Internal Control and Cash

ANSWERS TO QUESTIONS FOR GROUP LEARNING

Q6-1 Internal control consists of all measures within an organization to ensure (1) reliability of the accounting records and financial reporting, (2) effectiveness and efficiency of operations and safeguarding of assets, and (3) compliance with applicable laws and regulations.

The five components of internal control are:
- **Control environment** The control environment establishes the tone of the organization, which guides the control consciousness of its people.
- **Risk assessment process** This is the process of identifying and responding to business risks, which face the organization.
- **Control activities** To reduce the possibility of fraud, management must design policies and procedures to address the specific risks the organization faces.
- **Information and communication** The information system must ensure that all relevant information is captured and reported throughout the organization.
- **Monitoring of controls** A process to assess the quality of internal control performance over time.

Q-2 Five internal control procedures used to promote effective internal control include: (1) proper authorization of transactions and activities, (2) separation of duties, (3) design and use of adequate documents and records, (4) adequate safeguards over access to and use of assets and records, and (5) periodic internal review of performance and proper valuation of recorded amounts.

Q6-3 Typically included as cash are currency and coin, checks, money orders, bank drafts, traveler's checks, and bank credit card sales invoices. On a balance sheet, the cash caption often includes both checking and savings account balances. The basic rule to determine whether an item is part of cash is that a bank will accept the item for deposit.

Q6-4 When two or more persons are involved in handling cash receipts, it is more difficult for one of them to extract cash improperly. They also serve as checks on the accuracy of each other's work.
Q6-5 Depositing all cash receipts intact daily enables a three-way verification: (1) cash register total, (2) debits to the Cash account in the journals for that day, and (3) deposit ticket total should match. Making all payments by check presents similar internal control strengths. The cancelled checks are evidence of payment. The work of authorizing, preparing, and signing and mailing checks is separated, control is stronger.

Q6-6 a. A petty cash fund is a specific amount of money held by a designated custodian to make small cash payments.
   b. Under the imprest system, it operates by making the custodian solely responsible for the fund. Each time a payment is made, the custodian obtains a signed receipt or a petty cash voucher. At all times the sum of currency and coin plus receipted vouchers held by the custodian should be equal to the petty cash fund balance.
   c. The petty cash fund should be replenished at the end of each accounting period because all receipted vouchers held in the fund represent unrecorded debits to general ledger accounts.

Q6-7 A debit to the depositor's Cash account represents a receipt of cash that should be deposited (and increase the bank balance) that day. A credit to the depositor's Cash account represents a check written that should reduce the bank balance. In theory then, the Cash account balance and the bank balance should be equal. They rarely are equal at any time because of (1) time lags in checks and deposits reaching the bank after being recorded in the depositor's books, (2) errors by either party, and (3) credits or charges originated at the bank and not yet reflected in the depositor's books.

Q6-8 **Certified check:** A check that has been deducted in advance from the writer's account at the bank and is, therefore, certified by the bank that it will be paid upon presentation.

**Service charge:** This is the term used to describe a monthly charge by the bank for services to a depositor. It is usually a flat fee plus a charge for each item handled.

**NSF:** Literally meaning "not sufficient funds," this is the term used to describe a check written by a depositor whose account is not sufficient to pay it upon presentation at the bank.

**Debit memo:** A form used in a bank to cause a posting to be made reducing a depositor's balance. A copy informs the depositor.

**Credit memo:** A form used in a bank to cause a posting to be made increasing a depositor's balance. A copy informs the depositor.
Q6-9  The effect on the bank statement balance of these reconciliation items is as follows:
   a. Outstanding checks have not yet been deducted from the bank balance; deduct $323 from the bank balance.
   b. A deposit of $650 recorded by the bank at $560 has understated the bank balance; add $90 to the bank balance.
   c. The service charge is already reflected in the bank statement balance.
   d. Deposits in transit cause the bank statement balance to be understated; add $800 to the bank balance.
   e. A note payable collected by the bank by debiting the depositor's account has already been reflected as a reduction in the bank statement balance.

Q6-10 a. A bank reconciliation should be prepared each time a bank statement is received; usually, this is monthly.
   b. Both the Cash account balance and the bank statement balance should be adjusted to the same amount by adding or subtracting unrecorded items (or errors) in each.
   c. All items added to or subtracted from the balance per books are increases or decreases to the Cash account and must be entered on the books.
   d. The most important function of the bank reconciliation is to strengthen internal control by verifying the accuracy of the Cash account and bank statement balances periodically.

**SOLUTIONS TO EXERCISES**

E6-11 Internal Control
LG 1, 2

For internal controls to enable a business to meet its goals, it should start with the control environment. This includes the attitude of management and owners about internal controls. The managers philosophy and operating style will affect the ability to maintain an effective internal control system. It is important that your friend operate his business in a very ethical manner. The attitude that he projects about the way the business should be run will affect all of the employees. If he does not thoughtfully consider the risks that he is willing to take, neither will his employees. If he does not monitor employees' performance, they will pay no attention to the internal control system. An effective internal control system starts at the top. Your friend, the owner, must be an example for how he wants the business operated.

E6-12 Petty Cash Transactions
LG 3

**GENERAL JOURNAL**

1.

2011
Dec. 1   Petty Cash
         Cash  1,000

To establish petty cash fund.
E6-12 (continued)

2.

2011
Dec. 31 Transportation In 217
Telephone Expense 34
Postage Expense 210
Office Supplies 138
Cash Over and Short
Cash 3 602

To replenish petty cash fund.

3.

The fund should be replenished at the end of each accounting period in order to record all the expenses incurred during the period and to bring the amount of currency and coins on hand in the fund up to the balance of the Petty Cash account in the general ledger.

E6-13 Cash Over and Short
LG 3

There is a cash shortage. $608 - 50 = $558. Less than $562.

GENERAL JOURNAL

2011
April 10 Cash 558
Cash Over and Short
Sales 4*

To record cash sales for the day with a cash shortage.

*Computation: $608 - $50 change fund $ 558
Sales rung on register 562
Cash shortage $ (4)

E6-14 Items on the Bank Reconciliation
LG 4

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

6-4
MATT'S CARE CENTER
Bank Reconciliation
June 30, 2011

Per Books
Cash balance per ledger, June 30, 2011  $ 2,535
Add: Note collected by bank  350
Subtotal  $ 2,885
Deduct: NSF customer check  85
Adjusted cash balance, June 30, 2011  $ 2,800

Per Bank
Balance per bank statement, June 30, 2011  $ 3,225
Add: Check charged in error by bank  35
Subtotal  $ 3,260
Deduct: Outstanding checks
\[
\begin{array}{ccc}
\text{230} & \text{160} & \text{70} \\
\end{array}
\]
460
Adjusted cash balance, June 30, 2011  $ 2,800

E6-16 Recording Reconciliation Items
LG 5

GENERAL JOURNAL

<table>
<thead>
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<th>Date</th>
<th>Account Description</th>
<th>Debit</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Oct. 31</td>
<td>Cash</td>
<td>210.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Office Rent Expense</td>
<td></td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td>Notes Receivable</td>
<td></td>
<td>200.00</td>
</tr>
<tr>
<td></td>
<td>Interest Revenue</td>
<td></td>
<td>5.85</td>
</tr>
<tr>
<td></td>
<td>To record cash additions from bank statement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accounts Receivable, (customer name)</td>
<td>75.60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bank Service Charge Expense</td>
<td></td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td></td>
<td>78.60</td>
</tr>
<tr>
<td></td>
<td>To record cash deductions from bank statement.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
E6-17 Finding Reconciliation Errors
LG 4

Per Books
Adjusted cash balance per ledger $6,200
  Deduct: Prior month's deposit added in error 800
Corrected adjusted cash balance per ledger $5,400

Per Bank
Adjusted cash balance per bank statement $5,150
  Add: Bank error not shown on reconciliation 250
Corrected adjusted cash balance per bank statement $5,400

E6-18 Bank Reconciliation and Journal Entries
LG 4, 5

TAYLOR SWIFT BOOTERY
Bank Reconciliation
May 31, 2011

Per Books
Cash balance per ledger, May 31, 2011 $9,230
  Add: Error in recording check no. 882 90
  Subtotal $9,320
  Deduct: Note payable and interest collected
  for holder by bank $960
  NSF customer check 260 1,220
Adjusted cash balance, May 31, 2011 $8,100

Per Bank
Cash balance per bank statement, May 31, 2011 $9,200
  Add: Deposit in transit 2,300
  Subtotal $11,500
  Deduct: Outstanding checks 3,400
Adjusted cash balance, May 31, 2011 $8,100

GENERAL JOURNAL

2011
May 31 Cash
Accounts Payable, (creditor name) 90
To record cash additions from bank statement.

31 Notes Payable 900
Interest Expense 60
Cash 960
To record cash deductions from bank statement.
E6-18 (continued)

May 31 Accounts Receivable, (customer name) 260
    Cash 260
    To record NSF check.

SOLUTIONS TO PROBLEMS

P6-19 Internal Control System (Based on an Actual Occurrence)
LG 2

Requirement 1.

Among the internal control weaknesses are:
1. More than one person having custody of (and using) the same cash box.
2. No signatures required for receipt of cash taken up or candy delivered by the assistant recreation supervisor.
3. Cash receipts are not collected and deposited daily.

Requirement 2.

With the same employees, she could institute the following procedures:
1. Appoint the locker room attendant a change fund custodian with a modest amount—say, $50—charged to her.
2. Appoint a lifeguard as a second cash fund custodian, with a second cash box and a small amount of change—say, $25.
3. Have the assistant recreation director collect all cash in excess of the change funds and prepare a deposit ticket to deposit it daily. Upon each collection, she should give a receipt to the custodians.
4. Upon delivery of candy, the assistant recreation director should obtain a receipt from the locker room attendant.
5. The city recreation supervisor should make surprise checks at least weekly to compare copies of deposit tickets receipted by the bank with receipts for cash held by the custodians.
6. About every two weeks, the city recreation supervisor should total the receipts for candy (at selling price) and compare this amount with cash turned in. If cash turned in is less, an inventory buildup or cash shortage is indicated. If cash turned in is more, she should check to see if there appears to be an inventory decrease.
P6-20 Internal Control System (Based on an Actual Occurrence)
LG 2

Requirement 1.

There is an overall shortage of $860. It will show up in the bank reconciliation at the end of the month. The per bank side of the reconciliation will be $860 less than the per books side. Since he deposits receipts daily, there should be a bank deposit that matches each day’s debits to Cash. There will be no February 3 deposit. The books will show a February 3 deposit of $860. If he inserted the checks and took out an equal amount of cash, the February 19 deposit will match the February 19 debit to Cash.

The date of the endorsement will help the owner prove that the employee held the checks for 16 days. The checks deposited February 3 should be endorsed by the bank on February 3. Since the employee held the checks and deposited them February 19, they will show an endorsement of February 19 instead. Since these checks are not Alice’s, they will be returned in the bank statements of the customers who wrote them. Using the February 3 postings to the accounts receivable ledger, the owner can identify the customers whose checks should be endorsed by the bank as February 3. Alice then must contact these customers to determine whether checks written to her business were deposited late.

Requirement 2.

In the future, Alice should prepare the deposit ticket in triplicate and keep a copy. The employee should return a duplicate copy stamped by the bank. The owner should compare the stamped duplicate with the triplicate copy she has retained.

P6-21 Petty Cash Fund
LG 4
Requirement 1.

GENERAL JOURNAL

2011
Nov. 20 Petty Cash
Cash 1,000
1,000
To establish petty cash fund.

Requirement 2.

GENERAL JOURNAL

2011
Nov. 30 Transportation In
Sales Promotion Expense 180
Postage Expense 130
Cash Over and Short Cash
5
350
To replenish petty cash fund.
**P6-21 (continued)**

**Requirement 3.**

**GENERAL JOURNAL**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 31</td>
<td>Office Equipment Repairs Expense</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>Transportation In</td>
<td>260</td>
</tr>
<tr>
<td></td>
<td>Sales Promotion Expense</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Postage Expense</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Cash Over and Short</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>408</td>
</tr>
<tr>
<td></td>
<td>Petty Cash</td>
<td>250</td>
</tr>
</tbody>
</table>

To replenish and reduce petty cash fund.

**P6-22 Bank Reconciliation: Routine Items**

**LG 4, 5**

**Requirement 1.**

**TIMBERLAKE COMPANY**

**Bank Reconciliation**

**July 31, 2011**

**Per Books**

- Cash balance per ledger, July 31, 2011 | $4,368
- Deduct: Customer's NSF check | $80
- Error in recording check no. 607 | 18
- Safe deposit box rental | 20 | 118
- Adjusted cash balance, July 31, 2011 | $4,250

**Per Bank**

- Cash balance per bank statement, July 31, 2011 | $4,400
- Add: Deposit in transit | $750
- Check charged in error by bank | 330 | 1,080
- Subtotal | $5,480
- Deduct: Outstanding checks | 1,230
- Adjusted cash balance, July 31, 2011 | $4,250
P6-22 (continued)

Requirement 2.

**GENERAL JOURNAL**

2011

<table>
<thead>
<tr>
<th>Date</th>
<th>Account Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul. 31</td>
<td>Office Supplies</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Error in recording check no. 607.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Accounts Receivable, (customer name)</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>To adjust accounts for NSF check.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Safe Deposit Box Rental Expense</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>To record safe deposit box rental.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**P6-23 Bank Reconciliation: Tracing Items to Statements**

**LG 4, 5**

Requirement 1.

**ALLEN COMPANY**

**Bank Reconciliation**

*April 12, 2011*

**Per Books**

Cash balance per ledger, April 12, 2011 $2,835

Add: Customer note collected by bank:

- Principal $2,000
- Interest $40

Subtotal $2,040

Less: Collection charge

Net collection $2,030

Subtotal $4,865

Deduct: Customer's NSF check $75

Error in recording check no. 625 $90

Adjusted cash balance, April 12, 2011 $4,700

**Per Bank**

Cash balance per bank statement, April 12, 2011 $5,650

Add: Deposit in transit $500

Subtotal $6,150

Deduct: Outstanding checks

- No. 622 $360
- No. 628 $420
- No. 629 $540
- No. 632 $130

1,450

Adjusted cash balance, April 12, 2011 $4,700

6-10
GENERAL JOURNAL

2011
Apr. 12 Cash 2,030
   Collection Fees Expense 10
   Notes Receivable 2,000
   Interest Revenue 40
   Note collected by bank.

12 Accounts Receivable, (customer name) 75
   Cash 75
   NSF check returned by bank.

12 Store Equipment 90
   Cash 90
   Error in recording check no. 625.

P6-24 Determining a Cash Theft
LG 2, 3

Requirement 1.

Balance per books, June 30, 2011 $15,375
Add: Note proceeds not recorded 1,500
Adjusted book balance $16,875

Balance per bank statement, June 30, 2011 $12,935
Add: Cash on hand not deposited 3,000
$15,935

Deduct: Checks outstanding:
   No. 595 $140
   622 180
   649 300
   7835 225
   7837 260
   7843 175 1,280
Adjusted bank balance $14,655

Adjusted book balance $16,875
Adjusted bank balance 14,655
Amount of cash removed by cashier $2,220
P6-24 Requirement 1 (continued)

Alternative computation:

Outstanding checks omitted from reconciliation:

<table>
<thead>
<tr>
<th>No.</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>595</td>
<td>140</td>
</tr>
<tr>
<td>622</td>
<td>180</td>
</tr>
<tr>
<td>649</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>620</td>
</tr>
</tbody>
</table>

Error in adding checks outstanding
Note proceeds incorrectly recorded
Amount of cash cashier removed

<table>
<thead>
<tr>
<th></th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error in adding checks</td>
<td>100</td>
</tr>
<tr>
<td>Note proceeds</td>
<td>1,500</td>
</tr>
<tr>
<td>Amount of cash cashier</td>
<td>2,220</td>
</tr>
</tbody>
</table>

Requirement 2.

The cashier attempted to conceal the theft by incorrectly preparing the bank reconciliation as of June 30, 2011. This involved (1) omitting checks outstanding from the reconciliation, (2) incorrectly adding the checks shown as outstanding so as to deduct only $560 instead of $660, and (3) incorrectly deducting the note proceeds from the bank balance instead of adding the note proceeds to the book balance.

Requirement 3.

1. The company failed to deposit cash receipts intact daily. As a result, a relatively large amount of cash was kept on hand.
2. The company failed to maintain a clear separation of duties and responsibilities. The person who handles cash should not also prepare the bank reconciliation or have access to the accounting records.

P6-25 Bank Reconciliation: Based on Bank Statement and Company Records

Requirement 1.

**AMERICAN GIRL SALES**

Bank Reconciliation

June 30, 2011

**Per Books**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash balance per ledger, June 30, 2011</td>
<td>$1,218</td>
</tr>
<tr>
<td>Add: Customer note collected by bank</td>
<td>$407</td>
</tr>
<tr>
<td>Including interest of $10 and a collection fee of $3</td>
<td>4</td>
</tr>
<tr>
<td>Interest earned on account</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td>$411</td>
</tr>
<tr>
<td>Deduct: NSF customer check</td>
<td>$310</td>
</tr>
<tr>
<td>Bank service charge</td>
<td>9</td>
</tr>
<tr>
<td>Bank overdraft charge</td>
<td>20</td>
</tr>
<tr>
<td>Adjusted cash balance, June 30, 2011</td>
<td>$1,290</td>
</tr>
</tbody>
</table>
P6-25 Requirement 1 (continued)

Per Bank

Cash balance per bank statement, June 30, 2011  $1,766
Add: Deposit in transit 822
Subtotal  $2,588
Deduct: Outstanding checks:
No. 158  $578
No. 160  296
No. 161  33
No. 163  391  1,298
Adjusted cash balance, June 30, 2011  $1,290

Requirement 2.

GENERAL JOURNAL

2011
Jun. 30 Cash 407
Collection Fee Expense 3
Notes Receivable 400
Interest Revenue 10
Note collected by bank.

Cash 4
Interest Revenue 4
Interest earned on bank account.

Accounts Receivable, Dave Drier 310
Cash 310
Customer's NSF check deducted on June bank statement.

Bank Service Charge Expense 9
Cash 9
Cost of checking account for June.

Bank Service Charge Expense 20
Cash 20
Overdraft bank charge for negative cash balance on June 1, 2011.
P6-26 Analyzing Cash for Wildcat Corporation
LG 6

Note to instructors: This problem is based on actual data from a real company.

Based on the information available, the following are the main cash concerns for Wildcat Corporation:

1. At the end of the current year, Wildcat cash balance of $645,000. According to the agreement with banks, the compensating balance requirement is $2,000,000. Wildcat has not meet the requirement and is in danger of losing its credit line. Although the Company states that it is in "substantial compliance," $645,000 is clearly less than the required $2,000,000.

2. At the end of the current year, $35,000,000 is borrowed against a $47,000,000 line of credit. An additional requirement is that Wildcat completely liquidate its credit line for a 30-day period each year. Information on other resources is not available. However, a concern is raised as to whether Wildcat has the financial resources to do this if it cannot even maintain the required $2,000,000 compensating balance. In addition, the $35,000,000 borrowed at the end of the current year is significantly greater than the $6,800,000 outstanding at the end of last year.

3. At the end of the current year, the line of credit is nearly used up ($35,000,000 out of $47,000,000). Does Wildcat have other sources of financing it can draw upon to meet debts as they come due?

P6-27 Bank Reconciliation: Summary Review Questions
LG 4,5

1. a
2. b
3. e (debit to Accounts Receivable and credit to Cash)
4. c
5. a
6. b
Internal Control over Cash
LG 1-3

Following is a typical student response to this communications problem. Actual responses may vary in content and style but should contain as much of this basic information as possible.

TO: Adam Smith
FROM: Student
SUBJECT: Internal control over cash

With the number of employees that you have, achieving good internal control will be difficult. Your business is not large enough to warrant hiring two accounting clerks. But there are many things that you can do to improve the control over cash.

Separate the handling of cash from the recording of cash transactions. Someone other than the accounting clerk should open the mail receipts. The sales clerk could do this. He or she should separate the check from the tear-off portion of the bill. Forward only the tear-off portion to the accounting clerk. Immediately endorse the checks for deposit only. The person opening the mail also should prepare a bank deposit ticket in duplicate. Deposit receipts, intact, daily. Intact means that you should not pay any bills out of the day’s cash receipts. After making the bank deposit, return the stamped duplicate ticket for comparison to the cash receipts journal entries for the day.

The sales clerk should not be responsible for removing the cash from the cash register daily. It would be best if you took that responsibility. Then, you should compare the cash in the drawer with the totals shown by the registers and the cash register tape. Give just the cash register tape to the accounting clerk as the source document for journalizing. Again, deposit these receipts, intact, daily.

In a small business like yours, you cannot avoid having the same person write the checks and journalize the cash payment entries. You can establish some control by signing all the checks yourself. In that way, you can review all the checks to make sure that they are reasonable. Since you are familiar with all your suppliers, you can spot any unusual checks.

Do not make small cash payments from the cash register. You should deposit the cash receipts, intact, daily. Instead, establish a petty cash fund using the imprest system of control. Require that all persons receiving payment out of the petty cash fund sign a voucher recognizing the receipt of cash. The currency in the fund plus the vouchers should always equal the imprest amount. Keep only a small amount of money in this fund. Replenish the fund frequently. You would be the best person to act as petty cash custodian. With good controls, any of your employees could do this.

Ideally, no one having contact with cash or cash records should reconcile the bank statement. Your business is too small for this, however. So it would be best if you did the bank reconciliation. As the owner, you should oversee all operations and set the control environment. If the bank reconciliation does not balance, there is an error that you must locate. Because the bank reconciliation is an integral part of your internal control system, if it does not balance, it may suggest a breakdown in control.
**SOLUTION TO ETHICAL DILEMMA**

**Theft by the Petty Cash Clerk**
LG 3, 4

Individual responses to ethical dilemmas will vary. The technical and ethical issues raised in the following response are central to this dilemma; look for them in students answers and be prepared to discuss them with students in class.

When you sign the petty cash voucher, you are a part of the internal control system over cash. If the cashier makes the vouchers out in pencil, the vouchers may be altered. The petty cash clerk could increase the dollar amount on a signed voucher to cover up missing cash. The clerk may have made errors that he wants to cover up. Or the clerk may have taken money for personal use and is falsifying the voucher to cover up the theft. Use prenumbered petty cash vouchers and always make them out in pen or type them to prevent alteration. Once the person receiving the cash has signed the voucher, it should not be changed for any reason. If there is an error, the clerk should void the original voucher and complete a new one. The new voucher should show the voucher number that it is replacing.

You have seen the clerk altering vouchers. This suggests that there are irregularities. We design the imprest system of petty cash to control a very liquid asset. There should be no deviations from the system's procedures. You should report your observations to either your superior or to the petty cash clerks superior.

---

**SOLUTION TO COMPREHENSIVE ANALYSIS CASE**
**INTEL CORPORATION**

**Income Statement Responses:**

1. Total revenues in 2008 ($37,586,000,000) are higher that the total for 2006 ($35,382,000,000).

2. The percent increase in total revenues from 2006 to 2008 is:

\[
6.2\% = \frac{100 \times \frac{2,204,000,000}{35,382,000,000}}{37,586,000,000 - 35,382,000,000}
\]

Total revenues increased 6.2% from 2006 to 2008.
Comprehensive Analysis Case (continued)

3. The cost of goods sold percent decreased from 48.5% in 2006 to 44.5% in 2008. As a result, the gross margin percent increased from 51.5% in 2006 to 55.5% in 2008. This is a favorable trend.

4. The percentage of total operating expenses to total revenues decreased from 35.5% in 2006 to 31.6% in 2008. This is favorable. The operating income percent increased from 16.0% in 2006 to 23.8% in 2008. This is a favorable trend.

5. The percent of net income to total revenues decreased from 14.3% in 2006 to 14.1% in 2008. This is an unfavorable trend.

Balance Sheet Responses:

6. Total assets at December 27, 2008 ($50,715,000,000) are higher than the total at December 30, 2006 ($48,368,000,000).

7. The percent increase to total assets from December 30, 2006 to December 27, 2008 is:

4.9% = 100 x \( \frac{50,715,000,000 - 48,368,000,000}{48,368,000,000} \)

As with total revenues, total assets have increased over the three-year period.

8. The largest asset investment for the company is property and equipment. This item makes up 34.6% of the company's assets at the end of the most recent year.

9. The percent decrease in property, plant and equipment between 2006 and 2008 is:

(0.3)% = 100 x \( \frac{17,544,000,000 - 17,602,000,000}{17,602,000,000} \)

Property and equipment decreased by (0.3)% compared to an increase in total revenues of 6.2%. This is favorable. Property and equipment are decreasing accompanied by an increase in total revenues.

10. On the balance sheet, refer to the common-size percent for total liabilities each year. The percent of liabilities has decreased from 24.0% of total assets in 2006 to 22.9% in 2008. This is favorable.

Integrative Income Statement and Balance Sheet

11. This company is operating less efficiently in 2008 than in 2007. We conclude this by comparing the total asset turnover for the two years that decreased from 0.74 times in 2007 to 0.71 times in 2008. Each dollar of investment in assets generated a lower amount of revenues in 2008 than in 2007. This is unfavorable.
Comprehensive Analysis Case (continued)

Ratio Analysis Responses:
12. The current ratio is higher in 2008 than in 2006.

13. The quick ratio is higher in 2008 than in 2006.

14. For the year ended December 27, 2008, the accounts receivable turnover ratio 1 is better this year compared to the previous year. In 2008, the accounts receivable turnover ratio 1 is 10.95 times. This is an increase from 10.27 times in 2007. This is favorable.

15. For the year ended December 27, 2008, the accounts receivable turnover ratio 2 (based on year-end receivables) is better at 12.12 times compared to the 2008 accounts receivable turnover ratio 1 (based on average receivables) at 10.95 times. This is a result of the decrease in accounts receivable.

16. For the year ended December 27, 2008, the inventory turnover ratio 1 is worse this year compared to the previous year. In 2008, the inventory turnover ratio 1 is 4.71 times. This is a decrease from 4.80 times in 2007. This is unfavorable.

17. For the year ended December 27, 2008, the inventory turnover ratio 2 (based on year-end inventory) at 4.47 is worse than the 2008 inventory ratio 1 (based on average inventory) at 4.71. This is unfavorable.

18. The return on total assets (ROA) ratio is worse in 2008 than in 2007. In 2008, the ROA is 9.95%. This is a decrease from 13.41% in 2007. This is unfavorable.