

## SOLUTIONS

## Learning Goal 16

## Multiple Choice

1. d Bank errors must be an adjustment to the bank balance, not the book balance, even though these items can be added or subtracted to the book balance in such a way as to make the reconciliation balance.
2. b
3. d
4. c
5. b An outstanding check, regardless of when it was written, has already reduced the book balance but has never yet been recorded by the bank, so it must be subtracted from the bank balance on every reconciliation (until the check clears).
6. c
7. a Whether the classification is long term or short term depends on the type of restriction.
8. c
9. a Small businesses with just a few employees are very vulnerable to theft.
10. d
11. a
12. b In addition to duties being clearly defined and assigned, critical duties must also be separated.
13. c Bank reconciliations help control both payments and receipts.
14. d
15. b If the fund is not replenished, the expenses don't get recorded in the journal!
16. c The Petty Cash account is debited only when the fund is established or an increase in the fund is approved and made. It is credited only when terminated or a decrease in the fund is approved and made.
17. d (a) and (b) have already been recorded, and (c) is an adjustment the bank makes to its books.
18. d Safeguarding assets is the *primary* purpose. However, internal control is also intended to promote efficiency, improve the accuracy of financial statements, and encourage adherence to company policies. However, it cannot *ensure* these things will occur.
19. a The voucher authorizes payment, but other documents validate and verify before the voucher is completed.
20. b
21. b In a voucher system, every potential payment is first recorded as a liability after a voucher is completed, and this liability is usually called "Vouchers Payable." The Vouchers Payable liability is recorded in the voucher register. On the balance sheet the name is changed to "Accounts Payable" which is more familiar.

**SOLUTIONS****Learning Goal 16, continued****Discussion Questions and Brief Exercises**

1. Cash and cash equivalents are reported as a single current asset on the balance sheet. Cash equivalents are investments that are so quickly and reliably convertible into cash that they are considered the equivalent of cash. Examples are money market funds, short-term certificates of deposit, and U.S. treasury securities with maturity dates of not more than three months when purchased.

Restricted cash is cash that that can only be spent for a designated purpose. Restricted cash is reported on a balance sheet as either a short-term or long-term investment, depending on when the money is likely to be used. A compensating balance is a minimum cash balance that must be maintained in an account. A compensating balance is usually imposed by a lender or as the result of a financial agreement. Compensating balances should be disclosed in the footnotes to financial statements.

2. Internal control means the policies, procedures, and organizational design that a company creates for the purpose of:
  - safeguarding assets
  - reporting accurate and reliable accounting information
  - encouraging operating efficiency

The following internal controls are specifically designed to safeguard cash:

- A checking or savings account: A checking or savings account eliminates the need to maintain large amounts of cash on business premises. Also, maintaining a checking account provides a second record of cash receipts and payments that can be reconciled to business records.
- A bank reconciliation: A bank reconciliation is used to check the accuracy of a company's record of cash transactions and balances against a bank's record of cash transactions and balances for that company. Also, a bank reconciliation determines the true cash balance.
- An imprest petty cash system: An imprest petty cash system provides both physical and record-keeping controls for small amounts of cash that are kept on location at a business. The system maintains the cash in a locked location, assigns petty cash responsibility to a single person, requires authorization for disbursements, and maintains a record of expenditures and remaining cash.
- Use of credit cards: Using credit cards eliminates the need to maintain cash on location. Secondly, a credit card provides a detailed record of expenditures.
- A voucher system: A voucher system is designed to control cash payments. A voucher system requires detailed documentation for validation and verification before a payment can be authorized and recorded. Payment is made only after validation, verification, authorization, and a liability recording are completed. The voucher system is especially useful in larger organizations.
- Cash receipts procedures: Cash receipts are especially vulnerable to theft. Cash receipts procedures are designed to physically safeguard cash and to provide detailed records both of cash received and cash that should have been received, given the record of sales.
- Basic internal control principles: Eight basic internal procedures apply to all assets, but especially to cash, which is the easiest asset to steal.
- Internet and e-commerce controls: These controls, such as passwords, encryption, and firewalls prevent unauthorized access to account information and to online accounts. They also prevent unauthorized access to accounting records that potentially could be used to cover up theft of assets.

Internal control is not a guarantee against theft; it is intended to be a barrier to theft and reduce the probability of asset loss. Human error, collusion, carelessness, neglect, and fatigue are potentially serious weaknesses of internal control.

**SOLUTIONS****Learning Goal 16, continued****Discussion Questions and Brief Exercises, continued**

3. (1) Maker, also called the drawer or payor, the party writing the check. (2) Payee, the party receiving payment. (3) The bank.
4. A check endorsement is a legal transfer by the payee of ownership of the check to another party. This gives the other party the right to receive payment from the maker. A blank endorsement makes the check payable to anyone who physically possesses it. A restrictive endorsement transfers the check only to a designated party.
5. Debits and credits on a bank statement refer to increases and decreases in a bank's liability to an account owner. The debits and credits refer to changes in liability, not to changes in an asset. Therefore, a debit reduces the bank's liability and signifies a reduction in a cash account balance. A credit increases the bank's liability and therefore signifies an increase in a cash account balance. This is different from the debits and credits that affect the asset cash in the accounting records of the account owner.
6.  $\$15,200 - \$750 \text{ outstanding checks} + \$200 \text{ deposits in transit} = \$14,650 \text{ adjusted bank balance.}$  (The service charges and the NSF check have already been recorded on the bank statement and are part of the \$15,200 balance.)
7. The purpose of a voucher system is to provide internal control for cash payments. The five basic functions of a voucher system are validation, verification, authorization, recording, and payment.
  - Validation is the procedure for demonstrating that a request is authentic and has a genuine purpose.
  - Verification is the procedure for demonstrating that the correct item has been received.
  - Authorization is the approval procedure required to complete a voucher.
  - Recording means entering the voucher information in the accounting records and filing information.
  - Payment means writing a check or transferring funds electronically.
8. The eight basic internal control systems are:
  - (1) Separation of critical duties: (a) The accounting function is always separated from access to assets. (b) Other departmental authority is always separated from accounting functions. (c) Related duties are always separated.
  - (2) Assignment of responsibilities: Each employee's responsibilities must be specific, clear, and limited.
  - (3) Asset control: Assets are separated and access is limited and controlled physically and/or electronically.
  - (4) Independent verification: Assets and liabilities are verified at regular and frequent intervals by an individual who is not involved in a record-keeping task, and/or outside auditors.
  - (5) Authorization: Designated transaction types (such as cash payments) require approval by designated individuals.
  - (6) Documentation: All transactions must be supported by timely documentation. Document standards are established. Document controls are established.
  - (7) Recording: All transactions must be recorded—no exceptions.
  - (8) Personnel policy: Only competent and ethical employees are hired, and they are properly compensated.
9. (1) Using a cash register: (a) Safeguarding assets (b) Recording (c) Documentation (cash register tape)
- (2) Cash count at end of a shift: (a) Independent verification

**SOLUTIONS****Learning Goal 16, continued****Discussion Questions and Brief Exercises, continued**

- (3) Both the sales clerk and supervisor perform the cash count and complete a count sheet:  
 (a) Separation of critical duties (b) Documentation (c) Independent verification
- (4) (a) Independent verification (b) Safeguarding assets
- (5) (a) Separation of critical duties (b) Independent verification (c) Safeguarding assets  
 (d) Documentation
10. It is necessary to replenish the petty cash in order to record the petty cash expenditures. When financial statements are prepared, it is important to make sure that all expenses have been recorded and the cash balances are correct.
11. The greatest probability for loss of assets by theft occurs when a single individual has authority to control both assets and the records that document those assets. Separation of duties reduces the probability of theft by requiring multiple individuals to complete processes that involve both physical access and recording.
12. Yes, this is possible, but it requires the small business owner to assume accounting and internal control duties. For example, the owner controls cash and inventory, writes checks, and makes deposits. The owner also prepares a bank reconciliation. Many small business owners do not like to perform many of these functions, which is one reason that internal control is often weak in small businesses. An alternative is to use the services of an outside accounting firm to perform some (but not all) of these duties.
- 13.

Date	Account	Ref.	Dr.	Cr.
Oct. 5	Petty Cash		300.00	
	Cash			300.00
Oct. 31	Travel Expense		34.00	
	Entertainment Expense		88.50	
	Supplies		31.27	
	Cash			153.77

14. By using a limited access booth, the cash is being physically controlled. By using different individuals to make the sale and tear the ticket, several internal control principles are applied. First, a sale is recorded by creating a ticket. Second, the person taking the cash does not also permit the use of the service (the person tearing the ticket permits use of the service by allowing you to enter—this is authorization). Third, the number/type of torn tickets can be compared to the amount of recorded sales (verification).
- Collusion could possibly weaken the internal control. If the person in the booth kept the cash but did not record the sale (did not create a ticket) and entrance was permitted without a ticket, there would be no record of the sale and cash receipts could be stolen. However, other record-keeping methods could identify this activity, such as a record of ticket sales at other times with other individuals. These sales could be compared to the ticket sales during the shift of the colluding individuals.
15. Sequential numbers identify documents. A missing number indicates a missing document. Missing documents are often part of a theft when a dishonest individual wants to eliminate evidence of a transaction, such as writing a check or making a sale.

**SOLUTIONS****Learning Goal 16, continued****Discussion Questions and Brief Exercises, continued**

- 16.** ■ This procedure violates the most basic rule: Any person who is able to record transactions in the accounting records should never have access to cash or other assets. For example, the bookkeeper could steal some of the cash from the daily cash register sales and record the amount stolen as a sales return. If the owner does not examine the daily cash register tapes, she will not be aware of the theft.
- By verifying the receipt of the merchandise that he ordered, the manager is really approving payment. Because no one else is involved, the manager can steal the merchandise that he verified as having been delivered. The manager could also collude with a dishonest supplier to overcharge for the merchandise and then share the excess profits. Separate employees should place the orders and verify receipt of merchandise. Copies of purchase orders and receiving reports should also go to the owner for approval.
  - Again, this violates the basic principle of never having access to both accounting records and cash or other assets. Checks from customers paying on account could be stolen and recorded as uncollectible accounts receivable. By doing this, the customer will not be billed again next month and will not complain about having made payment. (Stolen checks can be cashed or deposited by the use of a stolen or fraudulent company endorsement stamp.) The owner should open the mail and make a list of checks received. In a larger business, a person without access to accounting records opens the mail and makes a list of checks received. The list of checks and the checks are sent to the cashier's office. A copy of the list, along with the remittance slips, is also sent to the accounting department. Other alternatives are the use of a lock box or credit card sales.
  - Invoices are not being stamped "paid," and they are not being filed properly by vendor name. A large number of invoices will soon accumulate in a single file, and it will be easy to lose the ability to track paid invoices. They can then be resubmitted for a second payment. This creates the possibility for creating fraudulent supplier invoices or colluding with suppliers to obtain duplicate payments.
  - Merchandise returns should be separated from access to cash or access to accounting records. As well, a supervisor should authorize all returns, and the amount of returns should be reviewed regularly. In this case, a dishonest clerk could record a fraudulent merchandise return and steal cash.
  - This is a problem of separation of critical duties. Transactions should only be recorded in the accounting department. Particularly if the manager received compensation as a percentage of sales, there would be a temptation to overstate sales.
- 17.** a. The check is recorded but is misclassified as being for a genuine purchase or expense.  
 b. The check is omitted from cash payments. The bank balance will have to be overstated on the bank reconciliation (either by manipulating outstanding checks or deposits in transit).  
 c. The check is recorded, and the cash payments journal totals are understated. The bank balance on the bank reconciliation will have to be overstated, as above.

**SOLUTIONS****Learning Goal 16, continued****Reinforcement Problems****LG 16-1.**

<b>Item:</b>	<b>Bank Adjustments</b>	<b>Book Adjustments</b>
Ending Balances Per Bank and Per Book to Reconcile	\$9,810	\$3,293
1. NSF check: \$500 .....		(\$500)
2. Outstanding checks from this month: \$7,200 .....	(\$7,200)	
3. Bank service charges: \$25 .....		(\$25)
4. Bank error: Charging our account for check of another company: \$310...	\$310	
5. Deposits in transit: \$4,500 .....	\$4,500	
6. \$450 check recorded as \$504 in cash payments journal .....		\$54
7. \$820 check recorded as \$208 in cash payments journal .....		(\$612)
8. Outstanding checks from prior periods that are still outstanding: \$400 ....	(\$400)	
9. Unrecorded EFT payment to a supplier on account: \$2,500 .....		(\$2,500)
10. Credit memo regarding note transaction: \$5,000 principal, \$200 interest ..		\$5,200
11. Debit memo for ATM transaction by owner: \$100 .....		(\$100)
12. \$3,000 deposit recorded as \$300 in the cash receipts journal .....		\$2,700
13. Bank error: Understating amount of deposit: \$500 .....	\$500	
14. \$10 interest earned on checking account .....		\$10
Total Adjustments	(\$2,290)	\$4,227
<b>Reconciled Balance</b>	<b>\$7,520</b>	<b>\$7,520</b>

*Remember:* Debit memos indicate decreases in the bank balance, and credit memos indicate increases in the bank balance. These are already part of the bank balance but are not part of the book balance.

**LG 16-2.**

a.

<b>Sunol Enterprises Bank Reconciliation June 30, 2017</b>		
Balance Per Bank, June 30		\$12,405.49
Add: Deposit in transit		825.50
Less: Outstanding checks		
#259	\$328.65	
#261	95.00	
#262	500.25	923.90
Adjusted cash balance per bank, June 30		<u>\$12,307.09</u>
Balance Per Books, June 30		\$12,521.46
Less:		
Service charges	10.00	
NSF check	204.37	214.37
Adjusted cash balance per books, June 30		<u>\$12,307.09</u>

b. The correct June 30 balance sheet cash amount is the adjusted balance of \$12,307.09.

**SOLUTIONS****Learning Goal 16, continued****LG 16-3.**

<b>American River Company Bank Reconciliation February 28, 2017</b>		
Balance Per Bank, February 28		\$8,472.21
Add: Deposit in transit		1,250.88
Less: Outstanding checks		<u>2,293.15</u>
Adjusted Cash Balance Per Bank, February 28		<u>\$7,429.94</u>
Balance Per Books, February 28		\$2,568.27
Add: Collection of note, \$5,000 plus interest \$127		5,127.00
Less: Service charges and fees	\$18.00	
Check #490 error	27.00	
NSF Check	<u>220.33</u>	<u>265.33</u>
Adjusted Cash Balance Per Books, February 28		<u>\$7,429.94</u>

<b>Date</b>	<b>Account</b>	<b>Ref.</b>	<b>Dr.</b>	<b>Cr.</b>
Feb. 28	Cash		5,127.00	
	Notes Receivable			5,000.00
	Interest Revenue			127.00
	Bank charges		18.00	
	Advertising Expense		27.00	
	Accounts Receivable		220.33	
	Cash			265.33

**SOLUTIONS****Learning Goal 16, continued****LG 16-4.**

<b>Barlowe's Automotive Service Bank Reconciliation July 31, 2017</b>		
Balance Per Bank, July 31		\$5,500.39
Add: Deposit in transit	\$975.00	
Check written on Beasley Company account (bank error)	<u>750.00</u>	1,725.00
Less: Outstanding checks, #390	495.00	
#395	266.00	
#396	<u>317.00</u>	<u>1,078.00</u>
Adjusted Cash Balance Per Bank, July 31		<u><u>\$6,147.39</u></u>
Balance Per Books, July 31		\$6,559.39
Less: Service charge	25.00	
NSF Check	<u>387.00</u>	<u>412.00</u>
Adjusted Cash Balance Per Books, July 31		<u><u>\$6,147.39</u></u>

<b>Date</b>	<b>Account</b>	<b>Ref.</b>	<b>Dr.</b>	<b>Cr.</b>
July 31	Accounts Receivable (name)		387.00	
	Miscellaneous Expense		25.00	
	Cash			412.00

**LG 16-5.**

*Sales are made:*

- Assignment of responsibilities, separation of duties, documentation (register tape), asset control (register), recording
- Recording with independent verification (the customer counts the change)
- Independent verification (customer looks at receipt), recording (customer cannot receive receipt unless sale recorded into register)

*The sales person's shift ends:*

- Asset control and separation of duties (supervisor has key to locked register), assignment of responsibilities
- Independent verification (supervisor prepares cash count and employee observes supervisor)
- Documentation, independent verification (supervisor verifies sales and cash under employee's control and employee verifies supervisor's cash count)

*Items to cashier:*

- Documentation, asset control



**SOLUTIONS****Learning Goal 16, continued****LG 16-5, continued***Cashier duties:*

- Assignment of responsibilities and separation of duties, independent verification, documentation and recording (by means of creating summary totals), asset control (use of safe)
- Asset control
- Asset control (daily deposits), documentation and independent verification (deposit slips stamped by bank)

*Accounting department duties:*

- Assignment of responsibilities and separation of duties, independent verification
- Recording

**LG 16-6.**

- a. Bill can write checks to himself or to bogus companies he controls and record the checks as valid business expenditures such as inventory purchases or expenses. He can also fail to record the checks entirely and manipulate the bank reconciliation to cover the expenditures. To prevent this potential loss, Bill's duties must not include any access to cash; he should be permitted to do only bookkeeping. It is also best if the owner does the bank reconciliation. (Assignment of duties and separation of bookkeeper from assets.)
- b. Maintaining substantial amounts of unprotected cash on hand is an invitation to theft. The cash should be deposited daily in a bank. Any cash on hand should be in a safe. (Asset control.)
- c. First, a sales employee could remove cash from the register and claim it was someone else. (Removal of cash receipts is called "skimming.") Second, cash can be stolen from the registers by sales employees who claim that decrease in cash is due to making returns to customers. One employee should be assigned to one register during a designated time period. Also, customers must show receipts in order to receive refunds, and a manager must approve all refunds. (Assignment of duties, separation of related duties, documentation, and authorization.)
- d. This example is based on a fraud that occurred in the San Francisco bay area. The director of recreation purchased a great deal of sports equipment, which he then stole for his personal use. In addition, he ordered almost all the city recreational equipment at inflated prices from a sporting goods store owned by a friend, with whom he then shared the proceeds. There should be a separate purchasing department that selects the vendor and a receiving department that verifies delivery and controls the items received, independent from the party authorizing the purchase (the director). Other staff should prepare validating and verifying documents for items purchased, maintaining an asset master file. Finally, purchase forms must be prenumbered; hand numbering is almost useless because blank documents can be stolen and filled in later. (Assignment of duties, separation of related duties, independent verification, proper authorization and validation procedure, and asset control.)
- e. If no one else verifies delivery, the chief executive officer could order merchandise for herself and also create false purchases from non-existent companies, which will then receive payment from the charity. All purchase orders must be validated and verified by documentation and purchasing and receiving done by a separate department. (Assignment of duties, separation of related duties, validation and independent verification.)
- f. This example is based on a case in which an employee made duplicate copies of actual invoices. After submitting the original for payment and waiting a period of time, she submitted the duplicate for payment, causing the company to pay twice. When the vendor sent a check to

**SOLUTIONS****Learning Goal 16, continued****LG 16-6, continued**

f, *continued*

refund the overpayment, she stole the check. She had a rubber stamp made that forged the company's endorsement stamp, and endorsed the checks to herself as "pay to Donna. . . ." In this case, a critical duty was not recognized—the authorization and refund duties should have been separated. Also, the company needed to develop a paid invoice file (preferably computerized) that would validate the need for payment and prevent duplicate payments. (Internal control weaknesses are separation of related duties—authorizing payment and receipt of overpayment checks; record-keeping validation.)

- g. This case happened to a friend of the author. The bookkeeper sent inflated bills to insurance companies and Medicare for medical services that were never provided. When the checks arrived, she stole the checks and forged an endorsement to herself. Additionally, she did the same with genuine billings for services actually performed. For these, she credited the accounts receivable to cover the theft, and debited various expenses. One day she suddenly disappeared. The physician was sued by the Federal government for over-billing, even though he was not aware of what was happening. (Not separating the bookkeeper from assets and insufficient separation of related duties.)
- h. No one is checking Seymour's work. (Lack of verification—document review.)
- i. A important clue is always cost of goods sold as a percentage of sales. If this mysteriously increases while markups remain constant, it can be a sign that either merchandise is being stolen or sales receipts are being stolen. In this case, merchandise inventory appears under control, and all sales are being recorded. So how are cash receipts being stolen if bank deposits always match net sales on the cash register tape? The answer is "net" sales. An employee has been taking cash and recording the theft as either a customer return or a customer discount allowance. Calculating net sales as a percentage of gross sales would pinpoint the problem—it would reveal a decreasing net sales as a percentage of gross sales. Employees should be assigned cash register duties by time shift, so any problem can be traced to a particular shift. (The internal control weaknesses here are proper authorization and separation of duties. Every return or allowance should always require independent authorization. Also, the same person who makes a sale should not have the duty of returning cash to customers.)
- j. I hate to say it, but—blush—yes, it has happened to me. After months of not checking the time slips, (really, the secretary was so sweet. . . .) I finally managed to pry a packet open and found the time being recorded for jobs done and calls answered was many times more than what was reasonable and more than on early billings. My internal control mistake was a lack of verification and adequate documentation.
- k. The employee can skim money from the cash receipts by selling a ticket and keeping the cash but not placing the torn half of the ticket in the box. Therefore, no ticket sale will appear to have been made. More advanced systems print out a ticket only when a sale is recorded electronically. To "trick" this system, a sale would have to not be recorded. In other words, the customer pays and is allowed to enter without a ticket. (This is a problem of documentation— there is no secure proof of the sale, such as a cash register tape or electronic recording. One way businesses can detect unrecorded cash sales, or sales recorded at discounted amounts, is by comparing sales made by different employees during different shifts to determine what normal sales should be.)
- l. The bookkeeper can open the mail and keep some of the customer checks. In this case, the bookkeeper appears to have been keeping the checks without crediting the accounts receivable. Because the bookkeeper also performs the billing, the customers' bills will show payment and the customers will not complain. The bookkeeper then later writes off the receivables as uncollectible. (This is a clear problem of separation of duties and access to assets, especially separating accounting from any access to cash. The bookkeeper can cash or deposit the checks in her own account by falsifying the endorsement of the checks from the business to herself. This is usually done by creating a false endorsement stamp.)

**SOLUTIONS****Learning Goal 16, continued****LG 16-7.**

Date	Account	Ref.	Dr.	Cr.
Sept. 1	Petty Cash		150.00	
	Cash			150.00
Sept. 30	Travel Expense		55.00	
	Supplies		12.50	
	Meals and Entertainment Expense		47.25	
	Postage Expense		18.45	
	Cash Over and Short		5.50	
	Cash			138.70
Oct. 31	Petty Cash		50.00	
	Travel Expense		38.00	
	Supplies		17.80	
	Meals and Entertainment Expense		91.20	
	Cash Over and Short			7.00
	Cash			190.00

*Comments:* On Sept. 30, the total expenses are \$133.20 and the remaining cash is \$11.30. This totals to \$144.50, which is \$5.50 short of the required balance of \$150.00. On Oct. 31, the total expenses are \$147.00, and the remaining cash is \$10.00, which totals to \$7.00 over the required fund balance. Therefore, this requires only a \$140 replenishment. However, because we are also increasing the Petty Cash balance by \$50, this requires an additional \$50, bringing the total credit to Cash to \$190.00 (Here, the additional \$50 is shown as part of a single reimbursement, but it could also be recorded in a separate entry.)

**SOLUTIONS****Learning Goal 16 Appendix, continued****LG A16-1.**

Increase Items			Decrease Items	
Step	Item	Amount	Item	Amount
1	Total increases per bank	\$28,686.20	Total decreases per bank	\$18,032.35
2	Less: Prior deposits in transit	1,150.00	Less: Prior outstanding checks	493.25
3	Add: Current deposits in transit	422.00	Add: Current outstanding checks	903.89
4	Total current increases per bank	27,958.20	Total current decreases per bank	18,442.99
5	Total current increases per books	27,618.20	Total current decreases per books	18,794.44
6	Total difference	340.00	Total difference	(351.45)
7	Bank differences: ■ None	\$27,958.20 -0- <u>\$27,958.20</u>	Bank differences: ■ Error: Sonora Company check ■ March outstanding check	\$18,442.99 (288.00) 261.90 <u>\$18,416.89</u>
8	Book differences: ■ EFT deposit unrecorded ■ Error, deposit	\$27,618.20 385.00 (45.00) <u>\$27,958.20</u>	Book differences: ■ Service charge ■ Error: check #271 ■ NSF check	\$18,794.44 7.70 (450.00) 64.75 <u>\$18,416.89</u>

To complete the bank reconciliation, the bookkeeper will have to erase her adjustments (except the EFT adjustment, and the existing outstanding checks and deposits in transit which are correct) and then make the following adjustments on the reconciliation. To book balance, subtract deposit error \$45, bank service charge \$7.70, and NSF check \$64.75 and add \$450 check recording error. To bank balance, subtract \$261.90 outstanding check and add \$288 bank error for the wrong check charged to the account.

**SOLUTIONS****Learning Goal 16 Appendix, continued****LG A16-2.**

Increase Items			Decrease Items	
Step	Item	Amount	Item	Amount
1	Total increases per bank	\$15,982.02	Total decreases per bank	\$15,356.18
2	Less: Prior deposits in transit	4,950.00	Less: Prior outstanding checks	9,398.65
3	Add: Current deposits in transit	7,005.25	Add: Current outstanding checks	7,725.33
4	Total current increases per bank	18,037.27	Total current decreases per bank	13,682.86
5	Total current increases per books	12,985.50	Total current decreases per books	15,980.50
6	Total difference	5,051.77	Total difference	(2,297.64)
7	Bank differences:	\$18,037.27	Bank differences:	\$13,682.86
	■ None	-0-	■ Error: Landreau check	(349.08)
		<u>\$18,037.27</u>		<u>\$13,333.78</u>
8	Book differences:	\$12,985.50	Book differences:	\$15,980.50
	■ EFT deposit	7,500.00	■ Service charges	27.00
	■ Error, May 12 deposit	(2,450.80)	■ NSF check	650.28
	■ Interest earned	2.57	■ Error: Check #1301	(3,324.00)
		<u>\$18,037.27</u>		<u>\$13,333.78</u>

Difference accounted for as follows: book balance increased by adjustments of (\$5,051.77 + \$2,646.72) less bank balance increased by \$349.08 = \$7,349.41.

*Adjustments on the bank reconciliation:*

Increase Items			Decrease Items	
Step	Item	Amount	Item	Amount
1	<b>Bank</b> balance adjustments:		<b>Bank</b> balance adjustments:	
	■ Add positive difference	-0-	Multiply items by (1)	
	■ Subtract negative differences	-0-	$(349.08) \times (1) =$	349.08
2	<b>Book</b> balance adjustments:			
	■ Add positive difference	7,500.00	■ Add positive results	349.08
		2.57	■ Subtract negative results	—
	■ Subtract negative differences	(2,450.80)		
3			<b>Book</b> balance adjustments:	
			Multiply items by (1).	
			$27.00 \times (1) =$	(27.00)
			$650.28 \times (1) =$	(650.28)
			$(3,324.00) \times (1) =$	3,324.00
4				
			■ Add positive results	3,324.00
			■ Subtract negative results	(27.00)
			■ NSF check	(650.28)

**SOLUTIONS****Learning Goal 16 Appendix, continued****LG A16-2, continued**

<b>Lomas Company</b>			
<b>Bank Reconciliation</b>			
<b>May 31, 20XX</b>			
Balance Per Bank, May 31			\$ 19,303.84
Add: Deposits in transit	\$7,005.25		
Landreau Check charged in error	<u>349.08</u>		7,354.33
Less: Outstanding Checks			<u>7,725.33</u>
Adjusted Cash Balance Per Bank, May 31			<u>\$18,932.84</u>
Balance Per Books, May 31			\$11,234.35
Add: EFT deposit	\$7,500.00		
Interest earned	2.57		
Check #1301 overstated	<u>3,324.00</u>		10,826.57
Less: Bank fees	\$27.00		
NSF check	650.28		
Overstated deposit	<u>2,450.80</u>		<u>3,128.08</u>
Adjusted Cash Balance Per Books, May 31			<u>\$18,932.84</u>

**LG A16-3.**

<b>Merced Company</b>			
<b>Bank Reconciliation</b>			
<b>June 30, 20XX</b>			
Balance Per Bank, June 30			\$ 16,135.59
Add: Deposit in transit	\$1,005.44		
Bank error; check #1201 (not this account)	<u>688.50</u>		1,693.94
Less: Outstanding Checks			
#431 \$ 705.33		#458 \$4,755.00	
#444 181.00		#459 1,031.24	
#454 47.99		#460 541.17	
#455 646.11			<u>7,907.84</u>
Adjusted Cash Balance Bank, June 30			<u>\$9,921.69</u>
Balance Per Books, June 30			\$9,676.06
Add: Collection of Note \$900 and interest \$100			1,000.00
Less: Bank service charge	\$ 10.00		
Check #457 understated on books	540.00		
NSF check	<u>204.37</u>		<u>754.37</u>
Adjusted Cash Balance Per Books, June 30			<u>\$9,921.69</u>

**SOLUTIONS****Learning Goal 16 Appendix, continued****LG A16-3, continued**

Increase Items		
Step	Item	Amount
1	Total increases per bank	\$14,128.61
2	Less: Prior deposits in transit	-0-
3	Add: Current deposits in transit	1,005.44
4	Total current increases per bank	15,134.05
5	Total current increases per books	14,134.05
6	Total difference	1,000.00
7	Bank differences:	\$15,134.05
	■ None	-0-
		<u>\$15,134.05</u>
8	Book differences:	\$14,134.05
	■ Note and interest collection (\$900 principal and \$100 interest)	1,000.00
		<u>\$15,134.05</u>

Decrease Items	
Item	Amount
Total decreases per bank	\$9,397.77
Less: Prior outstanding checks	1,275.71
Add: Current outstanding checks	7,907.84
Total current decreases per bank	16,029.90
Total current decreases per books	14,587.03
Total difference	1,442.87
Bank differences:	\$16,029.90
■ Error: Check #1201*	(688.50)
	<u>\$15,341.40</u>
Book differences:	\$14,587.03
■ Bank fees	10.00
■ Error: check #457	540.00
■ NSF check	204.37
	<u>\$15,341.40</u>

\* Notice that #1201 is not part of the check number sequence for Merced Company.

*Adjustments on the bank reconciliation:*

Increase Items		
Step	Item	Amount
1	<b>Bank</b> balance adjustments:	
	■ Add positive difference	-0-
	■ Subtract negative differences	-0-
2	<b>Book</b> balance adjustments:	
	■ Add positive difference	\$1,000.00
	■ Subtract negative differences	-0-
3		
4		

Decrease Items	
Item	Amount
<b>Bank</b> balance adjustments:	
Multiply items by (1)	
$(688.50) \times (1) =$	688.50
■ Add positive results	688.50
■ Subtract negative results	-0-
<b>Book</b> balance adjustments:	
Multiply items by (1).	
$10.00 \times (1) =$	(10.00)
$540.00 \times (1) =$	(540.00)
$204.37 \times (1) =$	(204.37)
■ Add positive results	-0-
■ Subtract negative results	(10.00)
	(540.00)
	(204.37)

SOLUTIONS

Learning Goal 16 Appendix, continued

LG A16-3, continued

Adjusting journal entries

Date	Account	Ref.	Dr.	Cr.
June 30	Cash		1,000.00	
	Notes Receivable			900.00
	Interest Revenue			100.00
30	Miscellaneous Expense		10.00	
	Utilities Expense		540.00	
	Accounts Receivable, (name)		204.37	
	Cash			754.37

Comment:

1. How do we identify the amount of the check from the other company (the bank error)? In this case, no other information is given, but something stands out on the bank statement: check #1201 is very different from the sequence of the other check numbers. This is the clue.
2. Be sure to carefully compare the checks and deposits on the bank statement to the cash payments and cash receipts journals. In this case, we find a book recording error for check #457. (Unless the bank definitely made an error reading the check amount.) The check is recorded for \$540 less than it actually cleared for.

LG A16-4. See solution in the learning goal.



**SOLUTIONS****Learning Goal 16 Appendix, continued****LG A16-5.**

Modesto Company Bank Reconciliation January 31, 2017				
Balance Per Bank, January 29				\$14,089.95
Add: Deposit in transit	\$3,750.00			
Bank error, Jan. 29 deposit	90.00			3,840.00
Less: Outstanding Checks:				
#848 \$775.80 #867 \$1,852.69				
#862 250.00 #868 1,500.00				
#863 127.02 #869 55.00				4,560.51
Adjusted Cash Balance January 31, 2005				<u>\$13,369.44</u>
Balance Per Books, January 31				\$18,016.19
Add: EFT customer deposit	755.25			
Book error, check #861	1.00			756.25
Understated credit to ledger	\$5,000.00			
Service charge	28.00			
NSF check	375.00			5,403.00
Balance Cash Balance Per Books, January 31				<u>\$13,369.44</u>

December 31 reconciled balance less January payments and plus January receipts.

*Adjusting journal entries:*

Date	Account	Ref.	Dr.	Cr.
2017				
Jan. 31	Cash		756.25	
	Sales Revenue			755.25
	Accounts Payable, Rockland Co.			1.00
	Miscellaneous Expense		28.00	
	Accounts Receivable, Kittock		375.00	
	Cash			403.00
	(No Entry)		(No entry)	
	Cash			5,000.00
	Theft Loss		10,000.00	
	Office Supplies			10,000.00

*Comment:* The one-sided credit entry is required because the trial balance does not balance. Total debits exceed total credits by 5,000 because the bookkeeper understated the January credit posting to the Cash account by 5,000. The correct total of the December cash payments journal is 15,996.22, not 10,996.22. It is also necessary to record a theft loss and eliminate the fraudulent classifications to Office Supplies for check #853 and #864.

SOLUTIONS

Learning Goal 16 Appendix, continued

LG A16-5, continued

Analysis of differences:

Increase Items			Decrease Items	
Step	Item	Amount	Item	Amount
1	Total increases per bank	\$12,881.32	Total decreases per bank	\$19,111.57
2	Less: Prior deposits in transit	2,063.85	Less: Prior outstanding checks	3,897.02
3	Add: Current deposits in transit	3,750.00	Add: Current outstanding checks	4,560.51
4	Total current increases per bank	14,567.47	Total current decreases per bank	19,775.06
5	Total current increases per books	13,902.22	Total current decreases per books	14,373.06
6	Total difference	665.25	Total difference	5,402.00
7	Bank differences: ■ Error: 1/29 deposit understated	\$14,567.47 90.00 <u>\$14,657.47</u>	Bank differences: ■ None	\$19,775.06 -0- <u>\$19,775.06</u>
8	Book differences: ■ EFT deposit	\$13,902.22 755.25 <u>\$14,657.47</u>	Book differences: ■ Service charge ■ NSF check ■ Understated total on cash payments journal ■ Error: check #861	\$14,373.06 28.00 375.00 5,000.00 (1.00) <u>\$19,775.06</u>

Adjustments on the bank reconciliation:

Increase Items			Decrease Items	
Step	Item	Amount	Item	Amount
1	Bank balance adjustments: ■ Add positive difference ■ Subtract negative differences	90.00 -0-	Bank balance adjustments: None	
2	Book balance adjustments: ■ Add positive difference ■ Subtract negative differences	755.25 -0-	■ Add positive results ■ Subtract negative results	-0- -0-
3			Book balance adjustments: Multiply items by (1)  28.00 × (1) = 375.00 × (1) = 5,000.00 × (1) = (1.00) × (1) =	  (28.00) (375.00) (5,000.00) 1.00
4			■ Add positive results ■ Subtract negative results	1.00 (28.00) (375.00) *(5,000.00)

\* Consists of check #856 for \$2,550.00 and check #857 understated by \$2,450.00. On the December 31 bank reconciliation, #856 was omitted from outstanding checks and #857 was an understated outstanding check.

**SOLUTIONS****Learning Goal 16 Appendix, continued****LG A16-5, continued**

*Additional Comment:* This problem demonstrates . . .

1. that when an employee has access to both accounting records and cash, a disaster is waiting to happen.
2. the importance of an independent and complete bank reconciliation that compares the bank statement and returned checks to the cash account and business records. Here, clearly suspicious indications in the cash payments journal are the repeated \$5,000 checks for office supplies—no small business repeatedly writes checks this size for office supplies. Dolores probably has been writing large checks to herself and, to cover the thefts, classified the checks as debits to Office Supplies. When these checks were returned with the bank statement she destroyed the checks.

Specifically, concerning the December period, she wrote a \$5,000 check to herself (classified as Office Supplies). As further cover, she understated the account totals in the December cash payments journal by \$5,000 (you can verify that the correct total credit to Cash is \$15,996.22), thereby keeping the ledger cash balance higher by the \$5,000. To make this reconcile to the December bank statement balance (which is now lower by the amount of the \$5,000 check), she understated the December outstanding checks by \$5,000 on the bank reconciliation. (On the December bank reconciliation check #856 was omitted completely and #857 was understated by \$2,450 by being shown as only \$272.37.) The key point here is that a correctly and independently prepared bank reconciliation would identify a problem, because it would not reconcile with the \$5,000.00 difference. In January, there was also a theft of an additional \$5,000, probably at the same time the bookkeeper disappeared. (See January bank statement.)

You will have to explain to the owner how the fraud was committed and emphasize the importance of improving the internal control by removing access to cash from any bookkeeping work. Generally, small business owners should make all deposits and write all checks. An alternative is to use an accounting firm to do bookkeeping. Deposit alternatives for a small business would be requiring customers to send payments to bank lock boxes or use credit cards for purchases. Finally, you should advise the owner to contact an attorney familiar with business fraud to obtain legal advice for any necessary reporting procedures and possible legal action, if feasible.