**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. The four different types are adjustments for:

(1) Deferred 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) Deferred 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).

3. 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.

4. 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.

5. (a) Income statement: Revenues (and gains) - Expenses (and losses) = Net Income

(b) Balance sheet: Assets = Liabilities + Stockholders' Equity

(c) Statement of stockholders' equity: Ending Stockholders' Equity = (Beginning

Contributed Capital + Stock Issuances - Stock Repurchases) + (Beginning

Retained Earnings + Net Income - Dividends Declared)

6. Adjusting entries have no effect on cash. For deferred revenues and deferred 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.

7. Earnings per share = Net income ÷ 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.

8. Total asset turnover ratio = Sales (or Operating) Revenues ÷ Average Total Assets

The total asset turnover ratio measures sales generated during the period per dollar of assets – how effective the company is at generating sales by utilizing assets.

9. The closing entry is made at the end of the accounting period to (1) transfer the balances in the temporary income statement accounts to retained earnings and (2) 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. A closing entry 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).

10. (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.

11. 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.

12. 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 entry has been journalized and posted and that all temporary accounts have zero balances.

**ANSWERS TO MULTIPLE CHOICE**

1. c

2. b

3. b

4. b

5. b

6. c

7. c

8. c

9. c

10. c

**MINI-EXERCISES**

**M4–1.**

Hagadorn Company

Adjusted Trial Balance

At June 30, 2014

|  |  |  |
| --- | --- | --- |
|  | Debit | Credit |
|  |  |  |
| Cash | $ 175 |  |
| Accounts receivable | 420 |  |
| Inventories | 710 |  |
| Prepaid expenses | 30 |  |
| Buildings and equipment | 1,400 |  |
| Accumulated depreciation |  | $ 250 |
| Land | 300 |  |
| Accounts payable |  | 250 |
| Accrued expenses payable |  | 160 |
| Income taxes payable |  | 50 |
| Unearned fees |  | 90 |
| Long-term debt |  | 1,460 |
| Common stock |  | 100 |
| Additional paid-in capital |  | 300 |
| Retained earnings |  | 150 |
| Sales revenue |  | 2,400 |
| Interest income |  | 60 |
| Cost of sales | 780 |  |
| Salaries expense | 640 |  |
| Rent expense | 460 |  |
| Depreciation expense | 150 |  |
| Interest expense | 70 |  |
| Income taxes expense | 135 |  |
| Totals | $ 5,270 | $ 5,270 |

**M4–2.**

|  |
| --- |
| (1) D |
| (2) C |
| (3) A |
| (4) D |
| (5) A |
| (6) B |
| (7) B |
| (8) C |

**M4–3.** (1) D

(2) C

(3) A

(4) B

**M4–4.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *(a)* | 1. Rent revenue is now earned. | | | |
|  | 2. Cash was received in the past – a deferred revenue was recorded. | | | |
|  | 3. Amount: $1,200 ÷ 4 months = $300 earned    **Adjusting entry –** | | | |
|  | Unearned rent revenue (−L) | 300 |  |
|  | Rent revenue (+R, +SE) |  | 300 |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *(b)* | | 1. Depreciation Expense on the equipment is now incurred. | | | | | | | | | |
|  | | 2. Cash was paid in the past when the equipment was purchased -- a deferred expense was recorded. The net book value of the equipment is overstated. Accumulated Depreciation (the contra-account) needs to be increased for the amount used during the period. | | | | | | | | | |
|  | | 3. Amount: $3,200 given    **Adjusting entry –** | | | | | | | | | |
|  | | Depreciation expense (+E, −SE) | 3,200 | | |  | | |
|  | | Accumulated depreciation (+XA, −A) |  | | | 3,200 | | |
|  | |  | |  | |  | | |
| *(c)* | | 1. Insurance expense was incurred in the period. | | | | | | | | | |
|  | | 2. Cash was paid for the insurance in the past – a deferred expense was recorded. | | | | | | | | | |
|  | | 3. Amount: $5,000 x 6/24 = $1,250    **Adjusting entry –** | | | | | | | | | |
|  | | Insurance expense (+E, −SE) | | 1,250 | | |  | | |
|  | | Prepaid insurance (−A) | |  | | | 1,250 | | |

**M4–5.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Balance Sheet | | | Income Statement | | |
| Transaction | Assets | Liabilities | Stockholders’ Equity | Revenues | Expenses | Net  Income |
| *a.* | NE | –300 | +300 | +300 | NE | +300 |
| *b.* | –3,200 | NE | –3,200 | NE | +3,200 | –3,200 |
| *c.* | –1,250 | NE | –1,250 | NE | +1,250 | –1,250 |

**M4–6.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *(a)* | | 1. Utilities Expense is incurred. | | | | |
|  | | 2. Cash will be paid in the future for utilities used in the current period – an accrued expense needs to be recorded. | | | | |
|  | | 3. Amount: $450 given    **Adjusting entry –** | | | | |
|  | | Utilities expense (+E, −SE) | 450 |  |
|  | | Utilities payable (+L) |  | 450 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *(b)* | | 1. Interest revenue is now earned on the note receivable. | | | | | | | |
|  | | 2. Cash for the interest will be received in the future – an accrued revenue needs to be recorded. | | | | | | | |
|  | | 3. Amount: $6,000 principal x .14 annual rate x 4/12 of a year = $280    **Adjusting entry –** | | | | | | | |
|  | | Interest receivable (+A) | | 280 | |  | |
|  | | Interest revenue (+R, +SE) | |  | | 280 | |
|  | |  | |  | |  | |
| *(c)* | | 1. Wages expense was incurred in the period. | | | | | | | |
|  | | 2. Cash will be paid in the future to the employees who worked in the current period – an accrued expense needs to be recorded. | | | | | | | |
|  | | 3. Amount: 10 employees x 4 days x $200 per day = $8,000    **Adjusting entry –** | | | | | | | |
|  | | Wages expense (+E, −SE) | | 8,000 | |  | |
|  | | Wages payable (+L) | |  | | 8,000 | |

|  |  |
| --- | --- |
|  |  |

**M4–7.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Balance Sheet | | | Income Statement | | |
| Transaction | Assets | Liabilities | Stockholders’ Equity | Revenues | Expenses | Net  Income |
| *a.* | NE | +450 | –450 | NE | +450 | –450 |
| *b.* | +280 | NE | +280 | +280 | NE | +280 |
| *c.* | NE | +8,000 | –8,000 | NE | +8,000 | –8,000 |

**M4–8.**

**ROMNEY’S MARKETING COMPANY**

**Income Statement**

**For the Year Ended December 31, 2015**

|  |  |
| --- | --- |
| **Operating Revenues:**  Sales revenue  Total operating revenues  **Operating Expenses:**  Wages expense  Depreciation expense  Utilities expense  Insurance expense  Rent expense  Total operating expenses  **Operating Income**  **Other Items:**  Interest revenue  Rent revenue  **Pretax Income**  Income tax expense | $ 38,500  38,500      19,500  1,800  380  750  9,000  31,430  7,070  100  800  7,970  2,700 |
| **Net Income** | $ 5,270 |
|  |  |
| **Earnings per share\*** | $9.58 |

\* calculated as $5,270 ÷ [(300 + 800) ÷ 2] = $5,270 ÷ 550 = $9.58

Average number of shares

**M4–9.**

**ROMNEY’S MARKETING COMPANY**

**Statement of Stockholders’ Equity**

**For the Year Ended December 31, 2015**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Common Stock** |  | **Additional Paid-in Capital** |  | **Retained Earnings** |  | | **Total**  **Stockholders’ Equity** |
| Balance, January 1, 2015 |  | $ 30 |  | $ 670 |  | $ 2,000\* |  | | $ 2,700 |
| Share issuance |  | 50 |  | 2,950 |  |  |  | | 3,000 |
| Net income |  |  |  |  |  | 5,270 |  | | 5,270 |
| Dividends declared |  |  |  |  |  | (0) |  | (0) | | |
| Balance, December 31, 2015 |  | $ 80 |  | $ 3,620 |  | $ 7,270 |  | | $ 10,970 |

\*From the trial balance.

Work backwards

**M4–10.**

Req. 1

**ROMNEY’S MARKETING COMPANY**

**Balance Sheet**

**At December 31, 2015**

|  |  |
| --- | --- |
| **Assets**  Current Assets:  Cash  Accounts receivable  Interest receivable  Prepaid insurance  Total current assets  Notes receivable  Equipment (net of accumulated depreciation, $3,000)  Total Assets  **Liabilities**  Current Liabilities:  Accounts payable  Accrued expenses payable  Income taxes payable  Unearned rent revenue  Total current liabilities  **Stockholders’ Equity**  Common stock ($0.10 par value)  Additional paid-in capital  Retained earnings  Total Stockholders’ Equity  Total Liabilities and Stockholders’ Equity | $ 1,500  2,200  100  1,600  5,400  2,800  12,290  $ 20,490  $ 2,400  3,920  2,700  500  9,520  80  3,620  7,270  10,970  $ 20,490 |

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.

**M4–11.**

|  |  |
| --- | --- |
| **Assets:**  Cash  Accounts receivable  Interest receivable  Prepaid insurance  Notes receivable  Equipment  Accumulated depreciation  Total assets | $ 1,500  2,200  100  1,600  2,800  15,290  (3,000)  $ 20,490 |

Total asset turnover = Sales (or Operating) revenues ÷ Average total assets

= $38,500 ÷ $18,270 = **2.11** ($16,050 + $20,490)/2 = $18,270

**M4–12.**

|  |  |  |
| --- | --- | --- |
| Sales revenue (−R)  Interest revenue (−R)  Rent revenue (−R)  Retained earnings (+SE)  Wages expense (−E)  Depreciation expense (−E)  Utilities expense (−E)  Insurance expense (−E)  Rent expense (−E)  Income tax expense (−E) | 38,500  100  800 | 5,270  19,500  1,800  380  750  9,000  2,700 |

**E4–4.**

Req. 1

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

The amount of expense is computed as follows: $4,800 x 3/24 = $600 used

Adjusting entry:

Insurance expense (+E, −SE) 600

Prepaid insurance (−A) 600

Req. 2

Shipping Supplies is a deferred 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 $13,000

Supplies purchased 75,000

Supplies on hand at end (20,000)

Supplies used $68,000

Adjusting entry:

Shipping supplies expense (+E, −SE) 68,000

Shipping supplies (−A) 68,000

Req. 3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Prepaid Insurance | |  | Insurance Expense | |
| 10/1 4,800 |  |  |  |  |
|  | AJE 600 |  | AJE 600 |  |
| End. 4,200 |  |  | End. 600 |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Shipping Supplies | |  | Shipping Supplies Expense | |
| Beg. 13,000 |  |  |  |  |
| Purch. 75,000 | AJE 68,000 |  | AJE 68,000 |  |
| End. 20,000 |  |  | End. 68,000 |  |

2014 Income statement:

Insurance expense $ 600

Shipping supplies expense $68,000

Req. 4

2014 Balance sheet:

Prepaid insurance $ 4,200

Shipping supplies $20,000

**E4–8.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Balance Sheet** | | | **Income Statement** | | |
| Transaction | Assets | Liabilities | Stockholders’ Equity | Revenues | Expenses | Net  Income |
| *(a)* | NE | +2,700 | –2,700 | NE | +2,700 | –2,700 |
| *(b)* | –675 | NE | –675 | NE | +675 | –675 |
| *(c)* | +1,120 | NE | +1,120 | +1,120 | NE | +1,120 |
| *(d)* | –12,100 | NE | –12,100 | NE | +12,100 | –12,100 |
| *(e)* | –600 | NE | –600 | NE | +600 | –600 |
| *(f)* | NE | –3,200 | +3,200 | +3,200 | NE | +3,200 |
| *(g)* | +800 | NE | +800 | +800 | NE | +800 |

**E4–10.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | **Debit** | | **Credit** | |
|  | **Independent Situations** | **Code** | **Amount** | **Code** | **Amount** |
| *a*. | Accrued wages, unrecorded and unpaid at year-end, $400 (example). | N | 400 | G | 400 |
| *b*. | Service revenue earned but not yet collected at year-end, $600. | C | 600 | L | 600 |
| *c*. | Dividends declared and paid during the year, $900. | K | 900 | A | 900 |
| *d*. | Office supplies on hand during the year, $400; supplies on hand at year-end, $160. | Q | 240 | B | 240 |
| *e*. | Service revenue collected in advance and not yet earned, $800. | A | 800 | I | 800 |
| *f*. | Depreciation expense for the year, $1,000. | O | 1,000 | E | 1,000 |
| *g*. | At year-end, interest on note payable not yet recorded or paid, $220. | P | 220 | H | 220 |
| *h*. | Balance at year-end in Service Revenue account, $56,000. Prepare the closing entry at year-end. | L | 56,000 | K | 56,000 |
| *i*. | Balance at year-end in Interest Expense account, $460. Prepare the closing entry at year-end. | K | 460 | P | 460 |

**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. |
| $154 | + | 1,424 | - | ? | = | $166 |
|  |  |  |  | ? | = | $1,412 paid |

*(c)*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Beg. Bal. | + | dividends declared | - | cash paid | = | End. bal. |
| $127 | + | 634 | - | ? | = | $168 |
|  |  |  |  | ? | = | $593 paid |

*(f)*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Beg. Bal. | + | accrued interest expense | - | cash paid | = | End. bal. |
| $190 | + | ? | - | 759 | = | $191 |
|  |  | ? |  |  | = | $760 accrued |

**P4–7.**

Req. 1

**December 31, 2014, Adjusting Entries:**

(*a*) Supplies expense (+E, −SE) 600

Supplies (−A) 600

(*b*) Insurance expense (+E, −SE) 800

Prepaid insurance (−A) 800

(*c*) Depreciation expense (+E, −SE) 3,700

Accumulated depreciation (+XA, −A) 3,700

(*d*) Wages expense (+E, −SE) 640

Wages payable (+L) 640

(*e*) Income tax expense (+E, −SE) 5,540

Income taxes payable (+L) 5,540

Req. 2

**TUNSTALL, Inc.**

**Income Statement**

**For the Year Ended December 31, 2014**

**Operating Revenue:**

Service revenue $61,360

**Operating Expenses:**

Supplies expense ($900 - $300) 600

Insurance expense 800

Depreciation expense 3,700

Wages expense 640

Remaining expenses (not detailed) 33,360

Total expenses 39,100

**Operating Income** 22,260

Income tax expense 5,540

**Net Income $16,720**

Earnings per share ($16,720 ÷ 5,000 shares) $3.34

**P4–7. (continued)**

**Req. 2 (continued)**

**TUNSTALL, INC.**

**Balance Sheet**

**At December 31, 2014**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Assets** |  |  | **Liabilities and Stockholders’ Equity** | |
| Current Assets: |  |  | Current Liabilities: |  |
| Cash | $42,000 |  | Accounts payable | $ 3,000 |
| Accounts receivable | 11,600 |  | Wages payable | 640 |
| Supplies | 300 |  | Income taxes payable | 5,540 |
| Total current assets | 53,900 |  | Total current liabilities | 9,180 |
| Service trucks | 19,000 |  | Note payable, long term | 17,000 |
| Accumulated depreciation | (12,900) |  | Total liabilities | 26,180 |
|  |  |  |  |  |
| Other assets (not detailed) | 8,300 |  | Stockholders' Equity |  |
|  |  |  | Common stock | 400 |
|  |  |  | Additional paid-in capital | 19,000 |
|  |  |  | Retained earnings\* | 22,720 |
|  |  |  | Total stockholders' equity | 42,120 |
| **Total assets** | **$68,300** |  | **Total liabilities and stockholders' equity** | **$68,300** |

\*Unadjusted balance, $6,000 + Net income, $16,720 = Ending balance, $22,720.

Req. 3

**December 31, 2014, Closing Entry:**

Service revenue (−R) 61,360

Retained earnings (+SE) 16,720

Supplies expense (−E) 600

Insurance expense (−E) 800

Depreciation expense (−E) 3,700

Wages expense (−E) 640

Remaining expenses (not detailed) (−E) 33,360

Income tax expense (−E) 5,540