Q8-1 When various financing methods are available to a company, the financial manager must consider the following factors:
1. The interest cost of each method,
2. Whether the financing method will continue to be available to the firm,
3. The possible effects on the availability and cost of alternative sources of money, both short-term and long-term. The financial manager should choose the method that will consistently generate the desired short-term funds at the lowest possible overall cost.

Q8-2 A negotiable promissory note is an unconditional written promise to pay a specified sum of money to the order of a designated person, or to bearer, at a fixed or determinable future time or on demand. The term negotiable indicates that it can be legally transferred by its owner to another person or institution, provided that the following requirements are met:
1. The instrument must be in writing and signed by the maker.
2. The instrument must contain an unconditional promise to pay a certain sum of money.
3. The instrument may be payable to a stated person (the payee), or it may be payable to bearer (anyone who holds the note).
4. The instrument must be payable either on demand or at a specified time in the future.
5. The instrument may or may not be interest bearing.

Q8-3 APR is short for "annual percentage rate." APR is the annual effective rate of interest applicable to outstanding principal. It is significant because it indicates the "true" cost of borrowing. It is the rate that must be compared with all other alternatives.
To calculate the effective interest rate (APR) on a note discounted at face value, the following formula is used:

\[ i = \frac{D}{P} \times \frac{360}{T} \]

where

D = the amount of the discount
P = the net proceeds
360 = days in the year
T = the term of the note in days.

Example: A 90-day note made out for the maturity value of $5,000 is discounted at 10%.

D = $5,000 \times 10\% \times 90/360 = $125
P = $5,000 - $125 = $4,875
T = 90

\[ I = \frac{$125}{$4,875} \times \frac{360}{90} = 0.1026 \text{ or } 10.26\% \]

If the alternatives offered have the same term and are (1) the borrowing of money by discounting a note on face value at 12% or (2) the issuance of a 12% interest-bearing note, the use of the interest-bearing note would produce the cheaper interest cost. The effective rate (APR) on the discounted note for a 90-day period is 12.37%; on the interest-bearing note it is simply 12%.

A company would issue notes when it needs short-term financing. Following are four common examples of where notes are issued:

1. For acquiring property, plant, and equipment.
2. For postponing the payment of merchandise purchased for resale.
3. For settling open accounts.
4. To borrow from banks to pay open accounts within discount periods. Other answers may be acceptable.

Discounting a note receivable refers to the short-term financing procedure whereby the payee of a note transfers it to a financial institution at maturity value less a discount. The payee generally becomes contingently liable in case of nonpayment by the maker.

The bank discount rate is the rate of interest on maturity value that a bank charges the payee of a note on the funds provided by the bank when the note is discounted.

If the maker of a note fails to pay the maturity value, the payee who discounts a note must make payment to the bank. The obligation the payee assumes upon discounting a note is referred to as a contingent liability.

The proceeds of a note are the amount of cash received in exchange for the note.

The maturity value of a note is the principal amount plus total interest to maturity.

A dishonored note is one that the maker fails to pay at maturity.
Q8-8  a. $90,000  
b. $65,000  
c. $25,000  
d. $25,000  
e. These items can be disclosed two different ways:  

Alternative 1.  

HANDY COMPANY  
Balance Sheet  
December 31, 2011  

Assets  

Current assets  
Notes receivable $ 90,000  
Deduct: Notes receivable discounted $ 25,000  
Net notes receivable on hand $ 65,000  

Liabilities  

Current liabilities  
Notes payable $ 40,000  

Alternative 2.  

HANDY COMPANY  
Balance Sheet  
December 31, 2011  

Assets  

Current assets  
Notes receivable (Note 1) $ 65,000  

Liabilities  

Current liabilities  
Notes payable $ 40,000  

Note 1: The company is contingently liable for notes receivable discounted in the amount of $25,000.  

Q8-9 Full disclosure means that all essential facts relating to financial statements are included with the statements. Full disclosure is important because potential lenders and investors need full and accurate information before making financing and investment decisions.
Q8-10 If the maker pays the note at maturity, neither the contingent liability nor the note receivable exist any more. If the maker dishonors the note then the liability is real and the bank will charge the firm's account to pay this liability. At the moment of maturity, the note is no longer a negotiable instrument. After the maturity date, it reverts to an open account status. Therefore, both the contingent liability and note receivable should be removed from the books on the maturity date.

Q8-11 a. A contingent liability is an amount that may become a liability in the future if certain events occur. An example is the maturity value of a discounted note.
b. Face value plus total interest to maturity plus any protest fee that is charged.
E8-12 Determining Maturity Date of Notes
LG 2

<table>
<thead>
<tr>
<th>Date of Note</th>
<th>Maturity Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 16, 2011</td>
<td>July 16, 2011</td>
</tr>
<tr>
<td>July 16, 2011</td>
<td>August 15, 2011</td>
</tr>
<tr>
<td>April 30, 2011</td>
<td>July 29, 2011</td>
</tr>
<tr>
<td>May 2, 2011</td>
<td>August 30, 2011</td>
</tr>
<tr>
<td>July 14, 2011</td>
<td>January 10, 2012</td>
</tr>
<tr>
<td>September 2, 2011</td>
<td>December 2, 2011</td>
</tr>
<tr>
<td>March 31, 2011</td>
<td>June 30, 2011</td>
</tr>
</tbody>
</table>

E8-13 Determining Maturity Value of Notes
LG 2

<table>
<thead>
<tr>
<th>Date of Note</th>
<th>Maturity Date</th>
<th>Maturity Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 4, 2011</td>
<td>August 1, 2011</td>
<td>$ 4,200</td>
</tr>
<tr>
<td>April 15, 2011</td>
<td>June 14, 2011</td>
<td>2,040</td>
</tr>
<tr>
<td>August 24, 2011</td>
<td>October 8, 2011</td>
<td>4,045</td>
</tr>
<tr>
<td>September 23, 2011</td>
<td>January 21, 2012</td>
<td>3,432</td>
</tr>
<tr>
<td>November 10, 2011</td>
<td>February 8, 2012</td>
<td>3,075</td>
</tr>
</tbody>
</table>

E8-14 Calculating Effective Interest Rates
LG 3

a. \(1.25\% \times 12 = 15\%\)
b. 1. Average outstanding principal = $2,520 \div 2 = $1,260
   2. Annual absolute interest costs:
      Total interest for two years = ($125 \times 24) - $2,520 = $480
      Interest for one year = $480 \div 2 = $240
   3. Rough approximation of APR is:
      $240 \div $1,260 = 19.0\% \text{ per year}

\[i = \frac{\text{\$200}}{\text{\$7,800}} \times \frac{360}{90} = 10.26\%\]
E8-15 Recording Notes Payable Transactions with Interest on Face Value
LG 4

GENERAL JOURNAL

2011
Jan.  2 Purchases  18,000
  Accounts Payable,
  Allen Company  18,000
  To record the purchase of
  merchandise from Allen Company.

  2 Accounts Payable,
     Allen Company  18,000
     Notes Payable  18,000
     To record the issuance of a
     12%, 45-day note in settlement
     of open account to Allen Company.

Feb. 16 Notes Payable  18,000
    Interest Expense  270
    Cash  18,270
    To record the payment of note
    and interest on the Allen note.

Mar. 15 Accounts Payable, Simon Company
    Notes Payable  12,000
    To record the issuance of a
    12%, 90-day note in settlement
    of open account to Simon
    Company.

Jun. 13 Notes Payable  12,000
    Interest Expense  360
    Cash  6,360
    Notes Payable  6,000
    To record the settlement of old
    note by payment of cash and the
    issuance of new 14%, 60-day note.

Aug. 12 Notes Payable  6,000
    Interest Expense  140
    Cash  6,140
    To record payment of Simon
    note and interest.

Dec.  1 Accounts Payable, Paula Company
    Notes Payable  15,000
    To record the issuance of 12%,
    45-day note in settlement of
    open account to Paula Company.
E8-15 (continued)

Dec. 31  Interest Expense
        Interest Payable
        To record the accrued interest
        on the Paula note:
        $15,000 x 12% x 30/360 = $150

2012
Jan.  15  Notes Payable
          Interest Payable
          Interest Expense
          Cash
          To record payment of Paula’s
          note and interest.

E8-16 Calculating and Recording Interest on Notes Payable
LG 2, 4

Calculation of Accrued Interest:

<table>
<thead>
<tr>
<th>Date of Note</th>
<th>Calculation</th>
<th>Accrued Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 15, 2011</td>
<td>$14,000 x 13% x 77/360</td>
<td>$389.28</td>
</tr>
<tr>
<td>November 5, 2011</td>
<td>$6,000 x 11% x 56/360</td>
<td>102.67</td>
</tr>
<tr>
<td></td>
<td>Total accrued interest</td>
<td>$491.95</td>
</tr>
</tbody>
</table>

GENERAL JOURNAL

2011
Dec. 31  Interest Expense
         Interest Payable
         To record accrued interest
         on notes.
E8-17 Recording Notes Payable Discounted at Face Value
LG 4

GENERAL JOURNAL

2011
Aug. 3 Cash 11,640
Discount on Notes Payable 360
Notes Payable 12,000
To record the discounting of own note to Jodi Bank.

Nov. 1* Interest Expense 360
Discount on Notes Payable 360
To recognize the interest on the note discounted at Jodi Bank.

*This entry could be deferred and made as an adjusting entry on December 31, 2011.

1 Notes Payable 12,000
Cash 12,000
To record payment of note to Jodi Bank.

Dec. 16 Cash 8,820
Discount on Notes Payable 180
Notes Payable 9,000
To record the discounting of own note to Nutmeg Bank.

31 Interest Expense 45
Discount on Notes Payable 45
To recognize interest on note discounted to Nutmeg Bank.

2012
Feb. 14* Interest Expense 135
Discount on Notes Payable 135
To recognize the remaining interest on note discounted to Nutmeg Bank.

*This entry could be deferred and made as an adjusting entry on December 31, 2012.

14 Notes Payable 9,000
Cash 9000
To record payment of note to Nutmeg Bank.
1. GENERAL JOURNAL

2011
Nov. 1 Cash 9,000
      Notes Payable 9,000
      To record a 10%, 90-day note
dated November 1, 2011 issued
to Vernon Bank.

1 Cash 8,775
      Discount on Notes Payable 225
      Notes Payable 9,000
      To record a note dated
November 1, 2011 issued
to Manchester Bank discounted
on face value at 10% for 90 days
($225 = $9,000 x 0.10 x 90/360).

Dec. 31 Interest Expense 150
      Interest Payable 150
      To record accrued interest in
the note issued to Vernon Bank.
($150 = $9,000 x 0.10 x 60/360).

31 Interest Expense 150
      Discount on Notes Payable 150
      To record the transfer of $150
interest from the Discount on
Notes Payable account to the
Interest Expense account on the
note discounted at the Manchester
Bank.

2012
Jan. 30 Notes Payable 9,000
         Interest Payable 150
         Interest Expense 75
         Cash 9,225
      To record payment of 10%,
90-day note and interest to
Vernon Bank.
E8-18 (continued)

Jan. 30 Interest Expense
    Discount on Notes Payable
    To transfer the remainder of
    the discount amount to Interest
    Expense.

30 Notes Payable
    Cash
    To record payment of the note
    issued to the Manchester Bank.

2.

Vernon Bank effective interest rate is 10% as follows:

\[
10\% = \frac{225}{9,000} \times \frac{360}{90}
\]

Manchester Bank effective interest rate is 10.26%, as follows:

\[
10.26\% = \frac{225}{8,775} \times \frac{360}{90}
\]

E8-19 Recording Notes Receivable Transactions
LG 5

GENERAL JOURNAL

2011
Apr. 19 Accounts Receivable, Gretzky.
    Sales
    To record sale to Gretzky.

19 Notes Receivable
    Accounts Receivable,
    Gretzky
    To record receipt of 10%,
    60-day note from Gretzky.

Jun. 18 Cash
    Notes Receivable
    Interest Revenue
    To record collection of note
    and interest on Gretzky note.
**E8-19 (continued)**

**Jun. 21**

<table>
<thead>
<tr>
<th>Accounts Receivable, Messier</th>
<th>Notes Receivable</th>
<th>6,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>To record receipt of a 12%, 120-day note in settlement of open account from Messier.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Oct. 19**

<table>
<thead>
<tr>
<th>Accounts Receivable, Messier</th>
<th>Notes Receivable</th>
<th>6,240</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Revenue</td>
<td>6,000</td>
<td>240</td>
</tr>
<tr>
<td>To record the dishonor of the Messier Note.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Nov. 16**

<table>
<thead>
<tr>
<th>Notes Receivable</th>
<th>Accounts Receivable, Ed Snider</th>
<th>3,600</th>
</tr>
</thead>
<tbody>
<tr>
<td>To record the receipt of a 12%, 90-day note in settlement of open account from Ed Snider.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Dec. 31**

<table>
<thead>
<tr>
<th>Interest Receivable</th>
<th>Interest Revenue</th>
<th>54</th>
</tr>
</thead>
<tbody>
<tr>
<td>To accrue interest for 45 days on the Snider note.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**2012**

<table>
<thead>
<tr>
<th>Cash</th>
<th>Notes Receivable</th>
<th>Interest Receivable</th>
<th>Interest Revenue</th>
<th>3,708</th>
</tr>
</thead>
<tbody>
<tr>
<td>To record the collection of note and interest from Snider.</td>
<td>3,600</td>
<td>54</td>
<td>54</td>
<td></td>
</tr>
</tbody>
</table>
E8-20 Calculating and Recording Accrued Interest on Notes Receivable
LG 2, 5

Calculation of Accrued Interest:

<table>
<thead>
<tr>
<th>Date of Note</th>
<th>Calculation</th>
<th>Accrued Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 1, 2011</td>
<td>$ 9,000 x 11% x 60/360</td>
<td>$ 165.00</td>
</tr>
<tr>
<td>November 16, 2011</td>
<td>$ 3,600 x 12% x 45/360</td>
<td>54.00</td>
</tr>
<tr>
<td>December 1, 2011</td>
<td>$ 4,000 x 9% x 30/360</td>
<td>30.00</td>
</tr>
<tr>
<td></td>
<td>Total accrued interest</td>
<td>$ 249.00</td>
</tr>
</tbody>
</table>

GENERAL JOURNAL

2011
Dec. 31 Interest Receivable 249.00
Interest Revenue 249.00
To record accrued interest on notes.

E8-21 Discounting a Customer's Note Receivable Paid by the Customer
LG 5, 6

GENERAL JOURNAL

2011
Oct. 8 Notes Receivable 1,600.00
Accounts Receivable, Hextall Company 1,600.00
To record receipt of 11%, 90-day note from Hextall Company. Dec. 5

Dec. 5 Cash 1,626.46
Notes Receivable Discounted 1,600.00
Interest Revenue 26.46
Maturity Value: $1,600 + ($1,600 x 11% x 90/360) = $1,644.
Discount: $1,644 x 12% x 32/360 = $17.54.
Proceeds: $1,644 - $17.54 = $1,626.46.

2012
Jan. 6 Notes Receivable Discounted 1,600.00
Notes Receivable 1,600.00
To remove the contingent liability and notes receivable from the books.
## E8-22 Discounting a Customer's Note Receivable Dishonored by the Customer
LG 5, 6

**GENERAL JOURNAL**

<table>
<thead>
<tr>
<th>Date</th>
<th>Reference</th>
<th>Debit Description</th>
<th>Credit Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep.</td>
<td>5</td>
<td>Accounts Receivable, Berne Company</td>
<td>Sales</td>
<td>5,400.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To record sales on account to Berne Company.</td>
<td>5,400.00</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Notes Receivable</td>
<td>Accounts Receivable, Berne Company</td>
<td>5,400.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To record receipt of 12%, 90-day note from Berne Company.</td>
<td>5,400.00</td>
</tr>
<tr>
<td>Oct.</td>
<td>20</td>
<td>Cash</td>
<td>Notes Receivable Discounted Interest Revenue</td>
<td>5,457.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maturity value: $5,400 + ($5,400 x 12% x 90/360) = $5,562</td>
<td>5,400.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Discount: $5,562 x 15% x 45/360 = $104.29</td>
<td>57.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Proceeds: $5,562 - $104.29 = $5,457.71</td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>4</td>
<td>Notes Receivable Discounted Notes Receivable</td>
<td>To remove contingent liability and notes receivable from books.</td>
<td>5,400.00</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Accounts Receivable, Berne Company</td>
<td>Cash</td>
<td>5,577.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>To record dishonor of note and protest fee by Berne Company.</td>
<td>5,577.00</td>
</tr>
</tbody>
</table>
E8-23 Recording Note Transaction: Maker and Payee
LG 4, 5, 6

Books of Lou Blue

GENERAL JOURNAL

2011
Mar.  3  Notes Receivable
       Accounts Receivable,       3,000
               Fred Red
       To record receipt of 10%,
       120-day note in settlement
       of open account from
       Fred Red.

Apr.  2  Cash
       Notes Receivable Discounted
       Interest Revenue
       Maturity value:  $3,000 + ($3,000 x
                       10% x 120/360) = $3,100.
       Discount:    $3,100 x 12% x 90/360 = $93
       Proceeds:    $3,100 - $93 = $3,007

Jul.  1  Notes Receivable Discounted
       Notes Receivable
       To remove the contingent
       liability and notes
       receivable from books.

Books of Fred Red

GENERAL JOURNAL

2011
Mar.  3  Accounts Payable, Lou Blue
       Notes Payable
       To record the issuance of
       10%, 120-day note in
       settlement of open account
       to Lou Blue.

Apr.  2  No entry. Red could make a memorandum
        entry to show that Money Bank is to be paid.

Jul.  1  Notes Payable
       Interest Expense
       Cash
       To record payment to Money Bank
       for note and interest issued to Lou Blue.

6-14
E8-24 Describing Transactions from Account Data
LG5

a. Made sale of $900 on account.
b. Received a $900 note from customer in settlement of open account.
c. The customer’s note in (b) was discounted at bank; the cash proceeds were $912.
d. The maker dishonored the discounted note. Cash of $944 was paid to bank; this amount was debited to Accounts Receivable.
e. The contingent liability and note receivable were removed from the books.
f. The customer paid the amount debited to Accounts Receivable for the note, interest, and protest fees plus interest of $45.

SOLUTIONS TO PROBLEMS

P8-25 Calculating and Recording Accrued Interest on Notes Payable
LG 2, 5

<table>
<thead>
<tr>
<th>Date of Note</th>
<th>Calculation</th>
<th>Accrued Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1, 2011</td>
<td>$ 3,000 × 11% × 183/360</td>
<td>$167.75</td>
</tr>
<tr>
<td>November 1, 2011</td>
<td>$12,000 × 12% × 60/360</td>
<td>$240.00</td>
</tr>
<tr>
<td>November 16, 2011</td>
<td>$17,000 × 10% × 45/360</td>
<td>$212.50</td>
</tr>
<tr>
<td>December 5, 2011</td>
<td>$ 5,000 × 9% × 26/360</td>
<td>$32.50</td>
</tr>
<tr>
<td>Total accrued interest</td>
<td></td>
<td>$652.75</td>
</tr>
</tbody>
</table>

GENERAL JOURNAL

2011
Dec. 31 Interest Expense 652.75
Interest Payable 652.75

To record accrued interest on notes payable.

P8-26 Determining Approximate APR
LG 3

a. Annual effective interest under the present plan:
   \[
   \frac{108}{600 + 2} = 0.36 \text{ or } 36\% \text{ for } 24 \text{ months.}
   \]

b. Annual effective interest under proposed plan:
   \[
   \frac{100}{600 + 2} = 0.333 \text{ or } 33.3\% \text{ per year.}
   \]

c. The proposed plan would be cheaper for the buyer and hence more favorable to the buyer. It would also result in a lower monthly payment.
d. The present plan would yield a lower return to the seller and hence would be less preferred by the seller. However in the long-run, sales may increase as customers evaluate both the lower interest cost and lower monthly payment.

## P8-27 Recording Notes Payable Transactions

**LG 2, 4**

### GENERAL JOURNAL

<table>
<thead>
<tr>
<th>Date</th>
<th>Account Debit/credit</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 2</td>
<td>Purchases</td>
<td>Accounts Payable, Ray Company</td>
<td>9,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ray Company</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>To record purchases on account from Ray Company.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 Accounts Payable, Ray Company Notes Payable</td>
<td>9,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>To record the issuance of 11%, 45-day note to Ray Company.</td>
<td>9,000.00</td>
</tr>
<tr>
<td>Feb. 16</td>
<td>Notes Payable</td>
<td>Interest Expense</td>
<td>9,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cash</td>
<td>123.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To record the payment of note to Ray Company.</td>
<td>9,123.75</td>
</tr>
<tr>
<td>Jun. 1</td>
<td>Cash</td>
<td>Notes Payable</td>
<td>12,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To record note issued to First Bank at 12% for 30 days.</td>
<td></td>
</tr>
<tr>
<td>Jul. 1</td>
<td>Notes Payable</td>
<td>Interest Expense</td>
<td>12,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cash</td>
<td>120.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To record payment of the note to First Bank.</td>
<td>12,120.00</td>
</tr>
<tr>
<td>Nov. 22</td>
<td>Accounts Payable, Gus Company Notes Payable</td>
<td>6,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>To record the issuance of 10%, 90-day note in settlement of open account to Gus Company.</td>
<td></td>
</tr>
<tr>
<td>Dec. 16</td>
<td>Cash</td>
<td>Discount on Notes Payable</td>
<td>17,670.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notes Payable</td>
<td>330.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To record the discounting of a note at Rock Bank at 11% for 60 days.</td>
<td>18,000.00</td>
</tr>
</tbody>
</table>
P8-27 (continued)

2011
Dec. 31  Interest Expense
  Interest Payable
    To record the accrual of interest on Gus Company note. ($6,000 x 10% x 39/360 = $65.00)
  65.00  65.00

31  Interest Expense
    Discount on Notes Payable
    To recognize incurred interest on the note discounted at Rock Bank. ($18,000 x 11% x 15/360 = $82.50)
    82.50  82.50

2012
Feb.14*  Interest Expense
    Discount on Notes Payable
    To record the remaining interest on the note issued to Rock Bank.
    247.50  247.50

        *This entry could be deferred and made as an adjusting entry at end of year.

14  Notes Payable
    Cash
    To record the payment of the note issued to the Rock Bank.
    18,000.00  18,000.00

20  Notes Payable
    Interest Expense
    Interest Payable
    Cash
    To record the payment of the note and interest to Gus Company.
    6,000.00  85.00  65.00  6,150.00

P8-28  Notes Transactions Review Issues
LG 2, 4, 5

1. Accounts Receivable, Harrison
   Sales Revenue
   120,000  120,000
P8-28  (continued)

2.  a.  December 16, 2011
   
   b.  Cash
       Notes Receivable  123,000
          Interest Revenue  120,000
                                 3,000
       Cash  123,000

   c.  Notes Payable
       Interest Expense  120,000
           Cash  18,000
                       3,000
       Interest Expense  123,000

3.  Notes Receivable
    Accounts Receivable, James Joyce  18,000
                                           18,000

4.  Accounts Receivable, Sarah Twain
    Notes Receivable  9,225
          Interest Revenue  9,000
                                 225

5.  Interest Receivable
    Interest Revenue  1,000
                                           1,000

P8-29  Recording Notes Receivable Transactions

LG 5, 6

GENERAL JOURNAL

2011

Sep. 14  Cash  500.00
    Notes Receivable  10,000.00
        Accounts Receivable, Venture Movies  10,500.00
            To record partial payment and receipt of 12%, 120-day note dated September 14, 2011, in settlement of open account from Venture Movies.

Nov. 3  Accounts Receivable, Mall Pictures Sales  6,000.00
        Sales  6,000.00
            To record sale on account to Mall Pictures, terms n/30.
2011
Dec. 3 Notes Receivable
   Accounts Receivable, Mall Pictures 6,000.00  6,000.00
   To record receipt of 12%,
   60-day note dated December 3,
   2011, in settlement of open
   account from Mall Pictures.

   Interest Receivable 360.00  360.00
      Interest Revenue
      To record accrued interest on
      the Venture Movies note at 12%
      for 108 days ($360 = $10,000 x
      0.12 x 108/360).

   Interest Receivable 56.00  56.00
      Interest Revenue
      To record accrued interest on
      the Mall Pictures note at 12%
      for 28 days ($56 = $6,000 x
      0.12 x 28/360.)

2012
Jan. 12 Accounts Receivable,
   Venture Movies 10,400.00  10,000.00
      Notes Receivable
      Interest Receivable 360.00
      Interest Revenue 40.00
      To record dishonor of the
      Venture Movies note.

22 Cash 10,400.00
   Accounts Receivable,
   Venture Movies 10,400.00
      To record the collection of
      the Venture Movies account.

Feb. 1 Cash 6,120.00
   Notes Receivable 6,000.00
   Interest Receivable 56.00
   Interest Revenue 64.00
   To record the collection of
   the Mall Pictures note.
P8-30  Comprehensive Notes Receivable Transactions
LG 5, 6

2011
Mar.  8 Accounts Receivable,
     Marty Dare  3,000.00
     Sales  3,000.00
     To record sales on account to Marty Dare.

10  Notes Receivable  4,200.00
    Accounts Receivable,
    Rose Van  4,200.00
    To record the receipt of an
    12%, 60-day note in settlement
    of open account from Rose Van.

15  Notes Receivable  5,600.00
    Accounts Receivable,
    Al Pal  5,600.00
    To record the receipt of a
    9%, 45-day note in settlement
    of open account from Al Pal.

Apr.  7 Notes Receivable  3,000.00
    Accounts Receivable,
    Marty Dare  3,000.00
    To record the receipt of a 12%,
    90-day note in settlement of
    open account from Marty Dare.

29  Accounts Receivable, Al Pal  5,663.00
    Notes Receivable  5,600.00
    Interest Revenue  63.00
    To record the dishonor of a
    note and interest of Al Pal.

May  9 Cash  1,084.00
    Notes Receivable  3,200.00
    Notes Receivable  4,200.00
    Interest Revenue  84.00
    To record partial collection
    and new 12%, 60-day note from
    Rose Van.
2011
May 10  Cash  3,021.50*
   Notes Receivable Discounted  3,000.00
   Interest Revenue  21.50
   To record discounting:
   Maturity
   Value: $3,000 + ($3,000 x 12% x 90/360) = $3,090
   Discount: $3,090 x 14% x 57/360 = $68.50
   * Proceeds: $3,090.00 - $68.50 = $3,021.50

21  Cash  3,211.78*
   Notes Receivable Discounted  3,200.00
   Interest Revenue  11.78
   To record discounting:
   Maturity
   Value: $3,200 + ($3,200 x 12% x 60/360) = $3,264.00
   Discount: $3,264.00 x 12% x 48/360 = $52.22
   * Proceeds: $3,264.00 - $52.22 = $3,211.78

Jul. 6  Notes Receivable Discounted  3,000.00
   Notes Receivable  3,000.00
   To remove the contingent liability and notes receivable from the books.

8  Notes Receivable Discounted  3,200.00
   Notes Receivable  3,200.00
   To remove the contingent liability and notes receivable from the books.

8  Accounts Receivable, Rose Van  3,284.00
    Cash  3,284.00
    To record payment of dishonored note, interest, and protest fee for Rose Van.
P8-30 (continued)

2011
Aug.  7  Cash  3,316.84
          Accounts Receivable,  3,284.00
          Rose Van
          Interest Revenue  32.84
          To record receipt of payment
          from Rose Van of maturity
          value of dishonored note,
          the protest fee, and interest
          on both at 12% for 30 days.

31  Allowance for Doubtful Accounts  5,663.00
    Accounts Receivable,  5,663.00
    Al Pal
    To write off an uncollectible
    amount of Al Pal.

P8-31 Selecting Best Source of Short-term Credit
LG 3, 7

The approximate annual effective interest for each source is as follows:

a. Patrick Bank
   ($4,000/$16,000) × (360/360) = 0.25 or 25%

b. Barber Bank
   Total payments (12 × $1,493.33)  $17,919.96
   Deduct: Cash received  16,000.00
   Total Interest  $ 1,919.96

   Approximate APR:
   $1,919.96 ÷ ($16,000.00 ÷ 2) = $1,919.96 ÷ $8,000.00
   = 0.24 or 24.0%

The Weinrich Company should choose the Barber Bank loan because it has a
lower cost in terms of effective interest rates.

P8-32 Interpretation of Short-term Borrowing for the Gap, Inc.

Overall, we have no concern about the short-term financing capacity of Gap,
Inc. as of January 31, 2009. The reasons are:

1. At the end of the 2009 fiscal year, the note stated that no borrowing was
   outstanding. Therefore, the complete credit facility is available.

2. The credit lines will not expire until 2012. Given the low debt situation for Gap
   Inc., renewal of the credit lines is likely.

8-22
P6-32 (continued)

3. Total liabilities as of January 31, 2009 are 42.0% ($3,177 ÷ $7,564) of total assets. The Company has a reasonable amount of total debt. This decreases the risk of not being able to meet interest and principal payments.

4. Of the total debt as of January 31, 2009, $2,158 million or 67.9% ($2,158 ÷ $3,177) is current and will come due within the next year. This will present a significant strain on cash resources and will have to be planned for.

5. With reported net earnings of $967 million in 2009, Gap, Inc. is paying a substantial cash dividend to common shareholders of $243 million. The consistency which Gap, Inc. has demonstrated over each of the past three years to generate a consistent income and pay a significant dividend is impressive.

SOLUTION TO PRACTICE CASE
Practice Case  (continued)

2011
Oct. 18 Interest Expense  
  Discount on Notes Payable  
  To record the transfer of $1,200 interest from the Discount on Notes Payable account to the Interest Expense account on the note discounted at the City Bank.  
  1,200.00  

18 Notes Payable  
  Cash  
  To record payment of note payable to City Bank.  
  60,000.00  

Nov. 2 Cash  
  Notes Receivable  
  Interest Revenue  
  To record payment of a note and interest of Green Acres.  
  32,640.00  
  32,000.00  
  640.00

SOLUTION TO BUSINESS DECISION AND COMMUNICATION PROBLEM

Extended Credit Terms
LG 2, 6

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: Charlie Checker, President
FROM: Student
SUBJECT: Extended Credit Sales Term

The proposed plan to offer three-year, noninterest-bearing loans to customers is not a good idea. Although the program may result in increased sales, the following items should be considered.

1. Banks would probably not be willing to discount the customer notes considering (1) the relatively long time period of the notes, (2) the probability the maker would not be able to pay at maturity, and (3) the probability that Farm Equipment Company would not be able to meet its contingent liability on the notes.
Business Decision and Communication Problem (continued)

2. At the end of three years, the tractors probably will be worth a small fraction of their initial value. Therefore, repossessing them from the customers will not provide much cash inflow.
Overall, I feel that the plan will not provide an immediate inflow of cash to the company since banks would be unwilling to discount the notes. Holding the noninterest-bearing notes for a three-year period represents a significant loss in interest for the company. The plan should be rejected.

SOLUTION TO ETHICAL DILEMMA

Interest Calculation Procedure
LG 2

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.

The change appears to be an attempt to increase net income for Fabulous Vacations. The following example illustrates the impact of the change for a $10,000, 12%, 60-day account:

Account Receivable Computation (interest income)

\[
\text{Interest} = \text{Principal} \times \text{Rate of Interest} \times \text{Time}
\]

\[
$200 = $10,000 \times 0.12 \times 60/360
\]

Account Payable Computation (interest expense)

\[
\text{Interest} = \text{Principal} \times \text{Rate of Interest} \times \text{Time}
\]

\[
$197.26 = $10,000 \times 0.12 \times 60/365
\]

Using a 360-day year for computing interest on accounts receivable maximizes interest income. Using a 365-day year for computing interest on accounts payable minimizes interest expense.

In the long-run, treating people fairly in business deals results in satisfied customers and suppliers. From an ethical point of view, the company should adopt a uniform number of days to calculate interest on both receivable and payable balances.
Income Statement Responses:

1. Total revenues in 2008 ($31,944,000,000) are higher than the total for 2006 ($24,088,000,000).

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

   \[ 32.6\% = 100 \times \frac{\$7,856,000,000^*}{\$24,088,000,000} \equiv \frac{\$31,944,000,000 - \$24,088,000,000}{\$24,088,000,000} \]

   Total revenues increased 32.6% from 2006 to 2008.

3. The cost of goods sold percent increased from 33.9% in 2006 to 35.6% in 2008. As a result, the gross margin percent decreased from 66.1% in 2006 to 64.4% in 2008. This is an unfavorable trend.

4. The percentage of total operating expenses to total revenues decreased from 39.9% in 2006 to 38.0% in 2008. This is favorable. The operating income percent increased from 26.2% in 2006 to 26.4% in 2008. This is a favorable trend.

5. The percent of net income to total revenues decreased from 21.1% in 2006 to 18.2% in 2008. This is an unfavorable trend.

Balance Sheet Responses:

6. Total assets at December 31, 2008 ($40,519,000,000) are higher than the total at December 31, 2006 ($29,963,000,000).

7. The percent increase to total assets from December 31, 2006 to December 31, 2008 is:

   \[ 35.2\% = 100 \times \frac{\$10,566,000,000^*}{\$29,963,000,000} \equiv \frac{\$40,519,000,000 - \$29,963,000,000}{\$29,963,000,000} \]

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

8. The largest asset investment for the company intangibles and goodwill. This item makes up 30.9% of the company's assets at the end of the most recent year.

9. The percent increase in accounts receivable between 2006 and 2008 is:

   \[ 14.3\% = 100 \times \frac{\$386,000,000^*}{\$2,704,000,000} \equiv \frac{\$3,090,000,000 - \$2,704,000,000}{\$2,704,000,000} \]
Accounts receivable increased by 14.3% compared to an increase in total revenues of 32.6%. This is favorable. Accounts receivable are increasing at a slower rate compared to revenues.

10. On the balance sheet, refer to the common-size percent for total liabilities each year. The percent of liabilities has increased from 43.5% of total assets in 2006 to 49.5% in 2008. This is unfavorable.

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 0.79 times in 2007 to 0.76 times in 2008. Each dollar of investment in assets generated a lower amount of revenues in 2008 than in 2007. This is unfavorable.

Ratio Analysis Responses:

12. The current ratio is lower in 2008 than in 2006.

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

14. For the year ended December 31, 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 9.97 times. This is an increase from 9.59 times in 2007. This is favorable.

15. For the year ended December 31, 2008, the accounts receivable turnover ratio 2 (based on year-end receivables) is better at 10.34 times compared to the 2008 accounts receivable turnover ratio 1 (based on average receivables) at 9.97 times. This is a result of total revenues increasing at a faster rate than accounts receivable.

16. For the year ended December 31, 2008, the inventory turnover ratio 1 is worse this year compared to the previous year. In 2008, the inventory turnover ratio 1 is 5.16 times. This is a decrease from 5.39 times in 2007. This is unfavorable.

17. For the year ended December 31, 2008, the inventory turnover ratio 2 (based on year-end inventory) at 5.20 is better than the 2008 inventory ratio 1 (based on average inventory) at 5.16. This is favorable.

18. The return on total assets (ROA) ratio is worse in 2008 than in 2007. In 2008, the ROA is 13.86%. This is a decrease from 16.33% in 2007. This is unfavorable.