## Chapter 4

## Adjustments, Financial Statements, and the Quality of Earnings

## ANSWERS TO QUESTIONS

1. Adjusting entries are made at the end of the accounting period to record all revenues and expenses that have not been recorded but belong in the current period. They update the balance sheet and income statement accounts at the end of the accounting period.
2. A trial balance is a list of the individual accounts, usually in financial statement order, with their debit or credit balances. It is used to provide a check on the equality of the debits and credits.
3. The four different types are adjustments for:
(1) Unearned revenues -- previously recorded liabilities that need to be adjusted at the end of the period to reflect revenues that have been earned (e.g., Unearned Ticket Revenue must be adjusted for the portion of ticket revenues earned in the current period).
(2) Accrued revenues -- revenues that have been earned by the end of the accounting period but which will be collected in a future accounting period (e.g., recording Interest Receivable for interest revenues not yet collected).
(3) Prepaid expenses -- previously recorded assets that need to be adjusted at the end of the period to reflect incurred expenses (e.g., Prepaid Insurance must be adjusted for the portion of insurance expense incurred in the current period).
(4) Accrued expenses -- expenses that have been incurred by the end of the accounting period but which will be paid in a future accounting period (e.g., recording Utilities Payable for utilities expense incurred during the period that has not yet been paid).
4. A contra-asset is an account related to an asset that is an offset or reduction to the asset's balance. Accumulated Depreciation is a contra-account to the equipment and buildings accounts.
5. The net income on the income statement is included in determining ending retained earnings on the statement of stockholders' equity and the balance sheet. The change in the cash account on the balance sheet is analyzed and categorized on the statement of cash flows into cash from operating activities, investing activities, and financing activities.
6. (a) Income statement: Revenues (and Gains) - Expenses (and Losses) $=$ Net Income
(b) Balance sheet: Assets = Liabilities + Stockholders' Equity
(c) Statement of cash flows: Changes in cash for the period = Cash from

Operations $\pm$ Cash from Investing Activities $\pm$ Cash from Financing Activities
(d) Statement of stockholders' equity: Ending Stockholders' Equity $=$ (Beginning Contributed Capital + Stock Issuances - Stock Repurchases) + (Beginning Retained Earnings + Net Income - Dividends Declared)
7. Adjusting entries have no effect on cash. For unearned revenues and prepaid expenses, cash was received or paid at some point in the past. For accruals, cash will be received or paid in a future accounting period. At the time of the adjusting entry, there is no cash being received or paid.
8. Earnings per share $=$ Net Income $\div$ average number of shares of stock outstanding during the period.

Earnings per share measures the average amount of net income for the year attributable to one share of common stock.
9. Net profit margin $=$ Net income $\div$ net sales

The net profit margin measures how much of every sales dollar generated during the period is profit.
10. An unadjusted trial balance is prepared after all current transactions have been journalized and posted to the ledger. It does not include the effects of the adjusting entries. The basic purpose of an unadjusted trial balance is to check the equalities of the accounting model (particularly, Debits = Credits) and to provide the data in a form convenient for further processing in the accounting information processing cycle.

In contrast, an adjusted trial balance is prepared after the effects of all of the adjusting entries have been applied to the corresponding (prior) unadjusted trial balance amounts. The basic purpose of an adjusted trial balance is to insure that accuracy has been attained in applying the effect of the adjusting entries. The adjusted trial balance provides a second check in the model equalities (primarily Debits = Credits). It also provides data in a form convenient for further processing.
11. Closing entries are made at the end of the accounting period to transfer the balances in the temporary income statement accounts to retained earnings. The closing entries reduce the revenue, gain, expense, and loss accounts to a zero balance so that they can be used for the accumulation process during the next period. Closing entries must be entered into the system through the journal and posted to the ledger accounts to state properly the temporary and permanent account balances (i.e., zero balances in the temporary accounts).
12. (a) Permanent accounts -- balance sheet accounts; that is, the asset, liability, and stockholders' equity accounts (these are not closed at the end of each period).
(b) Temporary accounts -- income statement accounts; that is, revenues, gains, expenses, and losses (these are closed at the end of each period).
(c) Real accounts -- another name for permanent accounts.
(d) Nominal accounts -- another name for temporary accounts.
13. The income statement accounts are closed at the end of the accounting period because, in effect, they are temporary subaccounts to retained earnings (i.e., a part of stockholders' equity). They are used only for accumulation during the accounting period. When the period ends, these accumulated accounts must be transferred (closed) to retained earnings. The closing process serves:
(1) to correctly state retained earnings, and
(2) to clear out the balances of the temporary accounts for the year just ended so that these subaccounts can be used again during the next period for accumulation and classification purposes.

Balance sheet accounts are not closed at the end of the period because they reflect permanent accumulated balances of assets, liabilities, and stockholders' equity. Permanent accounts show the entity's financial position at the end of the period and are the beginning amounts for the next period.
14. A post-closing trial balance is a listing taken from the ledger after the adjusting and closing entries have been journalized and posted. It is not a necessary part of the accounting information processing cycle but it is useful because it demonstrates the equality of the debits and credits in the ledger after the closing entries have been journalized and posted.

## ANSWERS TO MULTIPLE CHOICE

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

## Authors' Recommended Solution Time <br> (Time in minutes)

| Mini-exercises |  | Exercises |  | Problems |  | Alternate Problems |  | Cases and Projects |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Time | No. | Time | No. | Time | No. | Time | No. | Time |
| 1 | 5 | 1 | 10 | 1 | 15 | 1 | 15 | 1 | 25 |
| 2 | 5 | 2 | 10 | 2 | 20 | 2 | 20 | 2 | 25 |
| 3 | 3 | 3 | 10 | 3 | 25 | 3 | 20 | 3 | 25 |
| 4 | 5 | 4 | 15 | 4 | 20 | 4 | 20 | 4 | 25 |
| 5 | 5 | 5 | 10 | 5 | 20 | 5 | 20 | 5 | 25 |
| 6 | 5 | 6 | 20 | 6 | 25 | 6 | 25 | 6 | 40 |
| 7 | 5 | 7 | 20 | 7 | 30 | 7 | 30 | 7 | 45 |
| 8 | 5 | 8 | 20 | 8 | 30 | 8 | 30 | 8 | 35 |
| 9 | 5 | 9 | 15 | 9 | 60 |  |  | 9 | 50 |
| 10 | 5 | 10 | 20 |  |  |  |  | 10 | 25 |
| 11 | 5 | 11 | 10 |  |  |  |  | 11 | * |
| 12 | 3 | 12 | 20 |  |  |  |  |  |  |
|  |  | 13 | 15 |  |  |  |  |  |  |
|  |  | 14 | 15 |  |  |  |  |  |  |
|  |  | 15 | 20 |  |  |  |  |  |  |
|  |  | 16 | 20 |  |  |  |  |  |  |
|  |  | 17 | 20 |  |  |  |  |  |  |
|  |  | 18 | 20 |  |  |  |  |  |  |
|  |  | 19 | 10 |  |  |  |  |  |  |
|  |  | 20 | 15 |  |  |  |  |  |  |

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


## MINI-EXERCISES

M4-1.

Puglisi Company<br>Adjusted Trial Balance<br>At June 30, 2010

|  | Debit | Credit |  |
| :--- | ---: | ---: | ---: |
|  |  |  |  |
| Cash | $\$$ | 150 |  |
| Accounts receivable | 370 |  |  |
| Inventories | 660 |  |  |
| Prepaid expenses | 30 |  |  |
| Buildings and equipment | 1,400 |  |  |
| Accumulated depreciation |  | $\$$ | 250 |
| Land | 300 |  | 200 |
| Accounts payable |  | 160 |  |
| Accrued expenses payable |  |  | 50 |
| Income taxes payable |  | 90 |  |
| Unearned fees |  |  | 1,360 |
| Long-term debt |  | 400 |  |
| Contributed capital |  | 150 |  |
| Retained earnings |  | 2,500 |  |
| Sales revenue |  | 680 |  |
| Interest income |  | 640 |  |
| Cost of sales |  | 460 |  |
| Salaries expense |  |  |  |
| Rent expense |  | 70 |  |
| Depreciation expense |  | 110 |  |
| Interest expense | $\$ 5,220$ | $\$ 5,220$ |  |
| Income taxes expense |  |  |  |

M4-2. (1) $A$
(2) D
(3) A
(4) C
(5) D
(6) $B$
(7) B
(8) C

M4-3. (1) D
(2) C
(3) $B$
(4) A

M4-4.
(a) 1. Type - Unearned revenue
2. Amount -- $\$ 1,000 \div 4$ months $=\$ 250$ earned
3. Adjusting entry Unearned rent revenue (-L) ......................... 250

Rent revenue (+R, +SE)
250
(b) 1. Type - Prepaid expense
2. Amount $-\$ 3,800 \times 6 / 24=\$ 950$ used
3. Adjusting entry Insurance expense (+E, -SE)....................... 950

Prepaid insurance (-A)
950
(c) 1. Type - Prepaid expense
2. Amount - $\$ 3,000$ given
3. Adjusting entry -

Depreciation expense (+E, -SE) .................. 3,000
Accumulated depreciation (+XA, -A)..... 3,000
M4-5.

| Balance Sheet |  |  |  |  | Income Statement |  |  |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Transaction | Assets | Liabilities | Stockholders' <br> Equity | Revenues | Expenses | Net <br> Income |  |
| a. | NE | -250 | +250 | +250 | NE | +250 |  |
| b. | -950 | NE | -950 | NE | +950 | -950 |  |
| c. | $-3,000$ | NE | $-3,000$ | NE | $+3,000$ | $-3,000$ |  |

## M4-6.

(a) 1. Type - Accrued expense
2. Amount $-\$ 360$ given
3. Adjusting entry -

Utilities expense (+E, -SE) 360
Utilities payable (+L)
(b) 1. Type - Accrued expense
2. Amount -10 employees $\times \$ 150$ per day $x 4$ days $=\$ 6,000$ incurred
3. Adjusting entry -

Wages expense (+E, -SE) ........................... 6,000
Wages payable (+L) .............................. 6,000
(c) 1. Type - Accrued revenue
2. Amount $-\$ 5,000 \times .14 \times 4 / 12=\$ 233$ (rounded) interest earned
3. Adjusting entry -

Interest receivable (+A) ................................ 233
Interest revenue (+R, +SE)

M4-7.

| Balance Sheet |  |  |  |  |  |  |  |  | Income Statement |  |  |  |
| :---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Transaction | Assets | Liabilities | Stockholders' <br> Equity | Revenues | Expenses | Net <br> Income |  |  |  |  |  |  |
| a. | NE | +360 | -360 | NE | +360 | -360 |  |  |  |  |  |  |
| b. | NE | $+6,000$ | $-6,000$ | NE | $+6,000$ | $-6,000$ |  |  |  |  |  |  |
| c. | +233 | NE | +233 | +233 | NE | +233 |  |  |  |  |  |  |

M4-8.
MORGAN MARKETING COMPANY
Income Statement
For the Year Ended December 31, 2011

## Operating Revenues:

Sales revenue
Total operating revenues
\$ 37,450
37,450

Operating Expenses:
Wages expense 19,000
Depreciation expense 1,800
Utilities expense 320
Insurance expense 700
Rent expense
9,000
Total operating expenses
30,820

## Operating Income

 6,630
## Other Items:

Interest revenue
100
Rent revenue
Pretax income
750

Income tax expense
Net Income
7,480

Earnings per share*

2,700
\$ 4,780
$\$ 8.69$

* calculated as $\$ 4,780 \div[\underbrace{(300+800) \div 2}]=\$ 4,780 \div 550=\$ 8.69$

Average number of shares

M4-9.
MORGAN MARKETING COMPANY
Statement of Stockholders' Equity
For the Year Ended December 31, 2011

Balance, January 1, 2011
Share issuance
Net income
Dividends
Balance, December 31, 2011


$\left.$| Retained <br> Earnings |  |
| :---: | :---: | | Total |
| :---: |
| Stockholders' |
| Equity | \right\rvert\,

Work backwards

Req. 1

## MORGAN MARKETING COMPANY <br> Balance Sheet <br> At December 31, 2011

Assets
Current Assets:
Cash ..... \$ 1,500
Accounts receivable ..... 2,000
Interest receivable ..... 100
Prepaid insurance ..... 1,600
Total current assets ..... 5,200
Notes receivable ..... 2,800
Equipment (net of accumulated depreciation, \$3,000) ..... 12,000
Total Assets ..... \$ 20,000
Liabilities
Current Liabilities:
Accounts payable ..... \$ 2,400
Accrued expenses payable ..... 3,920
Income taxes payable ..... 2,700
Unearned rent revenue ..... 500
Total current liabilities ..... 9,520
Stockholders' Equity
Contributed Capital ..... 3,700
Retained Earnings ..... 6,780
Total Stockholders' Equity ..... 10,480
Total Liabilities and Stockholders' Equity ..... \$ 20,000

Req. 2
The adjustments in M4-4 and M4-6 have no effect on the operating, investing, and financing activities on the statement of cash flows because no cash is paid or received at the time of the adjusting entries.
Revenues:
Sales revenue
Sales revenue ..... \$ 37,450 ..... \$ 37,450
Interest revenue
Interest revenue ..... 100 ..... 100
Rent revenue ..... 750
Total revenues ..... 38,300
Costs and expenses:
Wages expense ..... 19,000
Depreciation expense ..... 1,800
Utilities expense ..... 320
Insurance expense ..... 700
Rent expense ..... 9,000
Income tax expense ..... 2,700
Total costs and expenses ..... 33,520
Net Income\$ 4,780

Net profit margin $=$ Net income $\div$ Operating Revenues $=\$ 4,780 \div \$ 37,450=12.76 \%$
The operating revenue source for this company is from sales. Interest revenue and rent revenue are not included in the denominator because they are other (nonoperating) revenue sources.

## M4-12.

| Sales revenue (-R) | 37,450 |
| :---: | :---: |
| Interest revenue (-R) | 100 |
| Rent revenue (-R) | 750 |
| Retained earnings (+SE) | 4,780 |
| Wages expense (-E) | 19,000 |
| Depreciation expense (-E) | 1,800 |
| Utilities expense (-E) . | 320 |
| Insurance expense (-E) ........................... | 700 9,000 |
| Rent expense (-E) ................................... | 9,000 |
| Income tax expense (-E) ..................... | 2,700 |

## EXERCISES

E4-1.

## Darius Consultants, Inc. Unadjusted Trial Balance At September 30, 2010

|  | Debit | Credit |
| :--- | ---: | ---: |
|  |  |  |
| Cash | $\$ 163,000$ |  |
| Accounts receivable | 225,400 |  |
| Supplies | 12,200 |  |
| Prepaid expenses | 10,200 |  |
| Investments | 145,000 |  |
| Building and equipment | 323,040 |  |
| Accumulated depreciation |  | $\$ 0,000$ |
| Land |  | 18,100 |
| Accounts payable |  | 86,830 |
| Accrued expenses payable |  | 25,650 |
| Unearned consulting fees |  | 32,500 |
| Income taxes payable |  | 2,030 |
| Notes payable |  | 160,000 |
| Contributed capital |  | 223,370 |
| Retained earnings * |  | 145,510 |
| Consulting fees revenue |  | $2,564,200$ |
| Investment income |  | 10,800 |
| Wages and benefits expense | 25,230 |  |
| Utilities expense | 23,990 |  |
| Travel expense | 152,080 |  |
| Rent expense | 18,600 |  |
| Professional development expense | 17,200 |  |
| Interest expense | 188,000 |  |
| Other operating expenses | 320,050 |  |
| General and administrative expenses |  | 5,000 |
| Gain on sale of land | $\$ 3,273,990$ | $\$ 3,273,990$ |
| Totals |  |  |

* Since debits are supposed to equal credits in a trial balance, the balance in Retained Earnings is determined as the amount in the credit column necessary to make debits equal credits (a "plugged" figure).

Req. 1

| Types | Accounts to be Adjusted |
| :---: | :---: |
| Unearned Revenues: <br> Deferred Revenue may need to be adjusted for any revenue earned during the period | Deferred Revenue and Product Revenue and/or Service Revenue |
| Accrued Revenues: <br> Interest may be earned on Short-term Investments <br> Any unrecorded sales or services provided will need to be recorded | Interest Receivable and Interest Revenue <br> Accounts Receivable and Product Revenue and/or Service Revenue |
| Prepaid Expenses: <br> Other Current Assets may include supplies, prepaid rent, prepaid insurance, or prepaid advertising <br> Any additional use of Property, Plant, and Equipment during the period will need to be recorded | Other Current Assets and Selling, General, and Administrative Expense <br> Accumulated Depreciation and Cost of Products and/or Cost of Services |
| Accrued Expenses: <br> Interest incurred on Short-term Note Payable and Long-term Debt will need to be recorded <br> There are likely many other accrued expenses to be recorded, including wages, warranties, and utilities <br> Income taxes must be computed for the period and accrued | Accrued Liabilities and Interest Expense <br> Accrued Liabilities and Selling, General, and Administrative Expenses (among other expenses) <br> Income Taxes Payable and Income Tax Expense |

Req. 2
Temporary accounts that accumulate during the period are closed at the end of the year to the permanent account Retained Earnings. These include: Product revenue, service revenue, interest revenue, cost of products, cost of services, interest expense, research and development expense, selling, general, and administrative expense, other expenses, loss on investments, and income tax expense.

## E4-3.

Req. 1
The annual reporting period for this company is January 1 through December 31, 2010.
Req. 2 (Adjusting entries)
Both transactions are accruals because revenue has been earned and expenses incurred but no cash has yet been received or paid.
(a) 1. Type: Accrued Expense
2. Amount: Given
3. Adjusting entry:

December 31, 2010 Wage expense (+E, -SE) 6,000
Wages payable (+L)
To record wages earned by employees during 2010, but not yet paid by the company. This entry records the (a) 2010 expense, and (b) 2010 liability, which is necessary to conform to accrual accounting and the matching principle.
(b) 1. Type: Accrued Revenue
2. Amount: Given
3. Adjusting entry:

December 31, 2010 Interest receivable (+A) 3,000
Interest revenue (+R, +SE) 3,000
To record interest revenue earned during 2010, but not yet collected. This entry records the (a) 2010 revenue, and (b) 2010 receivable, which is necessary to conform to accrual accounting and the revenue principle.

Req. 3
Adjusting entries are necessary at the end of the accounting period to ensure that all revenues earned and expenses incurred and the related assets and liabilities are measured properly. The entries above are accruals; entry (a) is an accrued expense (incurred but not yet recorded) and entry (b) is an accrued revenue (earned but not yet recorded). In applying the accrual basis of accounting, revenues should be recognized when earned and measurable and expenses should be recognized when incurred in generating revenues.

## E4-4.

Req. 1
Prepaid Insurance is a prepaid expense that needs to be adjusted each period for the amount used during the period.

The amount of expense is computed as follows: $\$ 3,600 \times 4 / 24=\$ 600$ used
Adjusting entry:
Insurance expense (+E, -SE) 600
Prepaid insurance (-A)
Req. 2
Shipping Supplies is a prepaid expense that needs to be adjusted at the end of the period for the amount of supplies used during the period.

The amount is computed as follows: Beginning balance
Supplies purchased

Supplies on hand at end Supplies used

Adjusting entry:
Shipping supplies expense (+E, -SE) ........................ 49,000
Shipping supplies (-A).................................... 49,000
Req. 3

| Prepaid Insurance |  |  |  | Insurance Expense |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 9/1 3,600 | AJE 600 |  |  |  |  |$\longrightarrow$| AJE 600 |
| :---: | :---: |

2011 Income statement:
Insurance expense \$600
Shipping supplies expense $\$ 49,000$
Req. 4
2011 Balance sheet:
Prepaid insurance $\$ 3,000$
Shipping supplies \$20,000

E4-5.

| Balance Sheet |  |  |  | Income Statement |  |  |
| :---: | ---: | :---: | :---: | :---: | ---: | ---: |
| Transaction | Assets | Liabilities | Stockholders' <br> Equity | Revenues | Expenses | Net <br> Income |
| E4-3 (a) | NE | $+6,000$ | $-6,000$ | NE | $+6,000$ | $-6,000$ |
| $E 4-3(b)$ | $+3,000$ | NE | $+3,000$ | $+3,000$ | NE | $+3,000$ |
| $E 4-4(a)$ | -600 | NE | -600 | NE | +600 | -600 |
| $E 4-4(b)$ | $-49,000$ | NE | $-49,000$ | NE | $+49,000$ | $-49,000$ |

## E4-6.

Req. 1
a. Prepaid expense
b. Accrued expense
c. Unearned revenue
d. Accrued revenue
e. Prepaid expense
f. Prepaid expense
g. Accrued revenue

Req. 2
a. Office supplies expense (+E, -SE)............... 575

Office supplies (-A) $\qquad$
2,200 Wages payable (+L) $\qquad$ ,
b. Wages expense (+E, -SE)
c. Unearned rent revenue (-L) ......................... 3,200

Rent revenue (+R, +SE) $\qquad$
Rentreve ( R , ,
d. Rent receivable (+A).................................... 960

Rent revenue (+R, +SE) $\qquad$
e. Depreciation expense (+E, -SE) $\qquad$ 6,100
Accumulated depreciation (+XA, -A)
f. Insurance expense (+E, -SE)....................... 550

Prepaid insurance (-A)
g. Repair accounts receivable (+A)
................. 800
Repair shop revenue (+R, +SE) $\qquad$
$\$ 480 \times 2$ months = \$960 earned

Given
\$2,200 x 6/24 = \$550 used

Given
Computations
\$350 + \$500

- \$275 = \$575 used
Given
$\$ 9,600 \times 2 / 6=$
\$3,200 earned
,


## E4-7.

Req. 1
a. Accrued revenue
b. Unearned revenue
c. Accrued expense
d. Prepaid expense
e. Prepaid expense
f. Prepaid expense
g. Accrued expense

Req. 2

## Computations

a. Accounts receivable (+A) ............................ 2,100

Service revenue (+R, +SE)................. 2,100
b. Unearned storage revenue (-L) ................... 500

Storage revenue (+R, +SE)
c. Wages expense (+E, -SE) $\qquad$
2,800
d. Advertising expense (+E, -SE)..................... 900

Prepaid advertising (-A)
e. Depreciation expense (+E, -SE) .................. 20,000

Accumulated depreciation (+XA, -A) 20,000
f. Supplies expense (+E, -SE)......................... 49,100

Supplies (-A)
49,100
g. Interest expense (+E, -SE) .......................... 3,000

Interest payable (+L) $\qquad$ 3,000

Given
$\$ 3,000 \times 1 / 6=$ \$500 earned

Given
\$1,200 x 9/12 = \$900 used

Given
\$15,500 +
\$46,000 - \$12,400
= \$49,100 used
\$150,000 x . 12
x 2/12 (since last payment) $=\$ 3,000$ incurred

E4-8.

| Balance Sheet |  |  |  | Income Statement |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Transaction | Assets | Liabilities | Stockholders' <br> Equity | Revenues | Expenses | Net <br> Income |
| $(a)$ | -575 | NE | -575 | NE | +575 | -575 |
| $(b)$ | NE | $+2,200$ | $-2,200$ | NE | $+2,200$ | $-2,200$ |
| $(c)$ | NE | $-3,200$ | $+3,200$ | $+3,200$ | NE | $+3,200$ |
| $(d)$ | +960 | NE | +960 | +960 | NE | +960 |
| $(e)$ | $-6,100$ | NE | $-6,100$ | NE | $+6,100$ | $-6,100$ |
| $(f)$ | -550 | NE | -550 | NE | +550 | -550 |
| $(g)$ | +800 | NE | +800 | +800 | NE | +800 |

E4-9.

| Balance Sheet |  |  |  |  | Income Statement |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Transaction | Assets | Liabilities | Stockholders' <br> Equity | Revenues | Expenses | Net <br> Income |  |  |
| $(a)$ | $+2,100$ | NE | $+2,100$ | $+2,100$ | NE | $+2,100$ |  |  |
| $(b)$ | NE | -500 | +500 | +500 | NE | +500 |  |  |
| $(c)$ | NE | $+2,800$ | $-2,800$ | NE | $+2,800$ | $-2,800$ |  |  |
| $(d)$ | -900 | NE | -900 | NE | +900 | -900 |  |  |
| $(e)$ | $-20,000$ | NE | $-20,000$ | NE | $+20,000$ | $-20,000$ |  |  |
| $(f)$ | $-49,100$ | NE | $-49,100$ | NE | $+49,100$ | $-49,100$ |  |  |
| $(g)$ | NE | $+3,000$ | $-3,000$ | NE | $+3,000$ | $-3,000$ |  |  |

E4-10.

| Independent Situations |  | Debit |  | Credit |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  | Code | Amount | Code | Amount |  |
| a. | Accrued wages, unrecorded and unpaid at <br> year-end, \$400 (example). | N | 400 | G | 400 |
| b. | Service revenue collected in advance, <br> \$800. | A | 800 | I | 800 |
| c. | Dividends declared and paid during the <br> year, \$900. | K | 900 | A | 900 |
| d. | Depreciation expense for the year, \$1,000. | O | 1,000 | E | 1,000 |
| e. | Service revenue earned but not yet <br> collected at year-end, \$600. | C | 600 | L | 600 |
| f. | Office Supplies on hand during the year, <br> $\$ 400 ; ~ s u p p l i e s ~ o n ~ h a n d ~ a t ~ y e a r-e n d, ~ \$ 150 . ~$ | Q | 250 | B | 250 |
| g. | At year-end, interest on note payable not <br> yet recorded or paid, \$220. | P | 220 | H | 220 |
| h. | Balance at year-end in Service Revenue <br> account, \$62,000. Give the closing entry at <br> year-end. | L | 62,000 | K | 62,000 |
| i. | Balance at year-end in Interest Expense <br> account, \$420. Give the closing entry at <br> year-end. | K | 420 | P | 420 |

## E4-11.

Selected Balance Sheet Amounts at December 31, 2010
Assets:
Equipment (recorded at cost per cost principle) \$12,000
Accumulated depreciation (for one year, as given) $(1,200)$
Carrying value of equipment (difference) 10,800

Office supplies (on hand, as given) 400

Prepaid insurance (remaining coverage, $\$ 400 \times 18 / 24$ months) 300

## Selected Income Statement Amounts for the Year Ended December 31, 2010

## Expenses:

Depreciation expense (for one year, as given)
\$ 1,200
Office supplies expense (used, \$1,400-\$400 on hand)
Insurance expense (for 6 months, $\$ 400 \times 6 / 24$ months)
1,000 100

E4-12.
Balance Sheet
Income Statement

| Date | Assets | Liabilities | Stockholders' <br> Equity | Revenues | Expenses | Net <br> Income |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Note 1: <br> April 1, 2011 | $+20,000 /$ | NE | NE | NE | NE | NE |
| December 31, 2011 | $+1,500$ | NE | $+1,500$ | $+1,500$ | NE | $+1,500$ |
| March 31, 2012 ${ }^{\mathrm{b}}$ | $+22,000 /$ | NE | +500 | +500 | NE | +500 |
| Note 2: <br> August 1, 201, | $+20,000$ | $+20,000$ | NE | NE | NE | NE |
| December 31, 2011 | NE | $+1,000$ | $-1,000$ | NE | $+1,000$ | $-1,000$ |
| January 31, 2012 ${ }^{\mathrm{d}}$ | $-21,200$ | $-21,000$ | -200 | NE | +200 | -200 |

(a) $\$ 20,000$ principal $x .10$ annual interest rate $\times 9 / 12$ of a year $=\$ 1,500$
(b) Additional interest revenue in 2012: $\$ 20,000 \times .10 \times 3 / 12=\$ 500$. Cash received was $\$ 22,000$ ( $\$ 20,000$ principal $+\$ 2,000$ interest for 12 months); receivables decreased by the $\$ 20,000$ note receivable and $\$ 1,500$ interest receivable accrued in 2011.
(c) $\$ 20,000$ principal $x .12$ annual interest rate $\times 5 / 12$ of a year $=\$ 1,000$
(d) Additional interest expense in 2012: $\$ 20,000 \times .12 \times 1 / 12=\$ 200$. Cash paid was $\$ 21,200$ ( $\$ 20,000$ principal $+\$ 1,200$ interest for 6 months); payables decreased by the $\$ 20,000$ note payable and $\$ 1,000$ interest payable accrued in 2011.

E4-13.
Req. 1 (a) Cash paid on accrued income taxes payable.
(b) Accrual of additional income tax expense.
(c) Cash paid on dividends payable.
(d) Amount of dividends declared for the period.
(e) Cash paid on accrued interest payable.
(f) Accrual of additional interest expense.

Req. 2 Computations:
(a)

Beg. Bal. + accrued income taxes - cash paid $=$ End. bal. $\$ 71+332$
? \$80 ? $\quad=\$ 323$ paid
(c)

Beg. Bal. + dividends declared - cash paid $=$ End. bal.
$\$ 43+176$
$\begin{array}{llc}? & = & \$ 48 \\ ? & = & \$ 171 \text { paid }\end{array}$
(f)
$\begin{array}{cccccc}\text { Beg. Bal. } & + & \text { accrued interest expense } & - & \text { cash paid } & \\ \$ 45 & + & ? & \text { End. bal. } \\ & ? & & 297 & & \$ 51 \\ & ? & & & & \end{array}$

Req. 1 Adjusting entries that were or should have been made at December 31:
(a) Should have been made.
Depreciation expense (+E, -SE) $\ldots . . . . . . . . . . . . . . . . . . . . . . . . ~ 15,000 ~$
Accumulated depreciation (+XA, -A) $\ldots \ldots \ldots .$.
15,000
(b) Should have been made.

Unearned revenue (-L)
1,500
Fee revenue (+R, +SE)
1,500
(c) Entry already made.

Interest expense (+E, -SE)
1,710
Interest payable (+L)
$\qquad$
(\$19,000 x 9\% x 12/12 months)
Should have been made.
Interest expense (+E, -SE) 285
Interest payable (+L)
(\$19,000 x 9\% x 2/12 months)
(d) Should have been made.

Insurance expense (+E, -SE)
Prepaid insurance (-A)
650
(e) Should have been made.

Rent receivable (+A)................................................. 1,400
Rent revenue (+R, +SE) .................................. 1,400

Req. 2
Balance Sheet
Income Statement

| Transaction | Assets | Liabilities | Stockholders' <br> Equity | Revenues | Expenses | Net <br> Income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $(a)$ | $\mathrm{O} 15,000$ | NE | $\mathrm{O} 15,000$ | NE | $\mathrm{U} 15,000$ | $\mathrm{O} 15,000$ |
| $(b)$ | NE | $\mathrm{O} 1,500$ | $\mathrm{U} 1,500$ | $\mathrm{U} 1,500$ | NE | $\mathrm{U} 1,500$ |
| $(c)$ | NE | $\mathrm{O} 1,425$ | $\mathrm{U} 1,425$ | NE | $\mathrm{O} 1,425$ | $\mathrm{U} 1,425$ |
| $(d)$ | O 650 | NE | O 650 | NE | U 650 | O 650 |
| $(e)$ | $\mathrm{U} 1,400$ | NE | $\mathrm{U} 1,400$ | $\mathrm{U} 1,400$ | NE | $\mathrm{U} 1,400$ |

E4-15.

| Items | Net Income | Total Assets | Total Liabilities | Stockholders' Equity |
| :---: | :---: | :---: | :---: | :---: |
| Balances reported | \$60,000 | \$180,000 | \$80,000 | \$100,000 |
| Additional adjustments: |  |  |  |  |
| a. Depreciation | $(16,000)$ | $(16,000)$ |  | $(16,000)$ |
| b. Wages | $(34,000)$ |  | 34,000 | $(34,000)$ |
| c. Rent revenue | 3,200 |  | $(3,200)$ | 3,200 |
| Adjusted balances | 13,200 | 164,000 | 110,800 | 53,200 |
| d. Income taxes | $(3,960)$ |  | 3,960 | $(3,960)$ |
| Correct balances | \$ 9,240 | \$164,000 | \$114,760 | \$49,240 |

Computations:
a. Given, \$16,000 depreciation expense.
b. Given, $\$ 34,000$ accrued and unpaid.
c. $\$ 9,600 \times 1 / 3=\$ 3,200$ rent revenue earned. The remaining $\$ 6,400$ in unearned revenue is a liability for two months of occupancy "owed" to the renter.
d. $\$ 13,200$ income before taxes $\times 30 \%=\$ 3,960$.

E4-16.
Req. 1
a. Expenses (depreciation) (+E, -SE) ............ 4,500

Accumulated depreciation (+XA, -A)... 4,500
b. Rent receivable (+A).................................. 1,500

Revenues (rent) (+R, +SE) $\qquad$ 1,500
c. Income tax expense (+E, -SE)

5,100
Income taxes payable (+L)
..................
5,100
Req. 2

|  | As Prepared |  | Effects of Adjusting Entries | Corrected Amounts |
| :---: | :---: | :---: | :---: | :---: |
| Income statement: |  |  |  |  |
| Revenues | \$98,000 | $b$ | \$1,500 | \$99,500 |
| Expenses | $(72,000)$ | a | $(4,500)$ | $(76,500)$ |
| Income tax expense |  | $c$ | $(5,100)$ | $(5,100)$ |
| Net income | \$26,000 |  | $(8,100)$ | \$17,900 |
| Balance Sheet: Assets |  |  |  |  |
| Cash | \$20,000 |  |  | \$20,000 |
| Accounts receivable | 22,000 |  |  | 22,000 |
| Rent receivable |  | $b$ | 1,500 | 1,500 |
| Equipment | 50,000 |  |  | 50,000 |
| Accumulated depreciation | $(10,000)$ | a | $(4,500)$ | $(14,500)$ |
|  | \$82,000 |  | $(3,000)$ | \$79,000 |
| Liabilities |  |  |  |  |
| Accounts payable | \$10,000 |  |  | \$10,000 |
| Income taxes payable |  | c | 5,100 | 5,100 |
| Stockholders' Equity |  |  |  |  |
| Contributed capital | 40,000 |  |  | 40,000 |
| Retained earnings | 32,000 |  | $(8,100)$ | 23,900 |
|  | \$82,000 |  | $(3,000)$ | \$79,000 |

Req. 1
a. Salaries and wages expense (+E, -SE) 560 Salaries and wages payable (+L)560
b. Utilities expense (+E, -SE).................................... 440 Utilities payable (+L) 440
c. Depreciation expense (+E, -SE)

24,000
Accumulated depreciation (+XA, -A) 24,000
d. Interest expense (+E, -SE) 300 Interest payable (+L)300 (\$15,000 x . $08 \times 3 / 12$ )
e. No adjustment is needed because the revenue will not be earned until January (next year)
f. Maintenance expense (+E, -SE)........................... 1,100 Maintenance supplies (-A)

1,100
g. Income tax expense (+E, -SE)

5,800 Income tax payable (+L)

5,800

## E4-17. (continued)

Req. 2

## DEREK, INC.

Income Statement
For the Year Ended December 31, 2011

## Operating Revenue:

Rental revenue
\$109,000
Operating Expenses:
Salaries and wages (\$26,500 + \$560) \$27,060
Maintenance expense (\$12,000 + \$1,100) 13,100
Rent expense
8,800
Utilities expense (\$4,300 + \$440) 4,740
Gas and oil expense 3,000
Depreciation expense 24,000
Miscellaneous expenses $\quad 1,000$
Total expenses
Operating Income
Other Item:
Interest expense (\$15,000 x 8\% x 3/12)
Pretax income
Income tax expense
Net income

Earnings per share: $\$ 21,200 \div 8,000$ shares

| 300 |
| ---: |
| 27,000 |
| 5,800 |
| $\$ \mathbf{2 1 , 2 0 0}$ |

\$2.65

Req. 3
Net profit margin $=$ Net income $\div$ Net Sales $=\$ 21,200 \div \$ 109,000=19.4 \%$
The net profit margin indicates that, for every \$1 of rental revenues, Derek earns \$0.194 (19.4\%) in net income. This ratio is higher than the industry average net profit margin of $18 \%$, implying that Derek is more profitable and better able to manage its business (in terms of sales price or costs) than the average company in the industry.

E4-18.

Req. 1
(c) Wages expense (+E, -SE)
(a) Insurance expense (+E, -SE)

Prepaid insurance (-A)
(b) Depreciation expense (+E, -SE) Accumulated depreciation (+XA, -A)

5 Wages payable (+L).
(d) Income tax expense (+E, -SE)

5
$\qquad$
$\qquad$ 7

$$
7
$$ 5 9 Income tax payable (+L)

5

5

9

Req. 2

> SENECA COMPANY
> Trial Balance
> December 31, 2010
> (in thousands of dollars)

|  | Unadjusted |  | Adjustments |  | Adjusted |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Debit | Credit | Debit | Credit | Debit | Credit |
| Cash | 38 |  |  |  | 38 |  |
| Accounts receivable | 9 |  |  |  | 9 |  |
| Prepaid insurance | 6 |  |  | a 5 | 1 |  |
| Machinery | 80 |  |  |  | 80 |  |
| Accumulated depreciation |  |  |  | b 7 |  | 7 |
| Accounts payable |  | 9 |  |  |  | 9 |
| Wages payable |  |  |  | c 5 |  | 5 |
| Income taxes payable |  |  |  | d 9 |  | 9 |
| Contributed capital |  | 76 |  |  |  | 76 |
| Retained earnings | 4 |  |  |  | 4 |  |
| Revenues (not detailed) |  | 84 |  |  |  | 84 |
| Expenses (not detailed) | 32 |  | $\begin{array}{ll}a & 5 \\ b & 7 \\ c & 5 \\ d & 9\end{array}$ |  | 58 |  |
| Totals | 169 | 169 | $\underline{\underline{26}}$ | $\underline{\underline{26}}$ | $\underline{\underline{190}}$ | $\underline{190}$ |

E4-19.
SENECA COMPANY
Income Statement
For the Year Ended December 31, 2010
(in thousands of dollars)

| Revenues (not detailed) | $\$ 84$ |
| :--- | ---: |
| Expenses $(\$ 32+\$ 5+\$ 7+\$ 5)$ | 49 |
| Pretax income | 35 |
| Income tax expense | 9 |
| Net income | $\$ 26$ |
| EPS $(\$ 26,000 \div 4,000$ shares $)$ | $\$ 6.50$ |

SENECA COMPANY Statement of Stockholders' Equity For the Year Ended December 31, 2010 (in thousands of dollars)

Total
Stockholders'


26
Net income
Dividends declared
Ending balances, 12/31/2010


26
(4) *
\$ 22

* The amount of dividends declared can be inferred because the unadjusted trial balance amount for retained earnings is a negative \$4. Since this is the first year of operations, we can assume the entire amount is due to a dividend declaration.


## SENECA COMPANY

## Balance Sheet

At December 31, 2010
(in thousands of dollars)

| Assets |  |
| :--- | ---: |
| Current Assets: | $\$ 38$ |
| Cash | 9 |
| Accounts receivable | 1 |
| Prepaid insurance $(\$ 6-\$ 5)$ | 48 |
| $\quad$ Total current assets | 80 |
| Machinery | $(7)$ |
| Accumulated depreciation |  |
|  |  |
| Total assets | $\$ 121$ |

Liabilities and Stockholders' Equity Current Liabilities:

| Accounts payable | $\$ 9$ |
| :--- | ---: |
| Wages payable | 5 |
| Income taxes payable | 9 |
|  | 23 |
| Stockholders' Equity: | 76 |
| Contributed capital | 22 |
| Retained earnings |  |
| $\quad$ Total liabilities and | $\$ 121$ |
| stockholders' equity |  |

E4-20.
Req. 1
The purpose of "closing the books" at the end of the accounting period is to transfer the balance in the temporary accounts to a permanent account (Retained Earnings). This also creates a zero balance in each of the temporary accounts for accumulation of activities in the next accounting period.

Req. 2

$$
\begin{aligned}
& \text { Revenues (-R) ..................................................... } 84 \\
& \text { Expenses (\$32 + \$5 + \$7 + \$5 + \$9) (-E)....... } 58 \\
& \text { Retained earnings (+SE) } \ldots \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . ~
\end{aligned}
$$

Req. 3
SENECA COMPANY
Post-closing Trial Balance
December 31, 2010
(in thousands of dollars)

|  | Debit | Credit |
| :--- | :---: | :---: |
| Cash | 38 |  |
| Accounts receivable | 9 |  |
| Prepaid insurance | 1 |  |
| Machinery | 80 |  |
| Accumulated depreciation |  | 7 |
| Accounts payable |  | 9 |
| Wages payable |  | 5 |
| Income taxes payable |  | 9 |
| Contributed capital |  | 76 |
| Retained earnings | 0 | 0 |
| Revenues (not detailed) | $\underline{128}$ | $\underline{128}$ |
| Expenses (not detailed) |  |  |
| Totals |  |  |

## PROBLEMS

## P4-1.

Req. 1
Dell Inc.
Adjusted Trial Balance
At January 31, 2012
(in millions of dollars)

|  | Debit | Credit |
| :--- | ---: | ---: |
|  |  |  |
| Cash | $\$$ | 520 |
| Marketable securities | 2,661 |  |
| Accounts receivable | 2,094 |  |
| Inventories | 273 |  |
| Property, plant, and equipment | 775 |  |
| Accumulated depreciation |  | $\$ 06$ |
| Other assets | 806 |  |
| Accounts payable |  | 2,397 |
| Accrued expenses payable |  | 1,298 |
| Long-term debt |  | 512 |
| Other liabilities |  | 349 |
| Contributed capital |  | 1,781 |
| Retained earnings (deficit) |  |  |
| Sales revenue | 14,137 | 18,243 |
| Cost of sales | 1,788 |  |
| Selling, general, and administrative expenses | 272 |  |
| Research and development expense | 38 |  |
| Other expenses | 624 |  |
| Income tax expense | $\$ 24,832$ | $\$ 24,832$ |
| $\quad$ Totals |  |  |

Req. 2
Since debits are supposed to equal credits in a trial balance, the balance in Retained Earnings is determined as the amount in the debit column necessary to make debits equal credits (a "plugged" figure).

## P4-2.

Req. 1
a. Unearned revenue
e. Prepaid expense
b. Accrued expense
f. Prepaid expense
c. Accrued revenue
g. Unearned revenue
d. Accrued expense
h. Accrued expense

Req. 2
a. Unearned rent revenue (-L)....................................... 4,800

Rent revenue (+R, +SE) ................................... 4,800
( $\$ 7,200 \div 6$ months $=\$ 1,200$ per month $\times 4$ months)
b. Wage expense (+E, -SE) ........................................... 14,000

Wages payable (+L)
,
c. Accounts receivable (+A) .......................................... 3, 3,000

Service revenue (+R, +SE)............................... 3,000

$(\$ 18,000 \times 12 \% \times 3 / 12=\$ 540)$
e. Insurance expense (+E, -SE)

1,167
Prepaid insurance (-A)
1,167
( $\$ 7,000 \div 12$ months $=\$ 583$ per month $\times 2$ months of coverage $)$
f. Depreciation expense (+E, -SE) ................................
Accumulated depreciation, service truck (+XA, -A)
g. Unearned service revenue (-L) ................................... 500

Service revenue (+R, +SE)
500
(\$3,000 x 2/12)
h. Property tax expense (+E, -SE)

500
Property tax payable (+L)
500

Req. 1
a. Prepaid expense
e. Accrued revenue
b. Prepaid expense
c. Accrued expense
f. Prepaid expense
g. Accrued expense
d. Accrued expense
h. Accrued expense

Req. 2

b. Supplies expense (+E, -SE) ...................................... 1,000

Supplies (-A) ................................................... 1,000
(Beg. Inventory of \$400 + Purchases \$1,000 - Ending Inventory \$400)
c. Repairs expense (+E, -SE) ........................................ 800

Accounts payable (+L) ...................................... 800
d. Property tax expense (+E, -SE) .................................. 1,500

Property tax payable (+L)................................... 1,500

$\begin{array}{cc}\text { f. Depreciation expense (+E, -SE) ............................... } & 1,000 \\ \text { Accumulated depreciation, van (+XA, -A) } & 1,000\end{array}$
g. Interest expense (+E, -SE) ......................................... 385

Interest payable (+L) ........................................... 385
$(\$ 11,000 \times 14 \% \times 3 / 12=\$ 385)$
h. Income tax expense (+E, -SE).................................... 9,335

Income tax payable (+L)
9,335
To accrue income tax expense incurred but not paid:
Income before adjustments (given) \$30,000
Effect of adjustments (a) through (g) $+1,115(-\$ 200-\$ 1,000-\$ 800-\$ 1,500$ Income before income taxes

31,115 +\$6,000-\$1,000-\$385)
Income tax rate
Income tax expense
x $30 \%$
\$9,335

P4-4.
Req. 1
a. Unearned revenue
e. Prepaid expense
b. Accrued expense
c. Accrued revenue
d. Accrued expense
f. Prepaid expense
g. Unearned revenue
h. Accrued expense

Req. 2

| Balance Sheet |  |  |  | Income Statement |  |  |
| :---: | ---: | ---: | :---: | ---: | ---: | ---: |
| Transaction | Assets | Liabilities | Stockholders' <br> Equity | Revenues | Expenses | Net <br> Income |
| a. | NE | $-4,800$ | $+4,800$ | $+4,800$ | NE | $+4,800$ |
| b. | NE | $+14,000$ | $-14,000$ | NE | $+14,000$ | $-14,000$ |
| c. | $+3,000$ | NE | $+3,000$ | $+3,000$ | NE | $+3,000$ |
| d. | NE | +540 | -540 | NE | +540 | -540 |
| e. | $-1,167$ | NE | $-1,167$ | NE | $+1,167$ | $-1,167$ |
| f. | $-2,000$ | NE | $-2,000$ | NE | $+2,000$ | $-2,000$ |
| g. | NE | -500 | +500 | +500 | NE | +500 |
| h. | NE | +500 | -500 | NE | +500 | -500 |

## Computations:

a. $\$ 7,200 \div 6$ months $=\$ 1,200$ per month $\times 4$ months $=\$ 4,800$ earned
b. Amount is given.
c. Amount is given.
d. $\$ 18,000$ principal $\times 12 \% \times 3 / 12=\$ 540$ interest incurred
e. $\$ 7,000 \div 12$ months $=\$ 583$ per month $\times 2$ months of coverage $=\$ 1,167$ incurred
f. Amount is given.
g. $\$ 3,000$ unearned $\times 2 / 12=\$ 500$ earned
h. Amount is given.

## P4-5.

Req. 1
a. Prepaid expense
e. Accrued revenue
b. Prepaid expense
c. Accrued expense
f. Prepaid expense
d. Accrued expense
g. Accrued expense
h. Accrued expense

Req. 2

| Balance Sheet |  |  |  | Income Statement |  |  |
| :---: | ---: | ---: | :---: | :---: | :---: | ---: |
| Transaction | Assets | Liabilities | Stockholders' <br> Equity | Revenues | Expenses | Net <br> Income |
| a. | -200 | NE | -200 | NE | +200 | -200 |
| b. | $-1,000$ | NE | $-1,000$ | NE | $+1,000$ | $-1,000$ |
| c. | NE | +800 | -800 | NE | +800 | -800 |
| d. | NE | $+1,500$ | $-1,500$ | NE | $+1,500$ | $-1,500$ |
| e. | $+6,000$ | NE | $+6,000$ | $+6,000$ | NE | $+6,000$ |
| f. | $-1,000$ | NE | $-1,000$ | NE | $+1,000$ | $-1,000$ |
| g. | NE | +385 | -385 | NE | +385 | -385 |
| h. | NE | $+9,335$ | $-9,335$ | NE | $+9,335$ | $-9,335$ |

Computations:
a. $\$ 1,200 \times 6 / 36=\$ 200$ used
b. Beg. inventory, $\$ 400$ + Purchases, $\$ 1,000$ - Ending inventory, $\$ 400=\$ 1,000$ used
c. Amount is given.
d. Amount is given.
e. Amount is given.
f. Amount is given.
g. $\$ 11,000 \times 14 \% \times 3 / 12=\$ 385$ interest expense for the period
h. Adjusted income $=\$ 30,000-200-1,000-800-1,500+6,000-1,000-385=$ $\$ 31,115 \times 30 \%$ tax rate $=\$ 9,335$ income tax expense.

P4-6.

| Account | $\mathbf{2 0 1 0}$ <br> Balance | Financial <br> Statement | Effect on <br> Cash Flows |
| :--- | ---: | :---: | :---: |
| 1. Rent revenue | $\$ 528,000$ | Income statement | $+\$ 524,000$ |
| 2. Salary expense | 65,000 | Income statement | $-67,500$ |
| 3. Maintenance supplies expense | 9,300 | Income statement | No effect |
| 4. Rent receivable | 16,000 | Balance sheet | No effect |
| 5. Receivables from employees | 1,500 | Balance sheet | $-1,500$ |
| 6. Maintenance supplies | 1,700 | Balance sheet | $-8,000$ |
| 7. Unearned rent revenue | 12,000 | Balance sheet | $+12,000$ |
| 8. Salaries payable | 3,000 | Balance sheet | $-4,000$ |

(1)

Rent Revenue

|  | 512,000 (a) |
| :---: | :---: |
|  | 16,000 (b) |
|  | $\underline{\underline{528,000}}$ |

(4)

Rent Receivable

| (b) 16,000 |  |
| :--- | :--- |
| $\underline{\underline{16,000}}$ |  |

(7) Unearned Rent Revenue

|  | 12,000 (c) |
| :--- | :--- |
|  | $\underline{\underline{12,000}}$ |

(2)

Salary Expense

| (e) | 62,000 |
| :--- | ---: |
| (f) | 3,000 |
|  | $\underline{\underline{65,000}}$ |

(5) Receivables from Employees

| (g) $\quad 1,500$ |  |
| :--- | :--- |
|  | $\underline{\underline{1,500}}$ |

(8)

Salaries Payable

| (d)4,000 $\begin{array}{l}4,000 \\ \text { Bal. } \\ 3,000 \\ \text { (f) }\end{array}$ <br>  $\underline{3,000}$ |
| :--- | :--- | :--- |

Cash

Req. 1

## December 31, 2010, Adjusting Entries

(1) Accounts receivable (+A) ........................................ 560

Service revenue (+R, +SE)
(b)

560
To record service fees earned, but not collected.
(2) Insurance expense (+E, -SE) Prepaid insurance (-A) 280
$\qquad$ 280
$\qquad$

To record insurance expired as an expense.
280
(3) Depreciation expense (+E, -SE) 11,900
Accumulated depreciation, equipment (+XA, -A)
11,900
To record depreciation expense.
(4) Income tax expense (+E, -SE)

6,580
(m)

Income taxes payable (+L) $\qquad$ 6,580

## (k)

Depreciation expense (+E, -SE)
Accumulated depreciation
11,900

To record income taxes for 2010.

Req. 2

## Amounts before Adjusting Entries

Revenues:
Service revenue
Expenses:
Salary expense
Depreciation expense
Insurance expense Income tax expense

Total expense
Net income (loss)
\$64,400
58,380
$\begin{array}{r}58,380 \\ \hline \$ 6,020\end{array}$

Amounts after Adjusting Entries

Net loss is $\$ 12,180$ because this amount includes all revenues and all expenses (after the adjusting entries). This amount is correct because it incorporates the effects of the revenue and matching principles applied to all transactions whose effects extend beyond the period in which the transactions occurred. Net income of $\$ 6,020$ was not correct because expenses of $\$ 18,760$ and revenues of $\$ 560$ were excluded that should have been recorded in 2010.

Req. 3
Earnings (loss) per share $=\$(12,180)$ net loss $\div 3,000$ shares $=\$(4.06)$ per share

## P4-7. (continued)

Req. 4

Net profit margin $=$ Net income $\div$ Net Sales $=\$(12,180)$ net loss $\div \$ 64,960=(18.8) \%$
The net profit margin indicates that, for every \$1 of service revenues, Wagonblatt actually lost $\$ 0.188$ of net income. This ratio implies that Wagonblatt destroys shareholder value in generating its sales and suggests that better management of its business (in terms of sales price or costs) is required.

Req. 5

| Service revenue (-R) | 64,960 |  |
| :---: | :---: | :---: |
| Retained earnings (-SE) | 12,180 |  |
| Salary expense (-E). |  | 58,380 |
| Depreciation expense (-E) |  | 11,900 |
| Insurance expense (-E) |  | 280 |
| Income tax expense (-E) |  | 6,580 |

Req. 6
Wagonblatt Company
Post-closing Trial Balance
December 31, 2010

|  | Debit | Credit |  |  |  |
| :--- | ---: | ---: | :---: | :---: | :---: |
| Cash | 12,600 |  |  |  |  |
| Accounts receivable | 560 |  |  |  |  |
| Prepaid insurance | 560 |  |  |  |  |
| Equipment | 168,280 |  |  |  |  |
| Accumulated depreciation, equipment |  | 56,000 |  |  |  |
| Income taxes payable |  | 6,580 |  |  |  |
| Contributed capital |  | 112,000 |  |  |  |
| Retained earnings |  | 7,420 |  |  |  |
| Service revenue | 0 | 0 |  |  |  |
| Salary expense | 0 |  |  |  |  |
| Depreciation expense | 0 |  |  |  |  |
| Insurance expense | 0 |  |  |  |  |
| Income tax expense | $\underline{182,000}$ | $\underline{182,000}$ |  |  |  |
| Totals |  |  |  |  |  |

Req. 1

## December 31, 2011, Adjusting Entries:

(a) Supplies expense (+E, -SE) ..................................... 400 Supplies (-A) ................................................. 400
(b) Insurance expense (+E, -SE) ................................... 400

Prepaid insurance (-A) .................................. 400
(c) Depreciation expense (+E, -SE) .............................. 3,200

Accumulated depreciation, service trucks (+XA, -A)
(d) Wages expense (+E, -SE)

720
Wages payable (+L)
720
(e) Income tax expense (+E, -SE)

5,880
Income taxes payable (+L)
5,880

Req. 2

## ST. DENIS, INC. <br> Income Statement <br> For the Year Ended December 31, 2011

## Operating Revenue:

Service revenue
\$61,600
Operating Expenses:
Supplies expense (\$640-\$240) 400
Insurance expense (\$800-\$400) 400
Depreciation expense 3,200
Wages expense 720
Remaining expenses (not detailed) $\underline{33,360}$
Total expenses
38,080
Operating Income 23,520
Income tax expense
Net income
5,880
\$17,640
Earnings per share (\$17,640 $\div 5,000$ shares)
\$3.53

Req. 2 (continued)

Assets

| Current Assets: |  |
| :--- | ---: |
| Cash | $\$ 48,000$ |
| Accounts receivable | 10,400 |
| Supplies | 240 |
| $\quad$ Prepaid insurance | 400 |
| Total current assets | 16,040 |
| Service trucks | $(12,000$ |
| Accumulated depreciation | 8,960 |
| Other assets (not detailed) |  |
|  |  |
| Total assets | $\mathbf{\$ 7 1 , 2 0 0}$ |

ST. DENIS, INC.
Balance Sheet
At December 31, 2011
Liabilities and Stockholders' Equity
Current Liabilities:

| Accounts payable | $\$ 2,400$ |
| :---: | ---: |
| Wages payable | 720 |
| Income taxes payable | 5,880 |
| Total current liabilities | 9,000 |
| Note payable, long term | 16,000 |
| Total liabilities | 25,000 |

Stockholders' Equity

| Contributed capital | 22,560 |
| :--- | ---: |
| Retained earnings* | 23,640 |
| Total stockholders' equity | 46,200 |

Total liabilities and
stockholders' equity $\quad$ \$71,200
*Unadjusted balance, \$6,000 + Net income, \$17,640 = Ending balance, \$23,640.

Req. 3

## December 31, 2011, Closing Entry:

Service revenue (-R)................................................. 61,600
Retained earnings (+SE) ............................... 17,640
Supplies expense (-E) ................................... 400
Insurance expense (-E) ................................. 400
Depreciation expense (-E) ............................ 3,200
Wages expense (-E) ..................................... 720
Remaining expenses (not detailed) (-E).......... 33,360
Income tax expense (-E) ............................... 5,880

P4-9.
Req. 1, 2, 3, and 5 T -accounts (in thousands)
Accounts

| Cash |  |  |  |
| :--- | ---: | :--- | :--- |
| Bal. | 4 | $b$ | 12 |
| $a$ | 12 | $e$ | 91 |
| $c$ | 156 | $g$ | 13 |
| $d$ | 4 | $h$ | 17 |
| $f$ | 31 | $k$ | 22 |
| Bal. | $\underline{52}$ |  |  |

Receivable

| Bal. | 7 |  |  |
| :--- | ---: | :--- | :--- |
| $c$ | 52 | $f$ | 31 |
|  |  |  |  |
|  |  |  |  |
| Bal. | $\underline{28}$ |  |  |

Supplies

| Bal. 16 <br> $i$ 23 <br> $i$  |  | 21 |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Bal. | $\underline{18}$ |  |  |

Accumulated

| Land |  |  |
| :--- | ---: | ---: |
| Bal. | 0 |  |
| $b$ | 12 |  |
| Bal. | $\underline{\underline{12}}$ |  |


| Equipment |  |  |
| :--- | :--- | :--- |
| Bal. | 78 |  |
| Bal. | $\underline{\underline{78}}$ |  |


| Accounts Payable |  |  |  |
| :---: | ---: | :--- | ---: |
| $h$ | Bal. | 0 |  |
|  | 17 | $e$ | 20 |
|  |  | $i$ | 23 |
|  |  | Bal. | $\underline{\underline{26}}$ |


| Wages Payable |  |  |
| :--- | :--- | ---: |
|  | Bal. | 0 |
|  | 0 | 16 |
|  | Bal. | $\underline{16}$ |



Contributed

| Contributed <br> Capital |  |  |
| :---: | :--- | ---: |
|  | Bal. | 85 |
|  | $d$ | 4 |
|  | Bal. | $\underline{\underline{89}}$ |

Depreciation
Expense

| Bal. | 0 |  |  |
| :---: | :---: | :---: | :---: |
| $m$ | 8 | CE | 8 |
| Bal. | $\underline{\underline{0}}$ |  |  |


| Income Tax |  |  |  |
| :--- | ---: | ---: | ---: |
| Expense |  |  |  |
| Bal. | 0 |  |  |
| $p$ | 10 | CE | 10 |
| Bal. | $\underline{0}$ |  |  |


| Interest Expense |  |
| :---: | :---: |
|   <br> Bal. 0 <br> $n^{\star}$ 1 | CE 1 |
| $\begin{array}{ll} \hline \text { Bal. } & \underline{\underline{0}} \\ \$ 12,000 \end{array}$ | $10 \times 10 / 12$ |
| Rema Expe | ining nses |
| e 111 | CE 111 |
| Bal. $\underline{\underline{0}}$ |  |

## P4-9. (continued)

Req. 2
a. Cash (+A) ....................................................... 12,000
Notes payable (+L) ................................. 12,000
b. Land (+A)........................................................ 12,000
Cash (-A)
Cash (-A) .............................................. 12,000
c. Cash (+A) ........................................................ 156,000
Accounts receivable (+A).................................. 52,000
Service revenue (+R, +SE)..................... 208,000
d. Cash (+A) ........................................................ 4,000
Contributed capital (+SE) ....................... 4,000
e. Remaining expenses (+E, -SE)......................... 111,000
Accounts payable (+L)............................. 20,000
Cash (-A) .............................................. 91,000
f. Cash (+A) ...................................................... 31,000
Accounts receivable (-A)........................ 31,000
g. Other assets (+A) ............................................ 13,000
Cash (-A)
Cash (-A) .............................................. 13,000
h. Accounts payable (-L)..................................... 17,000
Cash (-A) .............................................. 17,000
i. Supplies (+A).................................................... 23,000
Accounts payable (+L)
j. No entry required; no revenue earned in 2011.
k. Retained earnings (-SE)
22,000
Cash (-A) 22,000

Req. 3
I. Supplies expense (+E, -SE)............................. 21,000

Supplies (-A)
21,000
(\$39,000 in account - \$18,000 at year end)
m. Depreciation expense (+E, -SE)

8,000
Accumulated depreciation $(+X A,-A) \ldots \ldots . . \quad 8,000$
n. Interest expense (+E, -SE) ............................... 1,000 Interest payable (+L)
(\$12,000 $\times 10 \% \times 10 / 12$ )
o. Wages expense (+E, -SE)

16,000
Wages payable (+L) $\qquad$ 16,000
p. Income tax expense (+E, -SE)

10,000 Income taxes payable (+L)

10,000

Req. 4

## H \& H TOOL, INC. <br> Income Statement <br> For the Year Ended December 31, 2011

Operating Revenues:
Service revenue $\quad \$ 208,000$
Operating Expenses:
Depreciation expense 8,000
Supplies expense 21,000
Wages expenses $\quad 16,000$
Remaining expenses $\quad \underline{111,000}$
Total operating expenses $\quad 156,000$
Operating Income
52,000
Other Item:
Interest expense $\quad 1,000$
Pretax income
Income tax expense
Net income
51,000
10,000
\$41,000
Earnings per share
$\$ 0.46$
[\$41,000 $\div 89,000$ shares all year]

## H \& H TOOL, INC. <br> Statement of Stockholders' Equity <br> For the Year Ended December 31, 2011

$\left.\begin{array}{lcccc} & \begin{array}{c}\text { Contributed } \\ \text { Capital }\end{array} & & \begin{array}{c}\text { Retained } \\ \text { Earnings }\end{array} & \end{array} \begin{array}{c}\text { Total } \\ \text { Stockholders' } \\ \text { Equity }\end{array}\right]$

## H \& H TOOL, INC. <br> Balance Sheet <br> At December 31, 2011

| Assets |  |
| :--- | ---: |
| Current Assets: |  |
| Cash | $\$ 52,000$ |
| Accounts receivable | 28,000 |
| Supplies | 18,000 |
| Total current assets | 98,000 |
| Land | 12,000 |
| Equipment | 78,000 |
| Less: Accumulated deprec. | $(16,000)$ |
| Other assets | 18,000 |

Liabilities and Stockholders' Equity
Current Liabilities:

$$
\text { Accounts payable } \quad \$ 26,000
$$

Interest payable
1,000
Wages payable 16,000
Income taxes payable 10,000
Total current liabilities $\quad 53,000$
Notes payable 19,000
Total liabilities
72,000
Stockholders' Equity:
Contributed capital
89,000
Retained earnings
29,000
Total stockholders' equity

118,000

Total assets

| \$190,000 |
| :--- |

Total liabilities and
\$190,000

## P4-9. (continued)

## H \& H TOOL, INC. <br> Statement of Cash Flows <br> For the Year Ended December 31, 2011

## Cash from Operating Activities:

| Cash collected from customers $(c+f)$ | $\$ 187,000$ <br> $(108,000)$ <br> Cash paid to suppliers and employees $(e+h)$ <br> $\quad$ Cash provided by operations |
| :--- | ---: |

Cash from Investing Activities:
Purchase of land (b)
Purchase of other assets ( $g$ )
Cash used for investing activities
$(13,000)$

Cash from Financing Activities:
Borrowing from bank (a)
12,000
Issuance of stock (d) 4,000
Payment of dividends (k)
Cash used for financing activities
Change in cash
Beginning cash balance, January 1, 2011
Ending cash balance, December 31, 2011
$(25,000)$

Req. 5

| December 31, 2011, Closing Entry |  |
| :---: | :---: |
| Service revenue (-R). | 208,000 |
| Retained earnings (+SE) | 41,000 |
| Depreciation expense (-E) | 8,000 |
| Interest expense (-E) ........................... | 1,000 |
| Supplies expense (-E) .......................... | 21,000 |
| Wages expense (-E) | 16,000 |
| Remaining expenses (-E) | 111,000 |
| Income tax expense (-E) ....................... | 10,000 |

## P4-9. (continued)

Req. 6
Post-closing trial balance:

## H \& H TOOL, INC. <br> Post-Closing Trial Balance At December 31, 2011

|  | Debit | Credit |
| :---: | :---: | :---: |
| Cash | \$ 52,000 |  |
| Accounts receivable | 28,000 |  |
| Supplies | 18,000 |  |
| Land | 12,000 |  |
| Equipment | 78,000 |  |
| Accumulated depreciation (equipment) |  | \$ 16,000 |
| Other assets (not detailed) | 18,000 |  |
| Accounts payable |  | 26,000 |
| Wages payable |  | 16,000 |
| Interest payable |  | 1,000 |
| Income taxes payable |  | 10,000 |
| Notes payable (long-term) |  | 19,000 |
| Contributed capital (89,000 shares) |  | 89,000 |
| Retained earnings |  | 29,000 |
| Service revenue |  | 0 |
| Depreciation expense | 0 |  |
| Income tax expense | 0 |  |
| Interest expense | 0 |  |
| Supplies expense | 0 |  |
| Wages expense | 0 |  |
| Remaining expenses (not detailed) | 0 |  |
| Total | \$206,000 | \$206,000 |

## P4-9. (continued)

Req. 7
(a) Financial leverage = Average total assets $\div$ Average stockholders' equity

$$
=[(\$ 102,000+\$ 190,000) \div 2] \div[(\$ 95,000+\$ 118,000) \div 2]
$$

$$
=\$ 146,000 \div \$ 106,500
$$

$$
=\underline{\underline{1.37}}
$$

This suggests that $\mathrm{H} \& \mathrm{H}$ Tool, Inc., finances its assets primarily with stockholders' equity. Approximately one-third of the assets are financed with debt and the rest with stockholders' equity.
(b) Total asset turnover $=$ Sales $\div$ Average total assets

$$
=\$ 208,000 \div \$ 146,000
$$

$$
=\underline{1.42}
$$

This suggests that H \& H Tool, Inc., generates $\$ 1.42$ for every dollar of assets.
(c) Net profit margin $=$ Net income $\div$ Sales

$$
=\$ 41,000 \div \$ 208,000
$$

$$
=\underline{\underline{0.197}} \text { or } \underline{\underline{19.7 \%}}
$$

This suggests that H \& H Tool, Inc., earns \$0.197 for every dollar in sales that it generates.

For all of the ratios, a comparison across time and a comparison against an industry average or competitors will need to be analyzed to determine how risky (financial leverage ratio), how efficient (total asset turnover) and how effective (net profit margin) H \& H Tool's management is.

## ALTERNATE PROBLEMS

## AP4-1.

Req. 1

## Starbucks Corporation <br> Adjusted Trial Balance At September 30, 2009 (in millions)

| , | Debit |  | Credit |  |
| :---: | :---: | :---: | :---: | :---: |
| Cash | \$ | 66 |  |  |
| Short-term investments |  | 51 |  |  |
| Accounts receivable |  | 48 |  |  |
| Inventories |  | 181 |  |  |
| Prepaid expenses |  | 19 |  |  |
| Other current assets |  | 21 |  |  |
| Long-term investments |  | 68 |  |  |
| Property, plant, and equipment |  | 1,081 |  |  |
| Accumulated depreciation |  |  | \$ | 321 |
| Other long-lived assets |  | 38 |  |  |
| Accounts payable |  |  |  | 56 |
| Accrued liabilities |  |  |  | 131 |
| Short-term bank debt |  |  |  | 64 |
| Long-term liabilities |  |  |  | 40 |
| Contributed capital |  |  |  | 647 |
| Retained earnings |  |  |  | 212 |
| Net revenues |  |  |  | 1,680 |
| Interest income |  |  |  | 9 |
| Cost of sales |  | 741 |  |  |
| Store operating expenses |  | 544 |  |  |
| Other operating expenses |  | 51 |  |  |
| Depreciation expense |  | 98 |  |  |
| General and admin. expenses |  | 90 |  |  |
| Interest expense |  | 1 |  |  |
| Income tax expense |  | 62 |  |  |
| Totals |  | 3,160 | \$ | 3,160 |

Req. 2
Since debits are supposed to equal credits in a trial balance, the balance in Retained Earnings is determined as the amount in the credit column necessary to make debits equal credits (a "plugged" figure).

## AP4-2.

Req. 1
a. Prepaid expense
b. Accrued expense
e. Unearned revenue
c. Unearned revenue
f. Accrued expense
g. Accrued expense
d. Prepaid expense
h. Accrued revenue

Req. 2
a. Insurance expense (+E, -SE) ..................................... 1,600

Prepaid insurance (-A) .................................... 1,600
( $\$ 3,200 \div 6$ months $\times 3$ months of coverage)
b. Wage expense (+E, -SE) .......................................... 900

Wages payable (+L) 900
c. Unearned maintenance revenue (-L) ......................... 225

Maintenance revenue (+R, +SE) 225
(\$450 $\div 2$ months $\times 1$ month)
d. Depreciation expense (+E, -SE)................................. 3,000 Accumulated depreciation, service truck (+XA, -A)
e. Unearned service revenue (-L) 700 Service revenue (+R, +SE)
(\$4,200 $\div 12$ months $\times 2$ months)

g. Property tax expense (+E, -SE) ................................. 500

Property tax payable (+L)
500
h. Accounts receivable (+A) ........................................... 2,000

Service revenue (+R, +SE)
2,000

## AP4-3.

Req. 1
a. Prepaid expense
e. Prepaid expense
b. Accrued revenue
f. Prepaid expense
c. Accrued expense
g. Accrued revenue
d. Prepaid expense
h. Accrued expense

Req. 2
a. Supplies expense (+E, -SE) ....................................... 1,150 Supplies (-A)
(Beg. Inventory of \$350 + Purchases \$1,200 - Ending Inventory \$400)
b. Accounts receivable (+A)

7,500
Catering revenue (+R, +SE )
c. Repairs expense (+E, -SE) ........................................ 600

Accounts payable ( +L )
600
d. Insurance expense (+E, -SE) ..................................... 200

Prepaid insurance (-A)
200
(\$1,200 $\div 12$ months $x 2$ months of coverage)
e. Rent expense (+E, -SE).............................................. 700

Prepaid rent (-A)
700
( $\$ 2,100 \div 3$ months $\times 1$ month of rent used)
$\begin{array}{ccc}\text { f. Depreciation expense (+E, -SE) ................................ } & 1,600 & \\ \text { Accumulated depreciation, display counters (+XA, -A) } & 1,600\end{array}$
g. Interest receivable (+A)

80
Interest income (+R, +SE)
$(\$ 4,000 \times 12 \% \times 2 / 12=\$ 80)$
h. Income tax expense (+E, -SE)

7,719
Income tax payable (+L)
7,719
To accrue income tax expense incurred but not paid:
Income before adjustments (given) $\$ 22,400$
Effect of adjustments (a) through (g) $+3,330(-\$ 1,150+\$ 7,500-\$ 600$
Income before income taxes $\quad 25,730 \quad-\$ 200-\$ 700-\$ 1,600+\$ 80)$
Income tax rate
Income tax expense

| $\times \quad 30 \%$ |
| :--- |

\$7,719

## AP4-4.

Req. 1
a. Prepaid expense
e. Unearned revenue
b. Accrued expense
c. Unearned revenue
$f$. Accrued expense
d. Prepaid expense
g. Accrued expense
h. Accrued revenue

Req. 2
Balance Sheet
Income Statement

| Transaction | Assets | Liabilities | Stockholders' <br> Equity | Revenues | Expenses | Net <br> Income |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| a. | $-1,600$ | NE | $-1,600$ | NE | $+1,600$ | $-1,600$ |
| b. | NE | +900 | -900 | NE | +900 | -900 |
| c. | NE | -225 | +225 | +225 | NE | +225 |
| d. | $-3,000$ | NE | $-3,000$ | NE | $+3,000$ | $-3,000$ |
| e. | NE | -700 | +700 | +700 | NE | +700 |
| f. | NE | +600 | -600 | NE | +600 | -600 |
| g. | NE | +500 | -500 | NE | +500 | -500 |
| h. | $+2,000$ | NE | $+2,000$ | $+2,000$ | NE | $+2,000$ |

Computations:
a. $\$ 3,200$ prepaid insurance $\div 6$ months $\times 3$ months of coverage $=\$ 1,600$ used
b. Amount is given.
c. $\$ 450$ unearned revenue $\div 2$ months $\times 1$ month $=\$ 225$ earned
d. Amount is given.
e. $\$ 4,200$ unearned revenue $\div 12$ months $\times 2$ months $=\$ 700$ earned
f. $\quad \$ 16,000$ principal $\times 9 \% \times 5 / 12$ months $=\$ 600$ interest expense
g. Amount is given.
h. Amount is given.

## AP4-5.

Req. 1
a. Prepaid expense
e. Prepaid expense
b. Accrued revenue
c. Accrued expense
f. Prepaid expense
d. Prepaid expense
g. Accrued revenue
h. Accrued expense

Req. 2
Balance Sheet
Income Statement

| Transaction | Assets | Liabilities | Stockholders' <br> Equity | Revenues | Expenses | Net <br> Income |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| a. | $-1,150$ | NE | $-1,150$ | NE | $+1,150$ | $-1,150$ |
| b. | $+7,500$ | NE | $+7,500$ | $+7,500$ | NE | $+7,500$ |
| c. | NE | +600 | -600 | NE | +600 | -600 |
| d. | -200 | NE | -200 | NE | +200 | -200 |
| e. | -700 | NE | -700 | NE | +700 | -700 |
| f. | $-1,600$ | NE | $-1,600$ | NE | $+1,600$ | $-1,600$ |
| g. | +80 | NE | +80 | +80 | NE | +80 |
| $h$. | NE | $+7,719$ | $-7,719$ | NE | $+7,719$ | $-7,719$ |

Computations:
a. Beg. Inventory of \$350 + Purchases \$1,200 - Ending Inventory \$400 = \$1,150 used for the period.
b. Amount is given.
c. Amount is given.
d. $\$ 1,200$ prepaid expense $\times 2 / 12=\$ 200$ insurance used
e. $\$ 2,100 \times 1 / 3=\$ 700$ rent used
f. Amount is given.
g. $\$ 4,000$ principal $\times 12 \% \times 2 / 12$ months $=\$ 80$ interest earned
h. Adjusted income = \$22,400-\$1,150 + \$7,500-\$600-\$200-\$700-\$1,600 + \$80 $=\$ 25,730 \times 30 \%$ tax rate $=\$ 7,719$ income tax expense

Req. 1

## December 31, 2009, Adjusting Entries

(1) Accounts receivable (+A) 1,500

To record service fees earned, but not collected.
(2) Rent expense (+E, -SE) 400
Prepaid rent (-A)
400
To record rent expired as an expense.
(3) Depreciation expense (+E, -SE)

17,500
Accumulated depreciation (+XA, -A)
17,500
To record depreciation expense.
(4) Unearned revenue (-L)

8,000
Service revenue (+R, +SE) .......................... 8,000
To record service fees earned.
(5) Income tax expense (+E, -SE)

6,500
(n)

Income taxes payable (+L)
6,500
To record income taxes for 2009.

Req. 2

## Amounts before Adjusting Entries

Revenues:
Service revenue
Expenses:
Salary expense
Depreciation expense
Rent expense
Income tax expense
Total expense
Net income
\$83,000
54,000

|  |
| ---: |
| $\$ 4,000$ |
| $\$ 29,000$ |

Amounts after Adjusting Entries

## AP4-6. (continued)

Req. 3

Earnings per share $=\$ 14,100$ net income $\div 5,000$ shares $=\$ 2.82$ per share
Req. 4

Net profit margin $=$ Net income $\div$ Net Sales $=\$ 14,100 \div \$ 92,500=15.2 \%$
The net profit margin indicates that, for every $\$ 1$ of service revenues, Abraham made $\$ 0.152$ (15.2\%) of net income. This ratio suggests that Abraham is generally profitable.

Req. 5

| Service revenue (-R) | 92,500 |
| :---: | :---: |
| Retained earnings (+SE).............................. | 14,100 |
| Salary expense (-E).................................... | 54,000 |
| Depreciation expense (-E)........................... | 17,500 |
| Rent expense (-E) .... | 400 |
| Income tax expense (-E) ............................ | 6,500 |

Req. 6

## Abraham Company <br> Post-closing Trial Balance December 31, 2009

|  | Debit | Credit |
| :---: | :---: | :---: |
| Cash | 18,000 |  |
| Accounts receivable | 1,500 |  |
| Prepaid rent | 800 |  |
| Property, plant, and equipment | 210,000 |  |
| Accumulated depreciation |  | 70,000 |
| Income taxes payable |  | 6,500 |
| Unearned revenue |  | 8,000 |
| Contributed capital |  | 110,000 |
| Retained earnings |  | 35,800 |
| Service revenue |  | 0 |
| Salary expense | 0 |  |
| Depreciation expense | 0 |  |
| Rent expense | 0 |  |
| Income tax expense | 0 |  |
| Totals | 230,300 | 230,300 |

Req. 1

## December 31, 2010, Adjusting Entries:

(a) Depreciation expense (+E, -SE) $\qquad$ 3,000
Accumulated depreciation (+XA, -A) $\qquad$ 3,000
(b) Insurance expense (+E, -SE) 450
Prepaid insurance (-A)
(c) Wages expense (+E, -SE)

1,100
Wages payable (+L)
,100

700
Supplies (-A)
700
(e) Income tax expense (+E, -SE) ................................. 2,950

Income tax payable (+L)
2,950

Req. 2

## AUSTIN CO. <br> Income Statement <br> For the Year Ended December 31, 2010

## Operating Revenue:

Service revenue
\$48,000
Operating Expenses:
Supplies expense (\$1,300 balance - \$600 on hand) 700
Insurance expense 450
Depreciation expense 3,000
Wages expense 1,100
Remaining expenses (not detailed) $\quad \underline{32,900}$
Total expenses $\quad \underline{38,150}$
Operating Income $\quad 9,850$
Income tax expense $\quad \underline{2,950}$
Net income
\$6,900
Earnings per share ( $\$ 6,900 \div 4,000$ shares $)$ $\$ 1.73$

| Assets | AUSTIN CO. <br> Balance Sheet <br> At December 31, 2010 |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Liabilities and Stockholders' Equity |  |
| Current Assets: |  | Current Liabilities: |  |
| Cash | \$19,600 | Accounts payable | \$ 2,500 |
| Accounts receivable | 7,000 | Wages payable | 1,100 |
| Supplies | 600 | Income tax payable | 2,950 |
| Prepaid insurance | 450 | Total current liabilities | 6,550 |
| Total current assets | 27,650 | Note payable, long term | 5,000 |
| Equipment | 27,000 | Total liabilities | 11,550 |
| Accumulated depreciation | $(15,000)$ | Stockholders' Equity |  |
| Other assets (not detailed) | 5,100 | Contributed capital | 16,000 |
|  |  | Retained earnings* | 17,200 |
|  |  | Total stockholders' equity | 33,200 |
| Total assets | \$44,750 | Total liabilities and stockholders' equity | \$44,750 |

*Unadjusted balance, \$10,300 + Net income, \$6,900 = Ending balance, \$17,200.

Req. 3
December 31, 2010, Closing Entry:
Service revenue (-R) ..... 48,000
Retained earnings (+SE) ..... 6,900
Supplies expense (-E) ..... 700
Insurance expense (-E) ..... 450
Depreciation expense (-E) ..... 3,000
Wages expense (-E) ..... 1,100
Remaining expenses (not detailed) (-E) ..... 32,900
Income tax expense (-E) ..... 2,950

| Req. 1, 2, 3, and 5 |  |  |  |
| :--- | ---: | ---: | ---: |
| Cash |  |  |  |
| Bal. | 5 |  |  |
| $a$ | 20 | $b$ | 18 |
| $c$ | 5 | $e$ | 28 |
| $d$ | 56 | $f$ | 3 |
| $g$ | 8 | $h$ | 11 |
| $j$ | 3 | $k$ | 10 |
| Bal. | $\underline{27}$ |  |  |

T-accounts (in thousands)
Accounts
Receivable
Supplies

| Bal. | 4 |  |  |
| :---: | :---: | :---: | :---: |
| $d$ | 9 | $g$ | 8 |
|  |  |  |  |
|  |  |  |  |
| Bal. | $\underline{5}$ |  |  |


|  | Bal. |  |  |
| :---: | ---: | :--- | :--- |
| i | 10 | $/$ | 8 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Bal. | $\underline{4}$ |  |  |

Accumulated
Depreciation

| Small Tools |  |  |  |
| :--- | :--- | :--- | :--- |
| Bal. | 6 |  |  |
| $f$ | 3 | $l$ | 1 |
| Bal. | $\underline{8}$ |  |  |
| Other Assets |  |  |  |
| Bal. | 9 |  |  |
|  |  |  |  |
| Bal. | $\underline{9}$ |  |  |


| Equipment |  |  |
| :---: | ---: | :--- |
| Bal. | 0 |  |
| $b$ | 18 |  |
| Bal. | $\underline{\underline{18}}$ |  |


| Accounts Payable |  |  |  |
| ---: | ---: | ---: | ---: |
| $h$ | 11 | Bal. | 7 |
|  |  | 7 |  |
|  | $i$ | 10 |  |
|  |  | Bal. | $\underline{\underline{13}}$ |


| Notes Payable |  |  |
| :---: | :--- | ---: |
|  | Bal. | 0 |
|  | $a$ | 20 |
|  |  |  |
|  | Bal. | $\underline{\underline{20}}$ |

Income Taxes

| Wages Payable |  |  |
| :---: | :--- | :--- |
|  | Bal. | 0 |
|  | 0 | 3 |
| Unearned |  |  |
| Revenue | $\underline{3}$ |  |
|  | Bal. | 0 |
|  | $j$ | 3 |
|  | Bal. | $\underline{3}$ |


| Interest Payable |  |  |
| :---: | :--- | :--- |
|  | Bal. | 0 |
|  | $n$ | 1 |
|  | Bal. | $\underline{1}$ |


| Contributed Capital |  |  |
| :--- | :--- | ---: |
|  | Bal. | 15 |
|  | $C$ | 5 |
|  | Bal. | $\underline{\underline{20}}$ |


| Retained |  |  |  |
| ---: | ---: | ---: | ---: |
| Earnings |  |  |  |
| $k$ | 10 | Bal. | 4 |
|  |  | CE | 11 |
|  |  | Bal. | $\underline{5}$ |


| Service Revenue |  |  |  |
| :---: | :---: | :--- | :---: |
|  |  | Bal. | 0 |
| CE | 65 |  | 65 |
|  |  | Bal. | $\underline{0}$ |


| Income Tax Expense |  |  |  |
| :---: | :---: | :---: | ---: |
| Bal. | 0 |  |  |
| $p$ | 4 |  |  |
|  |  | CE | 4 |
| Bal. | $\underline{0}$ |  |  |


| Depreciation Expense |  |  |  |
| :---: | :---: | :---: | ---: |
| Bal. | 0 |  |  |
| $m$ | 2 |  |  |
|  |  | CE | 2 |
| Bal. | $\underline{0}$ |  |  |


| Wages Expense |  |  |  |
| :--- | :--- | :--- | :--- |
| Bal. | 0 |  |  |
| 0 | 3 | CE | 3 |
| Bal. | $\underline{0}$ |  |  |

## AP4-8. (continued)

Req. 2
a. Cash (+A) ..... 20,000
Notes payable (+L) ..... 20,000
b. Equipment (+A) ..... 18,000
Cash (-A) ..... 18,000
c. Cash (+A) ..... 5,000
Contributed capital (+SE) ..... 5,000
d. Cash (+A) ..... 56,000
Accounts receivable (+A) ..... 9,000
Service revenue (+R, +SE) ..... 65,000
e. Remaining expenses (+E, -SE) ..... 35,000
Accounts payable (+L) ..... 7,000Cash (-A)28,000
f. Small tools (+A) ..... 3,000
Cash (-A)

$\qquad$ ..... 3,000
g. Cash (+A) ..... 8,000
Accounts receivable (-A) ..... 8,000
h. Accounts payable (-L) ..... 11,000
Cash (-A) ..... 11,000
i. Supplies (+A) ..... 10,000
Accounts payable (+L) ..... 10,000
j. Cash (+A) ..... 3,000
Unearned revenue (+L) ..... 3,000
k. Retained earnings (-SE) ..... 10,000
Cash (-A) ..... 10,000

## AP4-8. (continued)

Req. 3
I. Remaining expenses (+E, -SE)........................ 9,000

Supplies (-A) ........................................... 8,000
Small tools (-A) ....................................... 1,000
[Supplies used (\$12 - 4) and small tools used (\$9-8)]
m. Depreciation expense (+E, -SE) ....................... 2,000

Accumulated depreciation (+XA, -A)........ 2,000
n. Interest expense (+E, -SE) ............................... 1,000

Interest payable (+L) ................................ 1,000
(\$20,000 principal x 10\% x 6/12)
o. Wages expense (+E, -SE) ................................ 3,000

Wages payable (+L) ................................ 3,000
p. Income tax expense (+E, -SE)......................... 4,000

Income taxes payable (+L) ...................... 4,000

Req. 4

## NEW AGAIN FURNITURE, INC. Income Statement <br> For the Year Ended December 31, 2011

## Operating Revenues:

Service revenue
$\$ 65000$
Operating Expenses:
Depreciation expense
2,000
Wages expense 3,000
Remaining expenses 44,000
Operating Income 16,000 Other Item:

Interest expense
Pretax income
Income tax expense
Net income

Earnings per share
$\$ 0.63$
$[\$ 11,000 \div[(15,000+20,000) \div 2]$

NEW AGAIN FURNITURE, INC.
Statement of Stockholders' Equity
For the Year Ended December 31, 2011

|  | Contributed Capital | Retained Earnings | Total Stockholders' Equity |
| :---: | :---: | :---: | :---: |
| Balance, January 1, 2011 | \$15,000 | \$ 4,000 | \$19,000 |
| Additional stock issuance | 5,000 |  | 5,000 |
| Net income |  | 11,000 | 11,000 |
| Dividends declared |  | $(10,000)$ | $(10,000)$ |
| Balance, December 31, 2011 | \$20,000 | \$ 5,000 | \$25,000 |

## NEW AGAIN FURNITURE, INC. Balance Sheet <br> At December 31, 2011

| Assets |  | Liabilities and Stockholders' Equity <br> Current Liabilities: |  |
| :--- | ---: | :--- | ---: |
| Current Assets: | $\$ 27,000$ |  | Accounts payable |$\quad \$ 13,000$

# NEW AGAIN FURNITURE, INC. <br> Statement of Cash Flows 

For the Period Ended December 31, 2011
Cash from Operating Activities:

| Cash collected from customers $(d+g+j)$ | $\$ 67,000$ <br> Cash paid to suppliers and employees $(e+h)$ <br> $\quad$ Cash provided by operations$\quad$$39,000)$ $\mathbf{2 8 , 0 0 0}$ |
| :--- | ---: |

Cash from Investing Activities:
Purchase of equipment (b)
Purchase of small tools ( $f$ )
Cash used in investing activities
$(21,000)$

Cash from Financing Activities:
Borrowing from bank (a) 20,000
Issuance of stock (c) 5,000
Payment of dividends ( $k$ )
Cash provided by financing activities
Change in cash
Beginning cash balance, January 1, 2011
Ending cash balance, December 31, 2011
$(10,000)$
15,000
22,000
5,000
\$ 27,000

Req. 5

| December 31, 2011, Closing Entry |  |
| :---: | :---: |
| Service revenue (-R)............................. | 65,000 |
| Retained earnings (+SE) | 11,000 |
| Depreciation expense (-E) | 2,000 |
| Interest expense (-E) | 1,000 |
| Wages expense (-E) | 3,000 |
| Remaining expenses (-E) | 44,000 |
| Income tax expense (-E) .................... | 4,000 |

## AP4-8. (continued)

Req. 6

# NEW AGAIN FURNITURE, INC. <br> Post-Closing Trial Balance At December 31, 2011 

| Cash $\quad$ Account Titles | Debit <br> \$27,000 | Credit |  |  |  |
| :--- | ---: | ---: | :---: | :---: | :---: |
| Accounts receivable | 5,000 |  |  |  |  |
| Supplies | 4,000 |  |  |  |  |
| Small tools | 8,000 |  |  |  |  |
| Equipment | 18,000 |  |  |  |  |
| Accumulated depreciation |  | $\$ 2,000$ |  |  |  |
| Other assets (not detailed) | 9,000 |  |  |  |  |
| Accounts payable |  | 13,000 |  |  |  |
| Notes payable |  | 20,000 |  |  |  |
| Wages payable |  | 3,000 |  |  |  |
| Interest payable |  | 1,000 |  |  |  |
| Income taxes payable |  | 4,000 |  |  |  |
| Unearned revenue |  | 3,000 |  |  |  |
| Contributed capital (20,000 shares) |  | 20,000 |  |  |  |
| Retained earnings |  | 5,000 |  |  |  |
| Service revenue | 0 | 0 |  |  |  |
| Depreciation expense | 0 |  |  |  |  |
| Wages expense | 0 |  |  |  |  |
| Income tax expense | 0 |  |  |  |  |
| Interest expense | 0 |  |  |  |  |
| Remaining expenses (not detailed) |  | $\$ 71,000$ |  |  |  |
| Totals |  | $\$ 71,000$ |  |  |  |
|  |  |  |  |  |  |

## AP4-8. (continued)

Req. 7
(a) Financial leverage = Average total assets $\div$ Average stockholders' equity

$$
=[(\$ 26,000+\$ 69,000) \div 2] \div[(\$ 19,000+\$ 25,000) \div 2]
$$

$$
=\$ 47,500 \div \$ 22,000
$$

$$
=\underline{\underline{2.16}}
$$

This result suggests that New Again Furniture, Inc., finances its assets more with debt than stockholders' equity. The company borrowed $\$ 1.16$ and utilized $\$ 1$ of stockholders' equity to acquire every dollar of assets.
(b) Total asset turnover = Sales $\div$ Average total assets

$$
=\$ 65,000 \div \$ 47,500
$$

$$
=\underline{\underline{1.37}}
$$

This suggests that New Again Furniture, Inc., generates \$1.37 for every dollar of assets.
(c) Net profit margin = Net income $\div$ Sales

$$
\begin{aligned}
& =\$ 11,000 \div \$ 65,000 \\
& =\underline{\underline{0.17}} \text { or } \underline{\underline{17 \%}}
\end{aligned}
$$

This suggests that New Again Furniture, Inc., earns \$0.17 for every dollar in sales that it generates.

For all of the ratios, a comparison across time and a comparison against an industry average or competitors will need to be analyzed to determine how risky (financial leverage ratio), how efficient (total asset turnover) and how effective (net profit margin) New Again Furniture's management is.

## CASES AND PROJECTS

## FINANCIAL REPORTING AND ANALYSIS CASES

CP4-1.

1. American Eagle paid $\$ 204,179$ thousand in income taxes in its 2006 fiscal year, as disclosed in note 2 under "Supplemental Disclosures of Cash Flow Information."
2. The quarter ended February 3,2007 , was its best quarter in terms of sales at $\$ 973,365,000$ (this quarter covered Christmas, the biggest part of the year for retailers). The worst quarter ended April 29, 2006 (the quarter following Christmas), and most likely this is because most people have very little money to spend on extra clothing in that period. Note 14 discloses quarterly information.
3. Other income (net) is an aggregate of many accounts, but a summary entry for them all would be:

Other income (net) $\qquad$ 42,277
Retained Earnings

42,277
4. As disclosed in Note 4, Accounts and Note Receivable consists of (in thousands):

Construction allowances
9,345
Merchandise sell-offs
Taxes 1,012
Interest income
7,251
Property insurance claims
Other
Total
2,530
3,419
$\$ 26,045$
(dollars are in thousands)
5. Fiscal year

2004: Net Profit Margin $=\frac{\text { Net Income }}{\text { Sales }}=\frac{\$ 213,343}{\$ 1,889,647}=0.113$

2005: Net Profit Margin $=\frac{\text { Net Income }}{\text { Sales }}=\frac{\$ 294,153}{\$ 2,321,962}=0.127$

2006: Net Profit Margin $=\frac{\text { Net Income }}{\text { Sales }}=\frac{\$ 387,359}{\$ 2,794,409}=0.139$

Over the past three years, the company's net profit margin has improved each year. Management appears to be more effective over time at controlling costs, generating greater sales, or both.

1. At the end of the most recent year, Prepaid Expenses were $\$ 27,286$ thousand. This information is disclosed on the balance sheet.
2. The company reported $\$ 88,650$ thousand in deferred rent. This information is disclosed on the balance sheet.
3. Prepaid rent represents rent that Urban Outfitters has paid in advance to its landlords. It is an asset. Urban Outfitters also rents property to tenants. Deferred rent represents rent that it has collected in advance for which Urban Outfitters has an obligation to allow a tenant to use Urban Outfitters' property.
4. Accrued Liabilities would consist of costs that have been incurred by the end of the accounting period but which have not yet been paid.
5. Interest Income is related to the company's short-term investments.
6. The company's income statement accounts (revenues, expense, gains, and losses) would not have balances on a post-closing trial balance. These accounts are temporary accounts that have been closed to Retained Earnings.
7. Prepaid Expenses is an asset account. As such, it is a permanent account that carries its ending balance into the next accounting period. It is not closed at the end of the period.
8. The company reported basic earnings per share of $\$ 0.71$ for the year ended January 31, 2007, $\$ 0.80$ for the year ended January 31, 2006, and $\$ 0.56$ for the year ended January 31, 2005.
9. Year Ended
(dollars in thousands)
1/31/05: Net Profit Margin $=\frac{\text { Net Income }}{\text { Sales }}=\frac{\$ 90,489}{\$ 827,750}=0.109$
1/31/06: Net Profit Margin $=\frac{\text { Net Income }}{\text { Sales }}=\frac{\$ 130,796}{\$ 1,092,107}=0.120$
1/31/07: Net Profit Margin $=\frac{\text { Net Income }}{\text { Sales }}=\frac{\$ 116,206}{\$ 1,224,717}=0.095$

Over the past three years, the company's net profit margin at first increased and then the most recent year's profit margin was lower than during the years ended January 31, 2005 and 2006. For the year ended January 31, 2007, management appears to be having a harder time controlling costs, generating greater sales, or both.

## CP4-3.

1. American Eagle Outfitters reported an advertising expense of $\$ 64.3$ million for the most recent year (Note 2 under Advertising Costs). Urban Outfitters reported \$35.9 million of advertising costs for the year. (See Note 2 under Advertising).

| 2. | American Eagle Outfitters |  | Urban Outfitters |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | Advertising <br> Expense / <br> Net Sales |  | Advertising <br> Expense / <br> Net Sales |  |
| 2006 | $64,300 / 2,794,409$ | $2.3 \%$ | $35,882 / 1,224,717$ | $2.9 \%$ |
| 2005 | $53,300 / 2,321,962$ | $2.3 \%$ | $30,033 / 1,092,107$ | $2.8 \%$ |
| 2004 | $41,400 / 1,889,647$ | $2.2 \%$ | $22,455 / 827,750$ | $2.7 \%$ |

Urban Outfitters incurred the higher percentage in 2006 (and in each year). Both firms had a slightly increasing balance of advertising costs as a percentage of net sales over the three years.

| 3. | Industry <br> Average | American Eagle <br> Outfitters | Urban <br> Outfitters |
| :--- | :---: | :---: | :---: |
| Advertising/Sales $=$ | $2.39 \%$ | $2.3 \%$ | $2.9 \%$ |

American Eagle Outfitters is spending less on advertising as a percentage of sales than the average company in the industry, while Urban Outfitters is spending more. This might imply that American Eagle is more effective, as they are generating more sales per dollar spent on advertising. Another interpretation is that they are not supporting their brand, and sales will eventually decline as their brands lose value.
4. Both accounting policies are similar indicating that advertising costs are expensed when the marketing campaigns become publicly available. American Eagle allocates advertising costs for television campaigns over the life of the campaign. Urban Outfitters capitalizes expenses associated with direct-to-consumer advertising (catalogs) and amortizes these expenses over the expected period of future benefits. (The policies are disclosed in note 2 in both annual reports).

## CP4-3. (continued)

5. 

2004: $\underset{\text { Net Profit }=}{\text { Margin }} \frac{\text { Net Income }}{\text { Sales }}$

2005: Net Profit $=$ Net Income Margin Sales

2006: Net Profit $=$ Net Income Margin Sales

| American Eagle <br> Outfitters | Urban Outfitters |
| :---: | :---: |
| $\frac{\$ 213,343}{\$ 1,889,647}=0.113$ | $\frac{\$ 90,489}{\$ 827,750}=0.109$ |
| $\frac{\$ 294,153}{\$ 2,321,962}=0.127$ | $\frac{\$ 130,796}{\$ 1,092,107}=0.120$ |
| $\frac{\$ 387,359}{\$ 2,794,409}=0.139$ | $\frac{\$ 116,206}{\$ 1,224,717}=0.095$ |

American Eagle Outfitters shows steadily increasing profit margins over time; whereas Urban Outfitters showed a dip in its profit margin in 2006. Over the previous three years, American Eagle has been able to attain a greater profit margin than that for Urban Outfitters, suggesting a better overall performance.
6.

| 6. | Industry <br> Average | American Eagle <br> Outfitters | Urban Outfitters |
| :---: | :---: | :---: | :---: |
| Net Profit Margin $=$ | $7.69 \%$ | $13.9 \%$ | $9.5 \%$ |

Both companies, American Eagle Outfitters and Urban Outfitters have higher Net Profit Margins than the average company in their industry. This is likely due to the strategy that these two companies have pursued, which is to differentiate their clothing in terms of style and quality and appeal to a particular niche market, therefore being able to charge a higher price.

Req. 1
The author suggests that the root cause of accounting scandals is "a widespread obsession with earnings that drives companies to push accounting standards to the limit and, in extreme cases, to engage in outright fraud." This causes managers to make decisions to meet short-term earnings expectations, often at the expense of long-term shareholder value.

Req. 2
The uncertainties that the author believes are problems in current financial reporting are related to the subjective assumptions about the future (accruals) - revenue recognition and expense matching. Examples include uncertainties as to how much revenue a company will generate from current-period expenditures for research and development, employee training, brand building, or additions to production capacity. There is also subjectivity in matching expenses with revenues. Examples include the various depreciation methods available to managers and expensing research and development.

According to the author, these uncertainties about the future combined with historical information produce financial statements, and net income in particular, that do not tell users what they need to know to make investing and lending decisions.

CP4-5.
Req. 1

| Account | Unadjusted <br> Trial Balance |  | Adjusted <br> Trial Balance |  | Post-Closing <br> Trial Balance |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Debit | Credit | Debit | Credit | Debit | Credit |
| Cash | 20,000 |  | 20,000 |  | 20,000 |  |
| Maintenance supplies | 500 |  | 200 |  | 200 |  |
| Service equipment | 90,000 |  | 90,000 |  | 90,000 |  |
| Accumulated depreciation, <br> service equipment |  | 18,000 |  | 27,000 |  | 27,000 |
| Remaining assets | 42,500 |  | 42,500 |  | 42,500 |  |
| Note payable, 8\% |  | 10,000 |  | 10,000 |  | 10,000 |
| Interest payable |  |  |  | 800 |  | 800 |
| Income taxes payable |  |  |  | 13,020 |  | 13,020 |
| Wages payable |  |  |  | 500 |  | 500 |
| Unearned revenue |  |  |  | 6,000 |  | 6,000 |
| Contributed capital |  | 56,000 |  | 56,000 |  | 56,000 |
| Retained earnings |  | 9,000 |  | 9,000 |  | 39,380 |
| Service revenue |  | 220,000 |  | 214,000 |  | 0 |
| Expenses | 160,000 |  | 183,620 |  | 0 |  |
|  | 313,000 | 313,000 | 336,320 | 336,320 | 152,700 | 152,700 |

Ending Retained Earnings = Beg., \$9,000 + Net income, (\$214,000-\$183,620)

Req. 2
(a) To record the amount of supplies used during 2010, $\$ 300$, and to reduce the supplies account to the amount remaining on hand at the end of 2010.
(b) To accrue interest expense for 2010 (the interest is payable in 2011, computed as $\$ 10,000 \times 8 \%=\$ 800$ ) and to record interest payable.
(c) To reduce service revenue for cash collected in advance of being earned and to record the liability for those services yet to be performed, $\$ 6,000$.
(d) To record depreciation expense for 2010, \$9,000.
(e) To record 2010 wages of $\$ 500$ that will be paid in 2008.
(f) To record 2010 income tax and the related liability, \$13,020.

## CP4-5. (continued)

Req. 3
Closing Entry on December 31, 2010:
Service revenue (from the adjusted trial balance) (-R) ......... 214,000
Retained earnings (+SE) ........................................... 30,380
Expenses (from the adjusted trial balance) (-E)......... 183,620

Req. 4

| Pretax income $x$ | Average income tax rate | $=$ | Income tax expense |  |
| :---: | :---: | :---: | :---: | :---: |
| $(\$ 214,000-170,600) x$ | $?$ | $=$ | $\$ 13,020$ |  |
| $\$ 43,400$ | $x$ | $?$ | $=$ | $\$ 13,020$ |
|  | $?$ | $=$ | $30 \%$ |  |

Req. 5

| Number of shares issued $x$ | Average issue price | $=$ | Total issue amount |
| :---: | :---: | :---: | :---: |
| 8,000 | $x$ | $?$ | $=$ |
|  | $? 56,000$ |  |  |
|  |  | $=$ | $\underline{\$ 7.00}$ per share |

## CP4-6.

## Transaction (a):

1. This transaction will affect Shirley's financial statements for 10 years (from 2009 to 2018) in conformity with the matching principle.
2. Income statement:

Depreciation expense, as given \$1,400 each year
3. Balance sheet at December 31, 2011:

Assets:

Office equipment
Less: Accumulated depreciation*
Net book (carrying) value
*\$1,400 x 3 years = \$4,200.
\$14,000
4,200
\$ 9,800
4. An adjusting entry each year over the life of the asset would be recorded to reflect the allocation of the cost of the asset when used to generate revenues:

Depreciation expense (+E, -SE)
1,400
Accumulated depreciation (+XA, -A)
1,400

## Transaction (b):

1. This transaction will affect Shirley's financial statements for 2 years--2011 and 2012--because four month's rent revenue was earned in 2011, and two months' rent revenue will be earned in 2012.
2. The 2011 income statement should report rent revenue earned of $\$ 16,000$ ( $\$ 24,000$ x 4/6). Occupancy was provided for only 4 months in 2011. This is in conformity with the revenue principle.
3. This transaction created an $\$ 8,000$ liability ( $\$ 24,000-\$ 16,000=\$ 8,000$ ) as of December 31, 2011, because at that date Shirley "owes" the renter two more months' occupancy for which it has already collected the cash.
4. Yes, an adjusting entry must be made to (a) increase the rent revenue account by $\$ 16,000$, and (b) to decrease the liability to $\$ 8,000$ representing the future occupancy owed (in conformity with the revenue principle).

December 31, 2011--Adjusting entry:
Unearned rent revenue (-L)
16,000
Rent revenue (+R, +SE)
16,000

## CP4-6. (continued)

## Transaction (c):

1. This transaction will directly affect Shirley's financial statements for two years, with the expense incurred in 2011 and the cash payment in 2012.
2. The $\$ 7,500$ should be reported as wage expense in the 2011 income statement and as a liability on the 2011 balance sheet. On January 5, 2012, the liability will be paid. Therefore, the 2012 balance sheet will reflect a reduced cash balance and reduced liability balance. The transaction will not directly affect the 2012 income statement (unless the adjusting entry was not made).
3. Yes, an adjusting entry must be made to (a) record the $\$ 7,500$ as an expense in 2011 (matching principle) and (b) to record the liability which will be paid in 2012.

December 31, 2011--Adjusting entry:
Wage expense (+E, -SE) ............................... 7,500
Wages payable (+L)
7,500
Note: On January 5, 2012, the liability, Wages Payable, $\$ 7,500$, will be paid. Wage expense for 2012 will not include this $\$ 7,500$. The 2012 related entry will debit (decrease) wages payable, and credit (decrease) cash, \$7,500.

## Transaction (d):

1. Yes, service revenue of $\$ 45,000$ (i.e., $\$ 60,000 \times 3 / 4$ ) should be recorded as earned by Shirley in conformity with the revenue principle. Service revenue is recognized as the service is performed.
2. Recognition of revenue earned but not collected by the end of 2011 requires an adjusting entry. This adjusting entry is necessary to (a) record the revenue earned (to be reported on the 2011 income statement) and (b) record the related account receivable (an asset to be reported on the 2011 balance sheet). The adjusting entry on December 31, 2011 is:

Accounts receivable (+A)
45,000
Service revenue (+R, +SE)
45,000
(\$60,000 total price $\times 3 / 4$ completed)
3. February 15, 2012--Completion of the last phase of the service contract and cash collected in full:

Cash (+A) ............................................................... 60,000
Accounts receivable (-A)
45,000
Service revenue (+R, +SE)............................. 15,000

Req. 1

## Adjusting entries:

(a) Expenses (insurance) (+E, -SE) ........................................................................................ 11

To adjust for expired insurance.
(b) Rent receivable (+A) ....................................................... 2

Revenues (rent) (+R, +SE)
2
To adjust for rent revenue earned but not yet collected.
(c) Expenses (depreciation) (+E, -SE) .................................. 11

Accumulated depreciation, long-lived assets (+XA, -A)11

To adjust for annual depreciation.
(d) Expenses (wages) (+E, -SE)

Wages payable (+L)
3
To adjust for wages earned but not recorded or paid.
(e) Income tax expense (+E, -SE)

5
Income taxes payable (+L)
To adjust for income tax expense.
(f) Unearned rent revenue (-L)

Revenues (rent) (+R, +SE)
3

To adjust for rent revenue collected but unearned.

Req. 2
Closing entry (from the adjusted trial balance):
Revenues (-R) .................................................................. 103
Retained earnings (+SE) ............................................. 15
Expenses (-E)............................................................. 83
Income tax expense (-E) ............................................. 5
To close the temporary accounts to Retained Earnings for 2009.

## CP4-7. (continued)

Req. 3
(a) Shares outstanding: 1,000 shares (given) - no change all year.
(b) Interest expense: $\$ 20,000 \times 10 \%=\$ 2,000$.
(c) Ending balance in retained earnings:

Unadjusted balance, \$(3,000) + Net income, \$15,000 = \$12,000.
(d) Average income tax rate: $\$ 5,000$ income tax expense $\div$ ( $\$ 103,000$ revenues $\$ 83,000$ total expenses) $=\underline{\underline{25 \%}}$.
(e) Rent receivable -- report on the balance sheet as an asset.

Unearned rent revenue -- report on the balance sheet as a liability (for future occupancy "owed").
(f) Net income of \$15,000 was computed on the basis of accrual accounting concepts. Revenue is recognized when earned and expenses recorded when incurred regardless of the timing of the respective cash flows. Cash inflows, in addition to certain revenues, were from numerous sources such as the issuance of capital stock, borrowing, and revenue collected in advance. Similarly, cash outflows were, in addition to certain expenses, due to numerous transactions such as the purchase of operational and other assets, prepaid insurance, and dividends to stockholders.
(g) EPS: $\$ 15,000 \div 1,000$ shares (per (a) above) $=\$ 15.00$ per share.
(h) Selling price per share: $\$ 30,000$ contributed capital $\div 1,000$ shares $=\$ 30$ per share.
(i) The prepaid insurance account reflected a $\$ 2,000$ balance before the adjustment (decrease) of $\$ 1,000$. Therefore, it appears that the policy premium was paid on January 1, 2009, and it was prepaid for two years (2009 and 2010). Other possibilities might be (a) a 12-month policy purchased on July 1, 2009, or (b) a 2month policy purchased on December 1, 2009. In any case, one-half of the premium has expired.
(j) Net profit margin: $\$ 15,000$ net income $\div \$ 103,000$ revenues $=\underline{\underline{0.146}}$ (14.6\%).

CP4-8.
Req. 1

| CRYSTAL'S DAY SPA AND SALON, INC. |
| :--- |
| Income Statement |
| For the Year Ended December 31, 2011 |
| Cash |
| Basis Per <br> Crystal's <br> Statement |

Revenues:
Spa fees
\$1,115,000 See * below.
\$1,012,000
Expenses:
Office rent
Utilities
Telephone
Salaries
Supplies
Miscellaneous
Depreciation

| 130,000 | Exclude rent for Jan. $2012(\$ 130,000 \div 13)(\mathrm{g})$ | 120,000 |
| ---: | :--- | ---: |
| 43,600 | No change | 43,600 |
| 12,200 | See ** below. | 11,800 |
| 522,000 | Add December 2011 salary $(\$ 18,000 \div 12)(\mathrm{e})$ | 523,500 |
| 31,900 | See *** below. | 29,825 |
| 12,400 | No change | 12,400 |
| 0 | Given for 2011 (c) | 20,500 |
| 752,100 |  |  |
| 362,900 |  |  |
|  | 761,625 |  |

* Cash collected for spa fees

Fees earned in prior years (a)
\$1,115,000
Fees earned in 2011 but not yet collected (b)
-132,000
Fees earned in 2011
$\begin{array}{r}+29,000 \\ \hline 1,012,000\end{array}$
** Add December 2011 bill of $\$ 1,400$ (f) and subtract the December 2010 bill of $\$ 1,800$ paid in $2011(\$ 12,200+\$ 1,400-\$ 1,800=\$ 11,800)$.

| $* * *$ | Supplies (d) |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
|  | Beg. | 3,125 |  |  |
| Purchases | 31,900 | 29,825 | Used |  |
| End. | 5,200 |  |  |  |

## CP4-8. (continued)

Req. 2
Memo to Crystal Mullinex should include the following:
(1) Net income was overstated by $\$ 112,525$ because of inappropriate recognition of revenue (overstated by $\$ 103,000$ ) and expenses (understated by $\$ 9,525$ ). Revenue should be recognized when earned, not when the cash is collected. Similarly, expenses should be matched against revenue in the period when the services or materials were used (including depreciation expense).
(2) Some other items the parties should consider in the pricing decision:
(a) A correct balance sheet at December 31, 2011.
(b) Collectibility of any receivables (if they are to be sold with the business).
(c) Any liabilities of the spa to be assumed by the purchaser.
(d) Current employees -- how will they be affected?
(e) Adequacy of the rented space -- is there a long-term noncancellable lease?
(f) Characteristics of Crystal's spa practices.
(g) Expected future cash flows of the business. What is the present value of those expectations?

## CRITICAL THINKING CASES

## CP4-9.

Req. 1
2010
Adjusting Entries12/31
(a) Supplies expense (+E, -SE).................... 4,200
$\qquad$,2004,200(\$6,000-\$1,800 = \$4,200)
(b) Insurance expense (+E, -SE)........................ 2,000
Prepaid insurance (-A)......................... 2,000 (\$4,000 $\div 2$ years)
(c) Depreciation expense (+E, -SE).................... 8,000
Accumulated depreciation $(+X A,-A) \ldots \ldots . \quad 8,000$
(d) Salaries expense (+E, -SE) 2,200
Salaries payable (+L).............................. 2,200
(e) Transportation revenue (-R, +SE)
Unearned transportation revenue (+L)...... 7,000 7,000
Transportation revenue is too high and needs to be reduced and an Unearned revenue account created for the appropriate amount.
(f) Income tax expense (+E, -SE)
3,650
Income tax payable (+L)
3,650
To record 2010 income tax computation:
Transportation revenue: \$85,000 - \$7,000 = \$78,000
Expenses: $\quad \$ 47,000+\$ 4,200+\$ 2,000$
$+\$ 8,000+\$ 2,200=63,400$
Pretax income
\$14,600 Income tax expense: $\quad \$ 14,600 \times 25 \%=\$ 3,650$

CP4-9. (continued)
Req. 2
MAGLIOCHETTI MOVING CORPORATION
Corrections to 2010 Financial Statements

|  | Amounts Reported |  | Changes Debit Credit |  | Corrected Amounts |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 Income Statement: |  |  |  |  |  |
| Revenue: |  |  |  |  |  |
| Transportation revenue | \$ 85,000 | $e$ | 7,000 |  | \$ 78,000 |
| Expenses: |  |  |  |  |  |
| Salaries expense | 17,000 | $d$ | 2,200 |  | 19,200 |
| Supplies expense | 12,000 | a | 4,200 |  | 16,200 |
| Other expenses | 18,000 |  |  |  | 18,000 |
| Insurance expense | 0 | $b$ | 2,000 |  | 2,000 |
| Depreciation expense | 0 | $c$ | 8,000 |  | 8,000 |
| Income tax expense | 0 | $f$ | 3,650 |  | 3,650 |
| Total expenses | 47,000 |  |  |  | 67,050 |
| Net income | \$ 38,000 |  |  |  | \$ 10,950 |
| December 31, 2010, Balance Sheet |  |  |  |  |  |
| Assets: |  |  |  |  |  |
| Current Assets: |  |  |  |  |  |
| Cash | \$ 2,000 |  |  |  | \$ 2,000 |
| Receivables | 3,000 |  |  |  | 3,000 |
| Supplies | 6,000 | a |  | 4,200 | 1,800 |
| Prepaid insurance | 4,000 | $b$ |  | 2,000 | 2,000 |
| Total current assets | 15,000 |  |  |  | 8,800 |
| Equipment | 40,000 |  |  |  | 40,000 |
| Less: Accumulated deprec. | 0 | c |  | 8,000 | $(8,000)$ |
| Remaining assets | 27,000 |  |  |  | 27,000 |
| Total assets | \$82,000 |  |  |  | \$67,800 |
| Liabilities: |  |  |  |  |  |
| Current Liabilities: |  |  |  |  |  |
| Accounts payable | \$ 9,000 |  |  |  | \$ 9,000 |
| Salaries payable | 0 | $d$ |  | 2,200 | 2,200 |
| Unearned transportation revenue | 0 | $e$ |  | 7,000 | 7,000 |
| Income tax payable | 0 | $f$ |  | 3,650 | 3,650 |
| Total current liabilities | 9,000 |  |  |  | 21,850 |
| Stockholders' Equity |  |  |  |  |  |
| Contributed capital | 35,000 |  |  |  | 35,000 |
| Retained earnings | 38,000 |  |  |  | 10,950 |
| Total stockholders' equity | 73,000 |  |  |  | 45,950 |
| Total liabilities and stockholders' equity | \$82,000 |  |  |  | \$67,800 |

## CP4-9. (continued)

Req. 3
Omission of the adjusting entries caused:
(a) Net income to be overstated by $\$ 27,050$.
(b) Total assets to be overstated by $\$ 14,200$.

Req. 4
(a) Earnings per share:

Unadjusted -- \$38,000 net income $\div$ 10,000 shares $=\$ 3.80$ per share
Adjusted -- \$10,950 net income $\div 10,000$ shares $=\$ 1.095$ per share
(b) Net profit margin:

Unadjusted -- $\$ 38,000$ net income $\div \$ 85,000$ sales $=44.7 \%$
Adjusted $\quad-\quad \$ 10,950$ net income $\div \$ 78,000$ sales $=14.0 \%$
Each of the ratios was affected by inclusion of the adjustments with revenues decreasing and expenses increasing resulting in a lower net income. For earnings per share, the numerator net income decreased while the denominator did not, resulting in a significantly lower figure. For the net profit margin, the denominator sales was lower but did not decrease more than the reduction in the numerator net income causing a significantly lower percentage.

## CP4-9. (continued)

Req. 5
(today's date)
To the Stockholders of Magliochetti Moving Corporation:
We regret to inform you that your request for a $\$ 20,000$ loan has been denied.
Our review showed that various adjustments were required to the original set of financial statements provided to us. The original (unadjusted) financial statements overstated net income for 2010 by $\$ 27,050$ (i.e., $\$ 38,000$ - $\$ 10,950$ ). This overstatement was caused by incorrectly including $\$ 7,000$ of revenue collected in advance that had not been earned in 2010. Further, all of the expenses were understated and income tax expense had been incorrectly excluded.

Total assets were overstated by $\$ 14,200$ (i.e., $\$ 82,000-\$ 67,800$ ). Supplies was overstated by $\$ 4,200$, prepaid insurance was overstated by $\$ 2,000$, and the net book value of the equipment was overstated by $\$ 8,000$ because annual depreciation was not properly recognized.

A review of key financial ratios indicates that the adjustments caused earnings per share and net profit margin to decline. Net profit margin declined from 44.7\% to 14.0\%. The adjusted ratios, however, would be compared to those of other start-up companies in the same industry.

We require that there be sufficient collateral pledged against the loan before we can consider it. The current market value of the equipment may be able to provide additional collateral against which the loan could be secured. Your personal investments may also be considered viable collateral if you are willing to sign an agreement pledging these assets as collateral for the loan. This is a common requirement for small start-up businesses.

If you would like us to reconsider your application, please provide us the current market values of any assets you would pledge as collateral.

Regards, (your name)

Loan Application Department, Your Bank

Req. 1 Cash from Operations: $\$ 18,000$
Req. 2 Subscriptions Revenue for fiscal year ended March 31, 2011 (\$18,000 x 7/36): \$3,500

Req. 3 March 31, 2011, Unearned Subscriptions Revenue

$$
(\$ 18,000 \times 29 / 36)=\$ 14,500 \quad \text { or } \quad \$ 18,000-\$ 3,500=\$ 14,500
$$

Req. 4
Adjusting entry (cash receipt credited to Unearned Subscriptions Revenue):
Unearned Subscriptions

| Revenue (L) |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  | $9 / 1$ | 18,000 |
| AJE | 3,500 |  |  |
|  |  | End. | $\underline{\underline{14,500}}$ |


| Subscriptions Revenue (R) |  |  |
| :---: | :---: | :---: |
|  | AJE | 3,500 |
| End. |  |  |
| 500 |  |  |

Unearned subscriptions revenue (-L)......................... 3,500
Subscriptions revenue (+R, +SE)

Req. 5
a. \$4,000 revenue target based on cash sales:

This target is not clearly defined. Does management mean any cash subscriptions received during the period? Your region generated \$18,000 in cash subscriptions. By this assumption, your region far exceeded the company's target. You may be entitled to a generous bonus due to your strong performance.

On the other hand, management may mean any sales revenue earned that has also been received in cash during the period. Under this assumption, sales revenue earned and received in cash is $\$ 3,500$ (the accrual accounting basis amount). If this is the company's intention of its target, then your region did not meet the goal, only generating 87.5\% of the target. You may need to provide an analysis to management regarding this below par performance.

This example demonstrates the need for clear communication of expectations by management.
b. $\$ 4,000$ revenue target based on accrual accounting:

This situation is the same as the second assumption under a. Your region earned $\$ 500$ less than expected by the company.

## FINANCIAL REPORTING AND ANLYSIS PROJECT

## CP4-11.

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

