on credit, with payment made within the specified period of time. (Refer to explanation of sales discount in Question 4, above.)
6. An account receivable is an amount owed to the business on open account by a trade customer for merchandise or services purchased. In contrast, a note receivable is a short-term obligation owed to the company based on a formal written document.
7. In conformity with the matching principle, the allowance method records bad debt expense in the same period in which the credit was granted and the sale was made.
8. Using the allowance method, bad debt expense is recognized in the period in which the sale related to the uncollectible account was recorded.
9. The write-off of bad debts using the allowance method decreases the asset accounts receivable and the contra-asset allowance for doubtful accounts by the same amount. As a consequence, (a) net income is unaffected and (b) accounts receivable, net, is unaffected.
10. An increase in the receivables turnover ratio generally indicates faster collection of receivables. A higher receivables turnover ratio reflects an increase in the number of times average trade receivables were recorded and collected during the period.
11. Cash includes money and any instrument, such as a check, money order, or bank draft, which banks normally will accept for deposit and immediate credit to the depositor's account. Cash equivalents are short-term investments with original maturities of three months or less that are readily convertible to cash, and whose value is unlikely to change (e.g., bank certificates of deposit and treasury bills).
12. The primary characteristics of an internal control system for cash are: (a) separation of the functions of cash receiving from cash payments, (b) separation of accounting for cash receiving and cash paying, (c) separation of the physical handling of cash from the accounting function, (d) deposit all cash receipts daily and make all cash payments by check, (e) require separate approval of all checks and electronic funds transfers, and (f) require monthly reconciliation of bank accounts.
13. Cash-handling and cash-recording activities should be separated to remove the opportunity for theft of cash and a cover-up by altering the records. This separation is accomplished best by assigning the responsibility for cash handling to individuals other than those who have the responsibility for record-keeping. In fact, it usually is desirable that these two functions be performed in different departments of the business.
14. The purposes of a bank reconciliation are (a) to determine the "true" cash balance and (b) to provide data to adjust the Cash account to that balance. A bank reconciliation involves reconciling the balance in the Cash account at the end of the period with the balance shown on the bank statement (which is not the "true" cash balance) at the end of that same period. Seldom will these two balances be identical because of such items as deposits in transit; that is, deposits that have been made by the company but not yet entered on the bank statement. Another cause of the difference is outstanding checks, that is, checks that have been written and recorded in the accounts of the company that have not cleared the bank (and thus have not been deducted from the bank's balance). Usually the reconciliation of the two balances, per books against per bank, requires recording of one or more items that are reflected on the bank statement but have not been recorded in the accounting records of the company. An example is the usual bank service charge.
15. The total amount of cash that should be reported on the balance sheet is the sum of (a) the true cash balances in all checking accounts (verified by a bank reconciliation of each checking account), (b) cash held in all "cash on hand" (or "petty cash") funds, and (c) any cash physically on hand (any cash not transferred to a bank for deposit-usually cash held for change purposes).
16. (Based on Supplement A) Under the gross method of recording sales discounts, the amount of sales discount taken is recorded at the time the collection of the account is recorded.

## ANSWERS TO MULTIPLE CHOICE

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

## Authors' Recommended Solution Time

(Time in minutes)

| Mini-exercises |  | Exercises |  | Problems |  | Alternate Problems |  | Cases and Projects |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Time | No. | Time | No. | Time | No. | Time | No. | Time |
| 1 | 5 | 1 | 15 | 1 | 25 | 1 | 35 | 1 | 25 |
| 2 | 5 | 2 | 15 | 2 | 35 | 2 | 35 | 2 | 30 |
| 3 | 10 | 3 | 15 | 3 | 20 | 3 | 50 | 3 | 35 |
| 4 | 10 | 4 | 20 | 4 | 35 | 4 | 40 | 4 | 20 |
| 5 | 10 | 5 | 20 | 5 | 50 | 5 | 45 | 5 | 35 |
| 6 | 10 | 6 | 30 | 6 | 40 |  |  | 6 | 45 |
| 7 | 10 | 7 | 30 | 7 | 45 |  |  | 7 | * |
| 8 | 5 | 8 | 15 | 8 | 45 |  |  |  |  |
| 9 | 10 | 9 | 15 | 9 | 45 |  |  |  |  |
|  |  | 10 | 15 |  |  |  |  |  |  |
|  |  | 11 | 15 |  |  |  |  |  |  |
|  |  | 12 | 15 |  |  |  |  |  |  |
|  |  | 13 | 20 |  |  |  |  |  |  |
|  |  | 14 | 20 |  |  |  |  |  |  |
|  |  | 15 | 20 |  |  |  |  |  |  |
|  |  | 16 | 20 |  |  |  |  |  |  |
|  |  | 17 | 30 |  |  |  |  |  |  |
|  |  | 18 | 30 |  |  |  |  |  |  |
|  |  | 19 | 15 |  |  |  |  |  |  |
|  |  | 20 | 15 |  |  |  |  |  |  |
|  |  | 21 | 20 |  |  |  |  |  |  |
|  |  | 22 | 20 |  |  |  |  |  |  |
|  |  | 23 | 20 |  |  |  |  |  |  |
|  |  | 24 | 30 |  |  |  |  |  |  |
|  |  | 25 | 30 |  |  |  |  |  |  |

* Due to the nature of these cases and projects, it is very difficult to estimate the amount of time students will need to complete the assignment. As with any open-ended project, it is possible for students to devote a large amount of time to these assignments. While students often benefit from the extra effort, we find that some become frustrated by the perceived difficulty of the task. You can reduce student frustration and anxiety by making your expectations clear. For example, when our goal is to sharpen research skills, we devote class time to discussing research strategies. When we want the students to focus on a real accounting issue, we offer suggestions about possible companies or industries.


## MINI-EXERCISES

M6-1.
Transaction
Point A
Point B
(a) Airline tickets sold by an airline on a credit card
(b) Computer sold by mail order company on a credit card
(c) Sale of inventory to a business customer on open account
___ Point of sale $x$ Completion of flight
x Shipment
Delivery

## M6-2.

If the buyer pays within the discount period, the income statement will report $\$ 9,405$ as net sales $(\$ 9,500 \times 0.99)$.

## M6-3.

Credit card sales (R)

| $\$ 8,400$ |
| ---: |
| 252 |
| $\$ 8,148$ |

Net credit card sales

| $\$ 10,500$ |
| ---: |
| 500 |
| 10,000 |
| 50 |
| 9,950 |
| $\$ 18,098$ |

## M6-4.

Gross Profit Percentage $=\frac{\text { Gross Profit }}{\text { Net Sales }}=\frac{\$ 49,000-\$ 28,000}{\$ 49,000}=\frac{\$ 21,000}{\$ 49,000}=0.429$
The gross profit percentage is $42.9 \%$. This ratio measures the excess of sales prices over the costs to purchase or produce the goods or services sold as a percentage. It indicates a company's ability to charge premium prices and produce goods and services at lower cost.

## M6-5.

(a)

Allowance for doubtful accounts (-XA, +A) 22,000
Accounts receivable (-A)
22,000
To write off specific bad debts.
(b) Bad debt expense (+E, -SE)

13,000
Allowance for doubtful accounts (+XA, -A)
13,000
To record estimated bad debt expense.
M6-6.
(a)


## M6-7.

$\qquad$ (a) Granted credit with shorter payment deadlines.
$+$
(b) Increased effectiveness of collection methods.
$\qquad$ (c) Granted credit to less creditworthy customers.

M6-8.

Reconciling Item \begin{tabular}{cc}
Company's <br>
Books

 

Bank <br>
Statement
\end{tabular}

(a) Outstanding checks
(b) Bank service charge
(c) Deposit in transit

## M6-9. (Based on Supplement A)

A $\$ 8,000$ credit sale with terms, $1 / 10, n / 30$, should be recorded as follows:
Accounts receivable ( + A)
8,000
Sales revenue (+R, +SE) ................................. 8,000

This entry records the sale at the gross amount. If the customer does pay within the discount period, only $\$ 7,920$ must be paid, in which case the entry for payment would be as follows:

> Cash (+A) ................................................................ 7,920

Sales discounts (+XR, -SE) ...................................... 80
Accounts receivable (-A)
8,000

## EXERCISES

## E6-1.

| Sal | \$2,000 |
| :---: | :---: |
| Less: Sales discount (\$950 collected from S. Green x 2\%). | 19 |
| Net sales | \$1,981 |

## E6-2.

Sales revenue ( $\$ 2,000+\$ 7,000+\$ 5,000$ ) ............................... $\$ 14,000$
Less: Sales discounts (\$7,000 collected from S x 3\%)............. 210
Less: Credit card discounts (\$2,000 from R x 2\%) ................... 40
Net sales
$\$ 13,750$

## E6-3.

Sales revenue (\$350 + \$4,500 + \$9,000) ................................. \$13,850
Less: Sales returns and allowances ( ${ }^{1} / 10 \times \$ 9,000$ from D) ....... 900
Less: Sales discounts ( $9 / 10 \times \$ 9,000$ from $D \times 3 \%)$.................... 243
Less: Credit card discounts (\$350 from B x 2\%)
7
Net sales
$\$ 12,700$

## E6-4.

| Transaction | Net Sales | Cost of <br> Goods Sold | Gross Profit |
| :--- | :---: | :---: | :---: |
| July 12 | +396 | +250 | +146 |
| July 15 | $+4,000$ | $+2,000$ | $+2,000$ |
| July 20 | -120 | NE | -120 |
| July 21 | $-1,000$ | -600 | -400 |

## E6-5.

Req. $1 \quad$ (Amount saved $\div$ Amount paid) $=$ Interest rate for 50 days. $(4 \% \div 96 \%)=4.17 \%$ for 50 days.

Interest rate for 50 days $\times$ ( 365 days $\div 50$ days) $=$ Annual interest rate $4.17 \% \times(365 \div 50$ days $)=30.44 \%$

Req. 2 Yes, because the 15\% rate charged by the bank is less than the 30.44\% rate implicit in the discount. The company will earn $15.44 \%$ by doing so (30.44\% - 15\%).

Req. 1

## WOLVERINE WORLD WIDE INC. Income Statement For the Year Ended

|  | Amount | Percentage |
| :---: | :---: | :---: |
| Sales of merchandise | \$1,141,887 | 100.0\% |
| Cost of products sold | 700,349 | 61.3\% |
| Gross profit | 441,538 | 38.7\% |
| Selling and administrative expense | 318,243 | 27.9\% |
| Income from operations | 123,295 | 10.8\% |
| Other income (expense) |  |  |
| Interest expense | $(2,973)$ | 0.3\% |
| Other income | 1,970 | 0.2\% |
| Pretax income | 122,292 | 10.7\% |
| Income taxes | 38,645 | 3.4\% |
| Net Income | \$ 83,647 | 7.3\% |
| Earnings per share ( $\$ 83,647 \div 55,030$ shares) | \$1. |  |

Req. 2
Gross profit margin: $\$ 1,141,887-\$ 700,349=\$ 441,538$.
Gross profit percentage ratio: $\$ 441,538 \div \$ 1,141,887=\underline{\underline{.387}}$ (or $\underline{\underline{38.7 \%}}$ ).
Gross margin or gross profit in dollars is the difference between the sales prices and the costs of purchasing or manufacturing all goods that were sold during the period (sometimes called the markup); that is, net revenue minus only one of the expenses-cost of goods sold. The gross profit ratio is the amount of each net sales dollar that was gross profit during the period. For this company, the rate was $38.7 \%$, which means that $\$ .387$ of each net sales dollar was gross profit (alternatively, $38.7 \%$ of each sales dollar was gross profit for the period).

Wolverine World Wide's gross profit percentage was below Deckers' current (2006) percentage of 46.4\%. Deckers' shoes have a reputation as a rugged product as well as a premium "high fashion" product. This has allowed it to maintain higher prices and higher gross margins. In marketing this is called the value of brand equity. Wolverine World Wide has been investing in its own brand development program, and has increased its gross profit percentage by about $2 \%$ in the last three years.

Req. 1

## SLATE, INCORPORATED Income Statement <br> For the Year Ended December 31, 2010

|  |  | Amount | Percentage |
| :---: | :---: | :---: | :---: |
| Gross sales (\$223,000 + \$40,000) .................. |  | \$263,000 |  |
| Less sales returns and allowances. |  | 8,000 |  |
| Net sales revenue |  | 255,000 | 100\% |
| Cost of goods sold. |  | 143,000 | 56\% |
| Gross profit |  | 112,000 | 44\% |
| Operating expenses: |  |  |  |
| Administrative expense | \$20,000 |  |  |
| Selling expense. | 45,200 |  |  |
| Bad debt expense (\$40,000 x 3\%) | 1,200 | 66,400 | 26\% |
| Income from operations. |  | 45,600 | 18\% |
| Income tax expense (\$45,600 x 30\%) ............ |  | 13,680 | 5\% |
| Net income. |  | \$ 31,920 | 13\% |
| Earnings per share (\$31,920 $\div 4,000$ shares) |  | . 98 |  |

Req. 2
Gross profit margin: $\$ 255,000-\$ 143,000=\$ 112,000$.
Gross profit percentage ratio: $\$ 112,000 \div \$ 255,000=\underline{\underline{.44}}$ (or 44\%).
Gross margin or gross profit in dollars is the difference between the sales prices and the costs of purchasing or manufacturing all goods that were sold during the period (sometimes called the markup); that is, net revenue minus only one of the expenses-cost of goods sold. The gross profit ratio is the amount of each net sales dollar that was gross profit during the period. For this company, the rate was $44 \%$, which means that $\$ .44$ of each net sales dollar was gross profit (alternatively, $44 \%$ of each sales dollar was gross profit for the period).

E6-8.
(a) Bad debt expense (+E, -SE) (\$700,000 x 0.01) ....... 7,000

Allowance for doubtful accounts (+XA, -A) .......
7,000
To record estimated bad debt expense.
(b) Allowance for doubtful accounts (-XA, +A) .............. 2,000

Accounts receivable (-A)
2,000
To write off a specific bad debt.
E6-9.
(a) Bad debt expense (+E, -SE) (\$790,000 x 0.03)........ 23,700

Allowance for doubtful accounts (+XA, -A) .......
23,700
To record estimated bad debt expense.
(b) Allowance for doubtful accounts (-XA, +A) .............. 240

Accounts receivable (-A)
240
To write off a specific bad debt.
E6-10.


E6-11.
Req. 1
(a) Bad debt expense (+E, -SE) (\$640,000 x 0.035)...... 22,400

Allowance for doubtful accounts (+XA, -A) ....... 22,400
To record estimated bad debt expense.
(b) Allowance for doubtful accounts (-XA, +A) .............. 1,800

Accounts receivable (-A)
1,800
To write off a specific bad debt.

Req. 2

| Transaction | Net Sales | Gross Profit | Income from <br> Operations |
| :--- | :---: | :---: | :---: |
| a. | NE | NE | $-22,400$ |
| b. | NE | NE | NE |

E6-12.

| Aged accounts receivable |  | Estimated percentage uncollectible |  |  | Estimated amount uncollectible |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Not yet due | \$14,000 | x | 2\% | = |  | 280 |
| Up to 120 days past due | 4,500 | x | 12\% |  |  | 540 |
| Over 120 days past due | 2,500 | x | 30\% | = |  | 750 |
| Estimated balance in Allowance for D | oubtful Ac | ou |  |  |  | 1,570 |
| Current balance in Allowance for Dou | btful Acco | nts |  |  |  | 800 |
| Bad Debt Expense for the year |  |  |  |  |  | \$770 |

## E6-13.

Req. 1
December 31, 2011-Adjusting entry:
Bad debt expense (+E, -SE)
4,800
Allowance for doubtful accounts (+XA, -A).
4,800
To adjust for estimated bad debt expense for 2011 computed as follows:

| Aged accounts receivable |  | Estimated percentage uncollectible |  |  | Estimated amount uncollectible |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Not yet due | \$60,000 | x | 3\% | $=$ | \$ | 1,800 |
| Up to 180 days past due | 12,000 | x | 15\% | = |  | 1,800 |
| Over 180 days past due | 4,000 | x | 35\% | = |  | 1,400 |
| Estimated balance in Allowance for Doubtful Accounts |  |  |  |  |  | 5,000 |
| Current balance in Allowance for Doubtful Accounts |  |  |  |  |  | 200 |
| Bad Debt Expense for the year |  |  |  |  |  | \$4,800 |

Req. 2
Balance sheet:
Accounts receivable (\$60,000 + \$12,000 + \$4,000) \$76,000
Less allowance for doubtful accounts ..................... 5,000
Accounts receivable, net of allowance for doubtful accounts
\$71,000

## E6-14.

Req. 1
December 31, 2010-Adjusting entry:
Bad debt expense (+E, -SE) 22,350
Allowance for doubtful accounts (+XA, -A) 22,350
To adjust for estimated bad debt expense for 2010 computed as follows:

| Aged accounts receivable |  | Estimated percentage uncollectible |  |  | Estimated amount uncollectible |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Not yet due | \$250,000 | x | 3.5\% | = | \$8,750 |
| Up to 120 days past due | 50,000 | $x$ | 10\% | $=$ | 5,000 |
| Over 120 days past due | 30,000 | x | 30\% | = | 9,000 |
| Estimated balance in Allow | Doubtful Ac | ou |  |  | 22,750 |
| Current balance in Allowa | ubtful Acco |  |  |  | 400 |
| Bad Debt Expense for the |  |  |  |  | \$22,350 |

Req. 2
Balance sheet:
Accounts receivable (\$250,000 + \$50,000 + \$30,000) \$330,000
Less allowance for doubtful accounts..................... 22,750
Accounts receivable, net of allowance for doubtful accounts

E6-15.

1. Bad debt expense (+E, -SE) 207
Allowance for doubtful accounts (+XA, -A) 207
To record estimated bad debt expense.
Allowance for doubtful accounts (-XA, +A) ............................ 450
Accounts receivable (-A)
450
To write off specific bad debts.
2. It would have no effect because the asset "Accounts receivable" and contraasset "Allowance for doubtful accounts" would both decline by Euro 10 million. Neither "Receivables, net" nor "Net income" would be affected.

E6-16.

Req. 1
Allowance for doubtful accounts

|  |  |  | 142 |  |  | Beg. Balance |
| :--- | ---: | ---: | :--- | :---: | :---: | :---: |
| Write-offs | 89 | 64 | Bad debt exp. |  |  |  |
|  |  | 117 | End. balance |  |  |  |

Beg. Balance + Bad debt exp. - Write-offs = End. Balance
Beg. Balance + Bad debt exp. - End. Balance = Write-offs
$142+64-117=89$

Bad debt expense increases (is credited to) the allowance. Since we are given the beginning and ending balances in the allowance, we can solve for write-offs, which decrease (are debited to) the allowance.

Req. 2
Accounts Receivable (Gross)

| Beg. balance* | 9,458 | 89 | Write-offs |
| :--- | ---: | ---: | :--- |
| Net sales | 51,122 | 49,036 | Cash collections |
| End. balance ** | 11,455 |  |  |

* 9,316 + 142
** 11,338 + 117
Beg. balance + Net sales - Write-offs - Cash collections = End. Balance
Beg. balance + Net sales - Write-offs - End. Balance $=$ Cash collections $9,458+51,122-89-11,455=49,036$

Accounts receivable gross is increased by recording credit sales and decreased by recording cash collections and write-offs of bad debts. Thus, we can solve for cash collections as the missing value.

## E6-17.

Req. 1
The allowance for doubtful accounts is increased (credited) when bad debt expense is recorded and decreased (debited) when uncollectible accounts are written off. This case gives the beginning and ending balances of the allowance account and the amount of uncollectible accounts that were written off. Therefore, the amount of bad debt expense (in thousands) can be computed as follows:

Allowance for doubtful accounts

|  |  | 399,000 | Beg. balance <br> Write-offs 512,000 |
| :--- | :--- | :--- | :--- |

Beg. Balance + Bad debt exp. - Write-offs = End. Balance
End. Balance - Beg. Balance + Write-offs = Bad debt exp.
$419,000-399,000+512,000=532,000$
Req. 2
Working capital is unaffected by the write-off of an uncollectible account when the allowance method is used. The asset account (accounts receivable) and the contraasset account (allowance for doubtful accounts) are both reduced by the same amount; therefore, the book value of net accounts receivable is unchanged.

Working capital is decreased when bad debt expense is recorded because the contraasset account (allowance for doubtful accounts) is increased. From requirement (1), we know that net accounts receivable was reduced by $\$ 532,000$ when bad debt expense was recorded in year 2, reducing working capital by \$532,000.

Note that income before taxes was reduced by the amount of bad debt expense that was recorded, therefore tax expense and tax payable will decrease. The decrease in tax payable caused working capital to increase; therefore, the net decrease was $\$ 532,000-(\$ 532,000 \times 30 \%)=\$ 372,400$.

Req. 3
The entry to record the write-off of an uncollectible account did not affect any income statement accounts; therefore, net income is unaffected by the $\$ 512,000$ write-off in year 2.

The recording of bad debt expense reduced income before taxes in year 2 by \$532,000 and reduced tax expense by \$159,600 (i.e., \$532,000 x 30\%). Therefore, year 2 net income was reduced by $\$ 372,400$ (as computed in Req. 2).

## E6-18.

Req. 1
Dec. 31, 2011
Allowance for doubtful accounts (-XA, +A) ............... 1,700
Accounts receivable (J. Doe) (-A) .................. 1,700
To write off an account receivable determined to be uncollectible.

Dec. 31, 2011
Bad debt expense (+E, -SE) .................................... 1,125
Allowance for doubtful accounts (+XA, -A).....
1,125
Adjusting entry--estimated loss on uncollectible
accounts; based on credit sales (\$75,000 x 1.5\%
= \$1,125).

Req. 2
Income statement:
Operating expenses:
Bad debt expense...................................................... \$1,125
Balance sheet:
Current assets
Accounts receivable (\$13,000 + \$75,000

- \$60,000-\$1,700)
\$26,300
Less: Allowance for doubtful accounts
(\$800-\$1,700 + \$1,125) ........................... 225 \$26,075

Req. 3
The $1.5 \%$ rate on credit sales appears reasonable because it approximates the amount of receivables written off $(\$ 1,700)$ during the year. However, if the uncollectible account receivable written off during 2011 is not indicative of average uncollectibles written off over a period of time, the $1.5 \%$ rate may not be appropriate. There is not sufficient historical data to make a definitive decision.

E6-19.
Req. 1
Receivables turnover $=\frac{\text { Net Sales }}{\begin{array}{c}\text { Average Net Trade } \\ \text { Accounts Receivable }\end{array}}=\frac{\$ 24,710,000}{\$ 2,827,000^{*}}=8.74$ times
$\begin{aligned} & \text { Average days sales } \\ & \text { in receivables }\end{aligned}=\frac{365}{\text { Receivables Turnover }}=\frac{365}{8.74}=41.8$ days

* $(\$ 3,027,000+\$ 2,627,000) \div 2$

Req. 2
The receivables turnover ratio reflects how many times average trade receivables were recorded and collected during the period. The average days sales in receivables indicates the average time it takes a customer to pay its account.

E6-20.
Req. 1

Receivables turnover $=\frac{\text { Net Sales }}{$|  Average Net Trade  |
| :---: |
|  Accounts Receivable  |}$=\frac{\$ 57,420,000}{\$ 4,352,000^{*}}=13.19$ times

| Average days sales |
| :--- |
| in receivables |$=\frac{365}{\text { Receivables Turnover }}=\frac{365}{13.19}=27.7$ days

* $(\$ 4,622,000+\$ 4,082,000) \div 2$

Req. 2
The receivables turnover ratio reflects how many times average trade receivables were recorded and collected during the period. The average days sales in receivables indicates the average time it takes a customer to pay its account.

E6-21.
Req. 1
The change in the accounts receivable balance (\$48,066-63,403 = - $\$ 15,337$ ) would increase cash flow from operations by $\$ 15,337$ thousand. This happens because the Company is collecting cash faster than it is recording credit sales revenue.

Req. 2
(a) Declining sales revenue leads to lower accounts receivable because fewer new credit sales are available to replace the receivables that are being collected.
(b) Cash collections from the prior period's higher credit sales are greater than the new credit sales revenue. Note that in the next period, cash collections will also decline.

E6-22.
Req. 1

The change in the accounts receivable balance would decrease cash flow from operations by $\$ 173,000$ thousand. This happens because the Company is recording credit sales revenue faster than it is collecting cash.

Req. 2
(a) Increasing sales revenue leads to higher accounts receivable balances because credit sales are creating new receivables faster than receivables can be collected.
(b) Cash collections from the prior period's lower credit sales are lower than the new credit sales revenue. Note that in the next period, cash collections will also rise.

E6-23.
Req. 1

## JONES COMPANY

Bank Reconciliation, June 30, 2010

## Company's Books

Ending balance per Cash
account......................... $\$ 8,000$

## Additions:

None

## Deductions:

Bank service charge......
Correct cash balance $\qquad$
40
$\$ 7.960$
*\$19,100 - \$16,200 = \$2,900.

Req. 2

$$
\begin{aligned}
& \text { Bank service charge expense (+E, -SE) ................................................................................................................ } 40 \\
& \text { Cash (-A)........ }
\end{aligned}
$$

## Bank Statement

Ending balance per bank
statement..................... $\$ 6,060$
Additions:
Deposit in transit........... $\frac{2,900 *}{8,960}$

## Deductions:

Outstanding checks... $\quad 1,000$
Correct cash balance...... $\quad \underline{\underline{\$ 7,960}}$

To record deduction from bank account for service charges.

Req. 3
The correct cash balance per the bank reconciliation (\$8,000 - \$40), \$7,960

Req. 4
Balance sheet (June 30, 2010):
Current assets:
Cash
\$7,960

Req. 1

## RUSSELL COMPANY <br> Bank Reconciliation, September 30, 2011

Company's Books
Ending balance per Cash account $\qquad$

Additions:
None

## Deductions:

Bank service charges ... \$ 60
NSF check -
Betty Brown ............. 170
Correct cash balance $\qquad$
170 $\qquad$
\$5,470

## Bank Statement

Ending balance per bank statement \$4,770

Additions:
Deposit in transit* $\ldots \ldots \ldots \quad \frac{1,200^{*}}{5,970}$

## Deductions:

Outstanding checks
(\$28,900-\$28,400).
500
Correct cash balance ....... $\$ \underline{\$ 5,470}$
*\$28,600 - \$27,400 = \$1,200.

Req. 2
(1) Bank service charge expense (+E, -SE) ..... 60
Cash (-A) ..... 60To record bank service charges deducted from bank balance.(2) Accounts receivable (Betty Brown) (+A)................................. 170Cash (-A)170
To record customer check returned due to insufficient funds.

Req. 3
Same as the correct balance on the reconciliation, \$5,470.

Req. 4
Balance Sheet (September 30, 2011):
Current Assets:
Cash \$5,470

## E6-25 (Based on Supplement A)

November 20, 2010
Cash (+A)
441
Credit card discount (+XR, -R, -SE) 9
Sales revenue (+R, +SE)
450
To record credit card sale.
November 25, 2010:
Accounts receivable (Customer C) (+A) ...................... 2,800
Sales revenue (+R, +SE)
2,800
To record a credit sale.

November 28, 2010:
Accounts receivable (Customer D) (+A) ...................... 7,200
Sales revenue (+R, +SE)
7,200
To record a credit sale.

November 30, 2010:
Sales returns and allowances (+XR, -R, -SE) ............ 600
Accounts receivable (Customer D) (-A)
600
To record return of defective goods, $\$ 7,200 \times 1 / 12=\$ 600$.
December 6, 2010:
Cash (+A)
6,468
Sales discounts (+XR, -R, $-S E$ ) 132
Accounts receivable (Customer D) (-A)
6,600
To record collection within the discount period, $98 \% \times(\$ 7,200-\$ 600)=\$ 6,468$

December 30, 2010:
Cash (+A) .................................................................. 2,800
Accounts receivable (Customer C) (-A)
2,800
To record collection after the discount period.

## PROBLEMS

P6-1.
Case A
Because McDonald's collects cash when the coupon books are sold, cash collection is not an issue in this case. In order to determine if the revenue has been earned, the student must be careful in analyzing what McDonald's actually sold. Students who focus on the sale of the coupon book often conclude that the earning process is complete with the delivery of the book to the customer. In reality, McDonald's has a significant additional service to perform; it has to serve a meal. The correct point for revenue recognition in this case is when the customer uses the coupon or when the coupon expires and McDonald's has no further obligation.

## Case B

In this case there is an extremely low down payment and some reason to believe that Quality Builders may default on the contract because of prior actions. If students believe that Howard Land Development could sue and collect on the contract, they will probably argue for revenue recognition. Given the risk of cash collection, most students will argue that revenue should be recognized as cash is collected. The text does not discuss FASB \#66, but the instructor may want to mention during the discussion that there is authoritative guidance concerning minimum down payments before revenue can be recorded on a land sale.

## Case C

While warranty work on refrigerators can involve significant amounts of effort and money, companies are permitted to record revenue at the point of sale. The text does not discuss this specific issue but the matching concept is mentioned in the context of revenue recognition. This is an excellent opportunity to mention the need to accrue estimated warranty expense at the time that sales revenue is recorded. Some students are surprised to see that costs that will be incurred in the future can be recorded as an expense in the current accounting period.

## P6-2.

Req. 1

|  | Sales Revenue | Sales Discounts (taken) | Sales Returns and Allowances | Bad Debt Expense |
| :---: | :---: | :---: | :---: | :---: |
| (a) | +234,000 | NE | NE | NE |
| (b) | +13,000 | NE | NE | NE |
| (c) | +25,000 | NE | NE | NE |
| (d) | NE | NE | +500 | NE |
| (e) | +24,500 | NE | NE | NE |
| (f) | NE | +250 | NE | NE |
| (g) | NE | +2,000 | NE | NE |
| (h) | NE | +500 | NE | NE |
| (i) | +17,500 | NE | NE | NE |
| (j) | NE | -70 | +3,500 | NE |
| (k) | NE | NE | NE | NE |
| (l) | NE | NE | NE | NE |
| (m) | NE | NE | NE | +1,140* |
| Total | +\$314,000 | $\underline{+\$ 2,680}$ | $\underline{+\$ 4,000}$ | $\underline{+ \text { +1,140 }}$ |
| * Credit sales (\$13,000 + \$25,000 + \$24,500 + \$17,500) . \$80,000 |  |  |  |  |
| Less: Sales returns (\$500 + \$3,500) .......................... 4,00 |  |  |  |  |
| Net sales revenue........................................ |  |  | ............. 76,000 |  |
| Estimated bad debt rate |  |  | .. x |  |
| Bad debt expense... |  |  | \$1,140 |  |

Req. 2
Income statement:
Sales revenue
Less: Sales returns and allowances \$314,000

Sales discounts................................... 2,680
Net sales revenue
\$307,320
Bad debt expense
1,140

## P6-3.

Income Statement Items
Case A
Case B
Gross sales revenue

|  | $\$ 239,000$ |  | $\$ 165,000$ |
| :--- | ---: | ---: | ---: |
|  | 20,000 | i. | 40,500 |
| a. | 219,000 | g. | 124,500 |
| c. | 153,300 | h. | $(70 \%) 87,150$ |
| b. | $(30 \%) 65,700$ | f. | 37,350 |
| d. | 43,700 |  | 18,600 |
|  | 22,000 | d. | 18,750 |
| e. | 4,400 | e. | 3,750 |
| f. | 17,600 | c. | 15,000 |
| g. | $(2,000)$ | 400 | b. |

Note $=$ Computations in order

## CASE A

a. $\quad \$ 239,000-\$ 20,000=\$ 219,000$
b. $\quad \$ 219,000 \times .30=\$ 65,700$
c. $\quad \$ 219,000-\$ 65,700=\$ 153,300$
d. $\$ 65,700-\$ 22,000=\$ 43,700$
e. $\quad \$ 22,000 \times .20=\$ 4,400$
f. $\quad \$ 22,000-\$ 4,400=\$ 17,600$
g. $\quad \$ 2,000 \times .20=\$ 400$
h. $\$ 17,600-\$ 2,000+\$ 400=\$ 16,000$
i. $\quad \$ 16,000 \div 10,000=\$ 1.60$

## CASE B

a. $\quad \$ 2.30 \times 10,000$ shares $=\$ 23,000$
b. $\quad \$ 10,000 \times .20=\$ 2,000$
c. $\$ 23,000-\$ 10,000+\$ 2,000=\$ 15,000$
d. $\$ 15,000 \div .80=\$ 18,750$
e. $\$ 18,750-\$ 15,000=\$ 3,750$
f. $\quad \$ 18,750+\$ 18,600=\$ 37,350$
g. $\$ 37,350 \div(1-.70)=\$ 124,500$
h. $\quad \$ 124,500-\$ 37,350=\$ 87,150$
i. $\$ 165,000-\$ 124,500=\$ 40,500$

## P6-4.

1. Bad debt expense (+E, -SE) ..... 162
Allowance for doubtful accounts (+XA, -A) ..... 162End-of-period bad debt expense estimate.
Allowance for doubtful accounts (-XA, +A) ..... 145
Accounts receivable (-A) ..... 145Write-off of bad debts.
2. Year 2 ..... \$69

$$
+\$ 30-\$ 41=\$ 58
$$

Year 1

$\$ 61+\$ 23-\$ 15=\$ 69$

Allowance for DA Year 2
Allowance for DA Year 1


The solution involves solving for the missing value in the T-account.

P6-5.

Req. 1
Aging Analysis of Accounts Receivable

| Customer | Total Receivables | (a) Not Yet Due | (b) Up to One Year Past Due | (c) More Than One Year Past Due |
| :---: | :---: | :---: | :---: | :---: |
| B. Brown............. | \$ 5,200 |  |  | \$5,200 |
| D. Donalds......... | 8,000 |  | \$ 8,000 |  |
| N. Napier........... | 7,000 | \$ 7,000 |  |  |
| S. Strothers......... | 22,500 | 2,000 | 20,500 |  |
| T. Thomas........... | 4,000 | 4,000 |  |  |
| Totals.............. | \$46,700 | \$13,000 | \$28,500 | \$5,200 |
| Percent............. | 100\% | 28\% | 61\% | 11\% |

Req. 2
Aging Schedule--Estimated Amounts Uncollectible

|  | Age | Amount of Receivables | Estimated Uncollectible Percentage | Estimated Amount Uncollectible |
| :---: | :---: | :---: | :---: | :---: |
| a. <br> b. <br> C. | Not yet due. $\qquad$ Up to one year past due $\qquad$ Over one year past due. $\qquad$ | $\begin{array}{r} \$ 13,000 \\ 28,500 \\ 5,200 \end{array}$ | $\begin{array}{r} 2 \% \\ 7 \% \\ 30 \% \end{array}$ | $\begin{array}{r} \hline \$ 260 \\ 1,995 \\ 1,560 \end{array}$ |
|  | Estimated ending balance in Allowance for Doubtful Accounts Balance before adjustment Bad Debt Expense for the year |  |  | $\begin{array}{r} 3,815 \\ 920 \\ \hline \$ 2,895 \end{array}$ |

Req. 3
Bad debt expense (+E, -SE)......................................... 2,895
Allowance for doubtful accounts (+XA, -A)........... 2,895
Req. 4
Income statement:
Bad debt expense ........................................................ \$2,895
Balance sheet:
Current Assets:
Accounts receivable
\$46,700
Less: Allowance for doubtful accounts 3,815
Accounts receivable (net)
\$42,885

Req. 1

## BUILDERS COMPANY, INC.

 Income Statement For the Year Ended December 31, 2009| Net sales revenue (\$145,600-\$5,600-\$6,400) |  | \$133,600 |
| :---: | :---: | :---: |
| Cost of goods sold. |  | 78,400 |
| Gross profit on sales |  | 55,200 |
| Operating expenses: |  |  |
| Selling expense | \$13,600 |  |
| Administrative expense | 14,400 |  |
| Bad debt expense | 1,600 | 29,600 |
| Income from operations.. |  | 25,600 |
| Income tax expense |  | 7,680 |
| Net income |  | \$ 17,920 |
| Earnings per share on capital stock outstanding (\$17,920 $\div 10,000$ shares) |  | \$1.79 |

## Req. 2

$$
\text { Gross Profit Percentage }=\frac{\text { Gross Profit }}{\text { Net Sales }}=\frac{\$ 55,200}{\$ 133,600}=0.413 \text { (41.3\%) }
$$

The gross profit percentage measures the excess of sales prices over the costs to purchase or produce the goods or services sold as a percentage.


* $(\$ 16,000+\$ 14,400) \div 2$

The receivables turnover ratio measures the effectiveness of credit-granting and collection activities.

Req. 1

## HOPKINS COMPANY <br> Bank Reconciliation, April 30, 2010

| Company's Books |  |  | Bank Statement |  |
| :---: | :---: | :---: | :---: | :---: |
| Ending balance per Cash account. $\qquad$ |  | \$23,900 | Ending balance per bank statement $\qquad$ | \$23,550 |
| Additions: |  |  | Additions: |  |
| Interest collected |  | 1,180 | Deposits in transit* ............ | 5,400 |
|  |  | 25,080 |  | 28,950 |
| Deductions: |  |  | Deductions: |  |
| NSF-A.B. Wright............. | 160 |  | Outstanding checks........... | 4,100 |
| Bank charges ................... | 70 | 230 |  |  |
| Correct cash balance ......... |  | \$24,850 | Correct cash balance ........ | \$24,850 |

*\$41,500-\$36,100 = \$5,400.
Req. 2
(1) Cash (+A)

Interest revenue (+R, +SE)
Interest collected.
(2) Accounts receivable (A. B. Wright) (+A) ............................ 160

Cash (-A)
Customer's check returned, insufficient funds.

Bank service charges deducted from bank statement.
These entries are necessary because of the changes to the regular Cash account that have not yet been recorded by the company. The bank already has recorded them in its accounts. The Cash account (and the other accounts in the entries) must be brought up to date for financial statement purposes.

Req. 3
Balance in regular Cash account..................................................... \$24,850
Req. 4
Balance Sheet (April 30, 2010):
Current Assets:
Cash
\$24,850

## P6-8.

Req. 1
Comparison of deposits listed in the Cash account with deposits listed on the bank statement reveals a \$5,200 deposit in transit on August 31.

Req. 2
Comparison of the checks cleared on the bank statement with (a) outstanding checks from July, and (b) checks written in August reveals two outstanding checks at the end of August (\$280 + \$510 = \$790).

Req. 3
HIRST COMPANY
Bank Reconciliation, August 31, 2011

| Company's Books <br> Ending balance per Cash account. $\qquad$ | Bank Statement |  |  |
| :---: | :---: | :---: | :---: |
|  | \$20,370 | Ending balance per bank statement | \$17,990 |
| Additions: |  | Additions: |  |
| Interest collected | 2,150 | Deposits in transit ............. | 5,200 |
|  | 22,520 |  | 23,190 |
| Deductions: |  | Deductions: |  |
| Bank service charges. | 120 | Outstanding checks............ | 790 |
| Correct cash balance | \$22,400 | Correct cash balance ......... | \$22,400 |

Req. 4

| (1) | Cash (+A) | 2,150 |  |
| :---: | :---: | :---: | :---: |
|  | Interest revenue (+R, +SE) |  | 2,150 |
|  | Interest collected |  |  |

(2) Bank service charge expense (+E, -SE) ............................................................................................ 120

Service charges deducted from bank balance.
These entries are necessary because of the changes in the regular Cash account that have not yet been recorded by the company. The bank already has recorded them in its accounts. The Cash account (and the other accounts in the entries) must be brought up to date for financial statement purposes.

Req. 5
Current Assets:
Cash
\$22,400

## P6-9. (Based on Supplement A)

Req. 1
(a) Cash (+A)

234,000
Sales revenue (+R, +SE)
234,000
Cash sales for 2010.
(b) Accounts receivable (R. Jones) (+A)

13,000
Sales revenue (+R, +SE)
13,000
Credit sale, \$13,000.
(c) Accounts receivable (K. Black) (+A)

25,000
Sales revenue (+R, +SE)
25,000
Credit sale, \$25,000.
(d) Sales returns and allowances (+XR, -R, -SE)

500
Accounts receivable (R. Jones) (-A)
500
Sale return, 1 unit @ $\$ 500$.
(e) Accounts receivable (B. Sears) (+A) 24,500
Sales revenue (+R, +SE)
24,500
Credit sale, \$24,500.
(f) Cash (+A) ............................................................ 12,250

Sales discounts (+XR, -R, -SE)................................ 250
Accounts receivable (R. Jones) (-A)
12,500
Paid account in full within discount period, $(\$ 13,000-\$ 500) \times(1-.02)=\$ 12,250$.
(g) Cash (+A) 98,000
Sales discounts (+XR, -R, -SE) 2,000
Accounts receivable (prior year) (-A)
100,000
Collected receivables of prior year, all within discount periods $\$ 98,000 \div .98=\$ 100,000$.
(h) Cash (+A)

24,500
Sales discounts (+XR, -R, -SE)............................... 500
Accounts receivable (K. Black) (-A)
25,000
Collected receivable within the discount period $\$ 25,000 \times .98=\$ 24,500$.
(i) Accounts receivable (R. Roy) (+A) 17,500
Sales revenue (+R, +SE)
17,500
Credit sale.

## P6-9. (continued)

(j) Sales returns and allowances (+XR, -R, -SE) .......... 3,500 Cash (-A)
Sales discounts (-XR, +R, +SE)
Sales return, 7 units @ \$500 less sales discounts taken = \$3,500 x . 98 .
(k) Cash (+A)

6,000
Accounts receivable (-A)
6,000
Collected receivable of prior year, after the discount period.
(I) Allowance for doubtful accounts (-XA, +A) ............... 3,000

Accounts receivable (2009 account) (-A) ....... 3,000
Wrote off uncollectible account from 2009.
(m) Bad debt expense (+E, -SE) .................................... 1,140

Allowance for doubtful accounts (+XA, -A)..... 1,140
To adjust for estimated bad debt expense
Credit sales (\$13,000 + \$25,000 + \$24,500 + \$17,500) .. \$80,000
Less: Sales returns (\$500 + \$3,500) ............................ 4,000
Net sales revenue......................................................... 76,000
Estimated bad debt rate .................................................x 1.5 1
Bad debt expense..................................................... \$1,140

Req. 2
Income statement:
Sales revenue (\$234,000 + \$13,000 + \$25,000

+ \$24,500 + \$17,500) .................................... \$314,000
Less: Sales returns and allowances (\$3,500 + \$500) .............. 4,000
Sales discounts (\$250 + \$2,000 + \$500 - \$70) ................................. 2,680
Net sales revenue
Bad debt expense


## ALTERNATE PROBLEMS

## AP6-1.

Req. 1

|  | Sales Revenue | Sales Discounts (taken) | Sales Returns and Allowances | Bad Debt Expense |
| :---: | :---: | :---: | :---: | :---: |
| (a) | +227,000 | NE | NE | NE |
| (b) | +12,000 | NE | NE | NE |
| (c) | +23,500 | NE | NE | NE |
| (d) | NE | +240 | NE | NE |
| (e) | +26,000 | NE | NE | NE |
| (f) | NE | -10 | +500 | NE |
| (g) | NE | +1,600* | NE | NE |
| (h) | NE | NE | +3,500 | NE |
| (i) | NE | +400 | NE | NE |
| (j) | +18,500 | NE | NE | NE |
| (k) | NE | NE | NE | NE |
| (I) | NE | NE | NE | NE |
| (m) | NE | NE | NE | +2,280** |
| Total | +\$307,000 | $\underline{+\$ 2,240}$ | $\underline{+\$ 4,000}$ | $\underline{+\$ 2,280}$ |
| * $[(\$ 78,400 / .98) \times .02]=\$ 1,600$ |  |  |  |  |
| ${ }^{* *}$ Credit sales (\$12,000 + \$23,500 + \$26,000 + \$18,500) . \$80,000 |  |  |  |  |
| Less: Sales returns (\$500 + \$3,500) .......................... 4,000 |  |  |  |  |
| Net sales revenue................................................... \$76,000 |  |  |  |  |
| Estimated bad debt rate ........................................... x 3 3 |  |  |  |  |
| Bad debt expense................................................... \$2,280 |  |  |  |  |

## Req. 2

Income statement:
Sales revenue
\$307,000
Less: Sales returns and allowances 4,000
Sales discounts.................................... 2,240
Net sales revenue
\$300,760
Bad debt expense
\$2,280

AP6-2.

1. Bad debt expense (+E, -SE) .4,908
Allowance for doubtful accounts (+XA, -A)..................... 4,908
End of period bad debt expense estimate.
Allowance for doubtful accounts (-XA, +A) ...............................5,060
Accounts receivable (-A)............................................... 5,060
Write-off of bad debts.
2. 

| Allowances for <br> Doubtful <br> Accounts | Balance at <br> Beginning <br> of Year | Additions <br> Charged to <br> Costs and <br> Expenses | Deductions <br> from <br> Reserve | Balance at <br> End <br> of Year |
| :---: | :---: | :---: | :---: | :---: |
| Year 3 | $\$ 2,032$ | $\$ 4,908$ | $\$ 5,060$ | $\$ 1,880$ |
| Year 2 | 1,234 | 5,475 | 4,677 | 2,032 |
| Year 1 | 940 | 5,269 | 4,975 | 1,234 |

Year 3
Allowance for Doubtful Accounts

|  |  | 2,032 | Beg. bal. |
| :--- | :--- | :--- | :--- |
| Write-offs | 5,060 | 4,908 | Bad debt exp. |
|  | 1,880 | End. bal. |  |

Year 2
Allowance for Doubtful Accounts

|  | 1,234 | Beg. bal. |  |
| :--- | :--- | ---: | :--- |
| Write-offs | 4,677 | 5,475 | Bad debt exp. |
|  | $\underline{\underline{2,032}}$ | End. bal. |  |

Year 1
Allowance for Doubtful Accounts

|  |  | 940 | Beg. bal |
| :--- | ---: | ---: | :--- |
| Write-offs | 4,975 | 5,269 | Bad debt exp. |
|  |  | 1,234 | Ending bal. |

The solution involves solving for the missing value in the T-account.

Req. 1
Aging Analysis of Accounts Receivable

| Customer | Total Receivable | (a) <br> Not Yet Due | (b) <br> Up to <br> 6 Mo. Past Due | (c) 6 to 12 Mo. Past Due | (d) More Than 12 Mo . Past Due |
| :---: | :---: | :---: | :---: | :---: | :---: |
| R. Devens .......... | \$ 2,000 |  |  | \$2,000 |  |
| C. Howard | 6,000 |  |  |  | \$6,000 |
| D. McClain | 4,000 |  | \$ 4,000 |  |  |
| T. Skibinski ......... | 14,500 | \$ 4,500 | 10,000 |  |  |
| H. Wu ................ | 13,000 | 13,000 |  |  |  |
| Totals.............. | \$39,500 | \$17,500 | \$14,000 | \$2,000 | \$6,000 |
| Percent............ | 100\% | 44.3\% | 35.4\% | 5.1\% | 15.2\% |

Req. 2
Estimated Amounts Uncollectible

|  | Age | Amount of Receivable | Estimated Loss Rate | Estimated Uncollectible |
| :---: | :---: | :---: | :---: | :---: |
| a. | Not yet due. | \$17,500 | 1\% | \$ 175 |
| b. | Up to 6 months past due....... | 14,000 | 5\% | 700 |
| c. | 6 to 12 months past due..... | 2,000 | 20\% | 400 |
| d. | Over 12 months past due...... | 6,000 | 50\% | 3,000 |
|  | Total.......................... | \$39,500 |  | \$4,275 |

To adjust for estimated bad debt loss:
Balance needed in the allowance account \$4,275
Balance currently in the account .............. 1,550
Adjustment needed (increase) ................. \$2,725
Req. 3

> Bad debt expense (+E, -SE) ....................................... 2,725 Allowance for doubtful accounts (+XA, -A) .........

Req. 4
Income statement:
Bad debt expense
\$2,725
Balance sheet:
Current Assets:
Accounts receivable ...................................................... \$39,500
Less: Allowance for doubtful accounts .......................... 4, 275
Accounts receivable, net

## AP6-4.

Req. 1

## RANG CORPORATION Income Statement For the Year Ended December 31, 2012

| Net sales revenue (\$182,000-\$7,000) |  | \$175,000 |
| :---: | :---: | :---: |
| Cost of goods sold. |  | 98,000 |
| Gross profit. |  | 77,000 |
| Operating expenses: |  |  |
| Selling expense | \$17,000 |  |
| Administrative and general expense | 18,000 |  |
| Sales discounts | 8,000 |  |
| Bad debt expense | 2,000 |  |
| Total operating expenses |  | 45,000 |
| Income from operations. |  | 32,000 |
| Income tax expense |  | 9,600 |
| Net income. |  | \$ 22,400 |

Earnings per share on common stock outstanding ( $\$ 22,400 \div 10,000$ shares) $\$ 2.24$

Req. 2
Gross Profit Percentage $=\frac{\text { Gross Profit }}{\text { Net Sales }}=\frac{\$ 77,000}{\$ 175,000}=0.440$ (44.0\%)
The gross profit percentage measures the excess of sales prices over the costs to purchase or produce the goods or services sold as a percentage.

```
\(\begin{aligned} & \text { Receivables }=\frac{\text { Net Sales }}{\text { Turnover }} \begin{array}{c}\text { Average Net Trade } \\ \text { Accounts Receivable }\end{array}\end{aligned}=\frac{\$ 175,000}{\$ 17,000^{\star}}=10.29\)
* \((\$ 16,000+\$ 18,000) \div 2\)
```

The receivables turnover ratio measures the effectiveness of credit-granting and collection activities.

## AP6-5.

Req. 1
Comparison of (a) the unrecorded deposit carried over from November and (b) the deposits listed on the bank statement reveals that the \$13,000 deposit for December 31 is in transit.

Req. 2
Comparison of the checks cleared on the bank statement with (a) outstanding checks from November and (b) checks written in December reveals that the outstanding checks at the end of December are \$5,000 + \$3,300 + \$500 = \$8,800.

Req. 3

## PACKER COMPANY Bank Reconciliation, December 31, 2011

## Company's Books

Bank Statement

Ending balance per Cash

Additions:
Interest collected ................

## Deductions:

NSF check—J. Left............ \$300
Bank service charges......... 150
Correct cash balance .........

|  | \$61,260 | Ending balance per bank statement $\qquad$ | \$61,860 |
| :---: | :---: | :---: | :---: |
|  |  | Additions: |  |
|  | 5,250 | Deposits in transit ............. | 13,000 |
|  | 66,510 |  | 74,860 |
|  |  | Deductions: |  |
| \$300 |  |  |  |
| $\underline{150}$ | 450 | Outstanding checks........... | 8,800 |
|  | $\underline{\underline{\$ 66,060}}$ | Correct cash balance ......... | \$66,060 |

## AP6-5. (continued)

Req. 4
(1) Accounts receivable (J. Left) (+A) .................................. 300 Cash (-A). 300
To record NSF check.
(2) Cash (+A) ................................................................. 5,250 Interest revenue (+R, +SE)
Interest collected.
(3) Bank service charge expense (+E, -SE) ........................ 150 Cash (-A)
Service charges deducted from bank balance.
These entries are necessary because of the changes in the regular Cash account that have not yet been recorded by the company. The bank already has recorded them in its accounts. The Cash account (and the other accounts in the entries) must be brought up to date for financial statement purposes.

Req. 5
Balance Sheet (2011):
Current Assets:
Cash \$66,060

## CASES AND PROJECTS

## ANNUAL REPORT CASES

CP6-1.

1. The company includes liquid financial instruments with original maturities of three months or less to be cash and cash equivalents. This information is from note 2 of the financial statements. The amount disclosed is likely to be close to the fair market value of the securities, given the short maturity date of the securities.
2. In addition to Cost of Goods Sold, American Eagle Outfitters subtracts buying, occupancy and warehousing costs from Net Sales in its computation of Gross Profit. This follows standard practice among retailers. No such additional expenses are subtracted in Deckers' (a footwear manufacturer) computation of Gross Profit. This makes the interpretation of gross profit percentages across different industries difficult.
3. 

$$
\begin{aligned}
& \text { Receivables turnover }=\frac{\text { Net Sales }}{\text { Average Net Trade }}=\frac{\$ 2,794,409}{27,595.5}=101.3 \text { times } \\
& *(\$ 26,045+29,146) \div 2
\end{aligned}
$$

This question is designed to focus student attention on the mechanics of the computation of the receivables turnover ratio and the effect of industry differences. The receivables turnover is so high because of the nature of the company's business. Retail sales are likely to be made with cash or credit card. As a consequence, most retailers would not have accounts receivable related to sales unless they had private store credit card accounts. The accounts receivable on American Eagle's balance sheet relate primarily to amounts owed from landlords for construction allowances for building new stores in malls.
4. No, the company does not report an allowance for doubtful accounts on the balance sheet or in the notes. As a retailer, its trade receivables from customers are immaterial-the company's receivables consist of non-trade receivables and notes receivable.

1. The company held $\$ 27,267$ thousand of cash and cash equivalents at the end of the current year. This is disclosed on the balance sheet and the statement of cash flows.
2. Accounts receivable increased by $\$ 6,547$ thousand, decreasing Net Cash Provided by Operating Activities for the current year. This is included in the operating section of the statement of cash flows in the line item relating to changes in receivables. You may wish to note to students that this amount does not agree with the amount on the statement of cash flows which indicates a $\$ 6,547$ increase. This difference is the result of the translation of foreign currency receivables.
3. 

|  |  | $\mathbf{2 0 0 7}$ |
| :--- | :---: | :---: |
| Gross Profit <br> Percentage$=\quad$ Gross Profit |  | $\mathbf{2 0 0 6}$ |

The gross profit percentage decreased from 2006 to 2007. The decrease implies that the company has reduced its ability to charge premium prices or to purchase goods for resale at lower cost.
4. It discloses its revenue recognition policies in note 2 which summarizes significant accounting policies. The company recognizes revenue from selling gift cards when customers redeem a gift card for merchandise rather than when the gift card is sold. When gift cards are sold, a current liability (deferred revenue) is recorded.

CP6-3.
1.

| Current year | American Eagle <br> Outfitters | Urban Outfitters |
| :--- | :---: | :---: |
| Gross Profit <br> Percentage$\quad$ Gross Profit |  | $\$ 1,340,429$ |


| Prior year | American Eagle <br> Outfitters | Urban Outfitters |
| :--- | :---: | :---: |
| Gross Profit <br> Percentage$\quad$Gross Profit <br> Net Sales | $\frac{\$ 1,077,749}{2,321,962}=0.464$ | $\frac{\$ 448,606}{1,092,107}=0.411$ |

The improved gross profit percentage for American Eagle suggests higher sales prices and/or lower costs of merchandise. Because other costs (occupancy, etc.) are included along with cost of goods sold, the improved ratios may also result from improved comparable store sales and better cost controls. The declining gross profit percentage for Urban Outfitters suggests the opposite scenarios.
2. Companies with unique items for sale or valuable brand images often produce higher gross profit margins. Because American Eagle Outfitters and Urban Outfitters have unique items for sale as well as valuable brand images in certain markets, their margins are predicted to be in the mid to upper range of their industry.
3.

|  | Industry <br> Average | American Eagle <br> Outfitters | Urban Outfitters |
| :---: | :---: | :---: | :---: |
| Gross Profit Percentage $=$ | $40.23 \%$ | $48.0 \%$ | $36.9 \%$ |

Urban Outfitters' gross profit percentage is below and American Eagle Outfitters' is above the industry average. The higher gross profit percentage for American Eagle Outfitters was anticipated in Requirement 2, but Urban Outfitters is not above the industry average (although it is close, and was above average in the prior year).

## FINANCIAL REPORTING AND ANALYSIS CASES

## CP6-4.

1. No, because the service is completed over a short time period and the difference in sales for that period from year to year is not large.
2. $\$ 365,000,000$ under each. If the current fiscal year is 2009, UPS recognizes revenues from December 31, 2008 to December 30, 2009 pickups (365 days). Federal Express recognizes revenues from January 1, 2009 through December 30 pickups plus half of December 31, 2008 and December 31, 2009 pickups. Airborne recognizes revenues from January 1 through December 31, 2009 pickups.
3. If there was a significant increase or decrease in pickups from year to year, the different methods could cause different amounts of revenue to be recognized in each period, though the total revenues over the life of the company would still remain the same.
4. Either the UPS or Federal Express rule is more correct conceptually (follow the revenue recognition rules). However, since the choice does not materially affect the financial statements, we have no preference among the three.

## CRITICAL THINKING CASES

## CP6-5.

1. Recording sales for goods or services that had not been delivered as of year-end violates the revenue principle. Recording revenue for sales that were subject to cancellation, without estimating returns properly, is also a violation.
2. It should establish a sales returns and allowances account (a contra revenue) for potential cancellations. An estimate of future cancellations should be made and the amount should reduce net sales in the period the revenue is recognized.
3. Profiting from sales of stock they owned at an inflated stock price and perhaps receiving bonuses determined on the basis of growth in net income probably motivated management. Management was very focused on reporting increased growth because the growth fueled the run-up in the stock price.

## CP6-5. (continued)

4. The other investors who paid inflated amounts for the stock, customers who were poorly served during the period, and employees of the company who were drawn into the fraud and suffered damage to their reputations were all hurt by management's conduct.
5. Sales transactions booked near the end of the quarter and sales with special terms, e.g. right of return or cancellation, should receive special attention from auditors. Channel stuffing often lowers the receivables turnover ratio. To cover up this change, management improperly reclassified some accounts receivable as notes receivable.

## CP6-6.

Req. 1
(a) $\$ 50 \times 12$ months $=\$ 600$
(b) $\$ 12 \times$ ( 52 weeks $\times 5$ days per week) $=3,120$
(c,d) Accounts receivable collections $(\$ 300+\$ 800)=1,100$
Total approximate amount stolen
\$4,820
Req. 2
Basic recommendations:
(1) Install a tight system of internal control, including the following:
a. Separate cash handling from recordkeeping.
b. Deposit all cash daily.
c. Make all payments by check. Consider a separate cash on hand system for small expense payments.
d. Reconcile bank statement monthly.
e. Institute a system of spot checks.
f. Establish cash and paperwork flows.
(2) a. Arrange for an annual independent audit on a continuing basis.
b. Carefully plan and assign definite responsibilities for all employees. Focus on attaining internal control. Isolate the once trusted employee from all cash handling and accounting activities and consider dismissing and bringing charges against the employee.

## FINANCIAL REPORTING AND ANALYSIS PROJECTS

## CP6-7.

The solutions to this case will depend on the company and/or accounting period selected for analysis.

