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) 6. c) 2. b) 7. d) 3. b) 8. b)

4. d) 9. d) 5. c) 10. c)

Authors' Recommended Solution Time

(Time in minutes)

						ΛItα	nate	Casa	s and
Mini-ev	rercises	Fyer	cises	Proh	lems		nate Iems		ects
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				
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		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		Point of sale	Х	Completion of flight
(b) Computer sold by mail order company on a credit card	s	Shipment		Delivery
(c) Sale of inventory to a business customer on open account	_x 5	Shipment		Collection of account

M6-2.

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

M6-3.

Credit card sales (R) Less: Credit card discount (XR) Net credit card sales	\$8,400 252 \$8,148
Sales on account (R)	\$10,500
Less: Sales returns (XR)	500
	10,000
Less: Sales discounts (1/2 x 10,000 x 1%) (XR)	50
Net sales on account	9,950
Net sales (reported on income statement)	\$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
(b)	Bad debt expense (+E, –SE)	13,000

M6-6.

	Assets		Liabilities	Stockholders' Equity
` '	Allowance for doubtful accounts	-17,000		Bad debt expense -17,000
` '	Allowance for doubtful accounts	+7,000		
	Accounts receivable	-7,000		

M6-7.

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

M6-8.

Reconciling Item	Company's Books	Statement _
(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 Accounts receivable (+A)		
Sales revenue (+R, +SE)		8,000
This entry records the sale at the gross amount. If the custome discount period, only \$7,920 must be paid, in which case the er be as follows:		
Cash (+A)	7,920	
Sales discounts (+XR, -SE)	80	
Accounts receivable (-A)		8,000

EXERCISES

E6-1.

Less: Sales di	(\$950 + \$600 + \$450) iscount (\$950 collected from S. Green x 2%).	
Less: Sales di Less: Credit c	(\$2,000 + \$7,000 +\$5,000)scounts (\$7,000 collected from S x 3%)ard discounts (\$2,000 from R x 2%)	210
	(\$350 + \$4,500 + \$9,000)turns and allowances (1/10 x \$9,000 from D)	

Less: Sales discounts ($^{9}/_{10}$ x \$9,000 from D x 3%)

Less: Credit card discounts (\$350 from B x 2%)......

Net sales

E6-4.

		Cost of	
Transaction	Net Sales	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 (Amount saved \div Amount paid) = Interest rate for 50 days. $(4\% \div 96\%) = 4.17\%$ for 50 days.

Interest rate for 50 days x (365 days \div 50 days) = Annual interest rate 4.17% x (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%).

243

\$12,700

E6-6.

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)

<u>\$1.52</u>

Req. 2

Gross profit margin: \$1,141,887 - \$700,349 = \$441,538.

Gross profit percentage ratio: $$441,538 \div $1,141,887 = .387$ (or 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 expensescost 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 For the Year Ended December 31, 2010

		Amount	Percentage
Gross sales (\$223,000 + \$40,000)		\$263,000 <u>8,000</u> 255,000 <u>143,000</u> 112,000	100% <u>56</u> % 44%
Administrative expense	\$20,000 45,200 1,200	66,400 45,600 13,680 \$ 31,920	26% 18% 5% 13%
Earnings per share (\$31,920 ÷ 4,000 shares)		<u>\$7.98</u>	

Req. 2

Gross profit margin: \$255,000 - \$143,000 = \$112,000.

Gross profit percentage ratio: $$112,000 \div $255,000 = .44$ (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.

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.

E6-10.

	Assets		Liabilities	Stockholders' Equity
	Allowance for doubtful accounts	-23,700		Bad debt expense -23,700
٠,	Allowance for doubtful accounts	+240		
	Accounts receivable	-240		

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.

Rea. 2

			Income from
Transaction	Net Sales	Gross Profit	Operations
a.	NE	NE	- 22,400
b.	NE	NE	NE

E6-12.

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

E6-13.

Req. 1

December 31, 2011-Adjusting entry:

Allowance for doubtful accounts (+XA, -A)...... 4,800

To adjust for estimated bad debt expense for 2011 computed as follows:

			Estimated		Estimated
			percentage		amount
Aged accounts receivable			uncollectible		uncollectible
Not yet due	\$60,000	Χ	3%	=	\$ 1,800
Up to 180 days past due	12,000	X	15%	=	1,800
Over 180 days past due	4,000	Χ	35%	=	1,400
Estimated balance in Allowance for D	oubtful Ac	cour	nts		5,000
Current balance in Allowance for Dou	btful Accou	unts		_	200
Bad Debt Expense for the year				_	\$4,800

Req. 2 Balance sheet:

Accounts receivable, net of allowance for doubtful accounts.....

\$71,000

E6-14.

Req. 1

December 31, 2010-Adjusting entry:

Allowance for doubtful accounts (+XA, -A)......

To adjust for estimated bad debt expense for 2010 computed as follows:

			Estimated		Estimated
			percentage		amount
Aged accounts receivab	ole		uncollectible		uncollectible
Not yet due	\$250,000	Χ	3.5%	=	\$8,750
Up to 120 days past due	50,000	Χ	10%	=	5,000
Over 120 days past due	30,000	Χ	30%	=	9,000
Estimated balance in Allowance for	Doubtful Aco	cour	nts		22,750
Current balance in Allowance for D	oubtful Accou	unts		_	400
Bad Debt Expense for the year				_	\$22,350

Req. 2

Balance sheet:

Accounts receivable, net of allowance for doubtful accounts.....

To write off specific bad debts.

\$307,250

22,350

E6-15.

- 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}

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.

^{** 11,338 + 117}

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 Write-offs 512,000 532,000 Bad debt exp. 419,000 End. balance

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 contra-asset 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
Dec. 31, 2011	
Bad debt expense (+E, -SE)	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) <u>225</u>	\$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

Average days sales = $\frac{365}{\text{Receivables Turnover}} = \frac{365}{8.74} = 41.8 \text{ days}$

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 =
$$\frac{\text{Net Sales}}{\text{Average Net Trade}} = \frac{\$57,420,000}{\$4,352,000^*} = 13.19 \text{ times}$$

Average days sales = $\frac{365}{\text{Receivables Turnover}} = \frac{365}{13.19} = 27.7 \text{ days}$

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.

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

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

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	Bank Statement
Ending balance per Cash account\$8,000	Ending balance per bank statement \$6,060
Additions:	Additions:
None	Deposit in transit 2,900* 8,960
Deductions:	Deductions:
Bank service charge 40 Correct cash balance \$7,960	Outstanding checks 1,000 Correct cash balance \$7,960
*\$19,100 - \$16,200 = \$2,900.	
Req. 2	
Bank service charge expense (+E, -Cash (-A) To record deduction from bank accord	40
Req. 3	
The correct cash balance per the bank rec	conciliation (\$8,000 – \$40), <u>\$7,960</u>
Req. 4	
Balance sheet (June 30, 2010): Current assets: Cash	\$7,960

Req. 1

RUSSELL COMPANY Bank Reconciliation, September 30, 2011

Endin	pany's Books g balance per Cash unt	\$5,700	Bank Statement Ending balance per bank statement	\$4,770
Addit	ions:		Additions:	
No	ne		Deposit in transit*	1,200* 5,970
Dedu	ctions:		Deductions:	
NS E Corre	hk service charges \$ 60 F check – Betty Brown 170 ct cash balance 600 - \$27,400 = \$1,200.	230 \$5,470	Outstanding checks (\$28,900 – \$28,400) Correct cash balance	<u>500</u> <u>\$5,470</u>
Req.	2			
(1)	Bank service charge expe Cash (-A) To record bank service ch			60
(2)	Accounts receivable (Betty Cash (–A) To record customer check			170
Req.	3			
Same	e as the correct balance on t	the reconcili	iation, <u>\$5,470.</u>	
Req.	4			
Balar	nce Sheet (September 30, 2 Current Assets: Cash	•	\$5	,470

E6-25 (Based on Supplement A)

November 20, 2010 Cash (+A) Credit card discount (+XR, -R, -SE) Sales revenue (+R, +SE) To record credit card sale.	441 9	450
November 25, 2010: Accounts receivable (Customer C) (+A)	2,800	2,800
November 28, 2010: Accounts receivable (Customer D) (+A)	7,200	7,200
November 30, 2010: Sales returns and allowances (+XR, -R, -SE) Accounts receivable (Customer D) (-A) To record return of defective goods, \$7,200 x 1/12 = \$60	600 00.	600
December 6, 2010: Cash (+A) Sales discounts (+XR, -R, -SE) Accounts receivable (Customer D) (-A) To record collection within the discount period, 98% × (\$7,200 - \$600) = \$6,468	6,468 132	6,600
December 30, 2010: Cash (+A)	2,800	2,800

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
(I)	NE	NE	NE	NE
(m)	NE	NE	NE	+1,140*
Total	+\$314.000	+\$2.680	+\$4.000	+\$1.140

* 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 ratex_	<u>1.5</u> %
Bad debt expense	\$1,140

Req. 2

Income statement:

Sales revenue	\$314,000	
Less: Sales returns and allowances	4,000	
Sales discounts	2,680	
Net sales revenue		\$307,320
Bad debt expense		1,140

Income Statement Items		Case A		Case B
Gross sales revenue		\$239,000		\$165,000
Sales returns and allowances		20,000	i.	40,500
Net sales revenue	a.	219,000	g.	124,500
Cost of goods sold	C.	153,300	ĥ.	(70%) 87,150
Gross profit	b.	(30%) 65,700	f.	37,350
Operating expenses	d.	43,700		18,600
Pretax income		22,000	d.	18,750
Income tax expense (20%)	e.	4,400	e.	3,750
Income before extraordinary items	f.	17,600	C.	15,000
Extraordinary gain (loss)		(2,000)		10,000
Less: Income tax (20%)	g.	400	b.	(2,000)
Net income	h.	\$16,000	a.	\$23,000
EPS (10,000 shares)	i.	\$1.60	: :=	\$2.30

Note = Computations in order

CASE A

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

CASE B

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

P6-4.

41

30

Write-offs

1.	Allow	ance f	(+E, –SE) for doubtful acc debt expense	counts (+XA, -A)				162
		unts re	btful accounts eceivable (-A) ebts.	•	•				145
2.				•	+ \$30 + \$23	- \$ ²	11 = 9 15 = 9	\$58 \$69	
	Allowance	for D	A Year 2		Allo	wand	e for	DA Yea	ır 1
		69	Beg. bal.				61	Beg.	bal

Write-offs

15

58 End. bal. 69 Ending Bal.

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

Bad debt exp.

Bad debt exp.

Req. 1

Aging Analysis of Accounts Receivable

			(b) Up to One	` '
	Total	(a) Not Yet	Year Past	One Year
Customer	Receivables	Due	Due	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

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

Req. 3

Req. 4

Income statement:

Balance sheet:

Current Assets:

P6-6.

Req. 1

BUILDERS COMPANY, INC. Income Statement For the Year Ended December 31, 2009

Net sales revenue (\$145,600 – \$5,600 – \$6,400)	<u>. 7</u>	33,600 7 <u>8,400</u> 55,200
Operating expenses: Selling expense Administrative expense Bad debt expense	14,400	29,600
Income from operations		25,600 7,680
Net income	<u>\$ 1</u>	17,920
Earnings per share on capital stock outstanding (\$17,920 ÷ 10,000 shares)		<u>\$1.79</u>
Req. 2		
Gross Profit Percentage = Gross Profit = \$55,200 Net Sales \$133,600	= 0.413 (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.

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

^{* (\$16,000 + \$14,400) ÷ 2}

Req. 1

HOPKINS COMPANY Bank Reconciliation, April 30, 2010

Company's Books	Bank Statement
Ending balance per Cash account	Ending balance per bank statement \$23,550
Additions: Interest collected 1,180 25,080	Additions: Deposits in transit*
Deductions: NSF—A.B. Wright	Deductions:Outstanding checks
*\$41,500 - \$36,100 = \$5,400.	
Req. 2 (1) Cash (+A) Interest revenue (+R, +SE) Interest collected.	
(2) Accounts receivable (A. B. Wright) (+A) Cash (-A) Customer's check returned, insufficient fundamental	160
(3) Bank service charge expense (+E, –SE) Cash (–A) Bank service charges deducted from bank	70
These entries are necessary because of the char- have not yet been recorded by the company. The accounts. The Cash account (and the other account to date for financial statement purposes.	e bank already has recorded them in its
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 g balance per Cash ount	\$20,370	Bank Statement Ending balance per bank statement	\$17,990
Additi Interes	ons: st collected	2,150 22,520	Additions: Deposits in transit	<u>5,200</u> 23,190
Bank s	ctions: service charges ct cash balance	120 \$22,400	Deductions: Outstanding checks Correct cash balance	790 \$22,400
Req. 4 (1)	4 Cash (+A) Interest revenue (+R, +S Interest collected.			2,150
(2)	Bank service charge expense (-Cash (-A)Service charges deducted from			120

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	234,000
(b)	Accounts receivable (R. Jones) (+A)	13,000	13,000
(c)	Accounts receivable (K. Black) (+A)	25,000	25,000
(d)	Sales returns and allowances (+XR, -R, -SE)	500	500
(e)	Accounts receivable (B. Sears) (+A)	24,500	24,500
(f)	Cash (+A)	12,250 250	12,500
(g)	Cash (+A)	98,000 2,000	100,000
(h)	Cash (+A)	24,500 500	25,000
(i)	Accounts receivable (R. Roy) (+A)	17,500	17,500

P6-9. (continued)

(j)	Sales returns and allowances (+XR, -R, -SE)		3,430 70
(k)	Cash (+A)	6,000	6,000
(1)	Allowance for doubtful accounts (–XA, +A)	3,000	3,000
Les Net	Bad debt expense (+E, -SE)	\$80,000 <u>4,000</u> 76,000 <u>1.5</u> %	1,140
Req.	2		
Incon	ne statement:		
;	Sales revenue (\$234,000 + \$13,000 + \$25,000 + \$24,500 + \$17,500) Less: Sales returns and	\$314,000	
	allowances (\$3,500 + \$500) Sales discounts (\$250 + \$2,000	4,000	
	+ \$500 – \$70)	2,680	•
	ales revenuelebt expense		\$307,320 1,140

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	+\$2,240	+\$4,000	+\$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 <u>3</u> %
Bad debt expense	<u>\$2,280</u>

Req. 2

Income statement:

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)4,9) 08
	Allowance for doubtful accounts (+XA, -A)	4,908
	End of period bad debt expense estimate.	
	Allowance for doubtful accounts (–XA, +A)	

2.

Allowances for Doubtful Accounts	Balance at Beginning of Year	Additions Charged to Costs and Expenses	Deductions from Reserve	Balance at End 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	Allo	Allowance for Doubtful Accounts				
			2,032	Beg. bal.		
	Write-offs	5,060	4,908	Bad debt exp.		
			1,880	End. bal.		

Year 2	Allo	Allowance for Doubtful Accounts				
			1,234	Beg. bal.		
	Write-offs	4,677	5,475	Bad debt exp.		
			2,032	End. bal.		

Year 1	Allo	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.

AP6-3.

Req. 1

Aging .	Anal	vsis	of A	Accounts	Receiv	able
AGIIIG	miiai y	7313	<i>UI F</i>	100001113	110001	anic

		(a)	(b)	(c)	(d)
		Not Yet	Up to	6 to	More Than
	Total	Due	6 Mo.	12 Mo.	12 Mo.
Customer	Receivable		Past Due	Past Due	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

		Amount of	Estimated	Estimated
	Age	Receivable	Loss Rate	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

Req. 3

Req. 4

Income statement:

Balance sheet:

Current Assets:

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		<u>45,000</u>
Income from operations		32,000
Income tax expense		9,600
Net income		<u>\$ 22,400</u>
Earnings per share on common stock outstanding (\$22,400 ÷ 10,000 shares)		<u>\$2.24</u>
Req. 2		
Gross Profit Percentage = Gross Profit = \$77,000 Net Sales \$175,000	_	(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.

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

^{* (\$16,000 + \$18,000) ÷ 2}

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

Ending balance per Cash Ending balance per bank account..... \$61,260 statement \$61,860 Additions: Additions: Interest collected 5,250 Deposits in transit 13,000 66,510 74,860 **Deductions:** Deductions: \$300 NSF check—J. Left..... Bank service charges...... <u> 150</u> 450 Outstanding checks..... 8,800 Correct cash balance Correct cash balance \$66,060 \$66,060

Bank Statement

AP6-5. (continued)

Req. 4

(1)	Accounts receivable (J. Left) (+A)	300	300
(2)	Cash (+A)	5,250	5,250
(3)	Bank service charge expense (+E, –SE) Cash (–A) Service charges deducted from bank balance.	150	150

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.

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.

CP6-2.

- 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.

		2007	2006
Gross Profit =	Gross Profit	\$451,921 = 0.369	\$448,606 = 0.411
Percentage	Net Sales	1,224,717	1,092,107

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 Outfitters	Urban Outfitters	
Gross Profit =	Gross Profit	\$1,340,429 = 0.480	\$451,921 = 0.369	
Percentage	Net Sales	2,794,409	1,224,717	

Prior year		American Eagle Outfitters	Urban Outfitters	
Gross Profit =_	Gross Profit Net Sales	\$1,077,749	\$448,606 = 0.411	
Percentage		2,321,962 = 0.464	1,092,107	

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 Average	American Eagle 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.
- \$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.
- 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 x 12 months	=	\$ 600
(b)	\$12 x (52 weeks x 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.