## THE OPERATING CYCLE and REVENUE RECOGNITION

## I. Review of Key Concepts and Terms:

A. The operating cycle of a merchandising (retail) business is the average period of time, normally measured in months, that a business takes to:

1. spend cash for assets (purchase inventory);
2. sell the inventory for cash or receivables and;
3. convert the receivables back into cash.
4. pay for inventory

Recall that the accounting cycle is the longer of the accounting cycle or one year. The operating cycle of a service business (Doctor, lawyer, CPA etc) is the average period of time to take on a client/case and receive payment for services rendered.
B. The issue of revenue recognition deals with how the business should recognize (record) revenue for reporting purposes. Revenue should be recognized when:

1. the earnings process is complete and
2. an exchange has taken place or services have been completed

## C. The matching principle and revenue recognition

1. Recall from Chapter Two that the matching principle states that revenues and expenses should be recognized (recorded) in the periods in which they are earned/incurred. This means that payments received in the current accounting period for goods or services that will not be rendered until subsequent periods cannot be recorded as revenues in the current accounting period. Likewise, only those payments for assets that will be consumed in the current accounting period can be considered expenses. (Review the definitions of revenues and expenses in Handout 1A. To illustrate these points consider the following examples. Each example differs in terms of when the payment is made.

Note:The key issue in each of the following examples is the timing of revenue recognition. Cash received as payment for goods or services must be earned before revenue can be recognized. The following examples illustrate the revenue recognition process and the timing of revenue recognition.
a. Services rendered and payment received in the current period:

Bill Teague, an attorney, takes a case and settles the matter in the current period. The client is billed $\$ 1,000$ and pays $\$ 400$ on account. The earnings process is complete and an exchange has taken place (Teague has provided legal services and been paid for them)
(asset)
(asset)
Cash. $\qquad$400
(asset) Accounts receivable..... 600
(revenue) Legal service revenue.....
1,000
b. Service is prepaid

On December 15, 19x1 Bill Teague, an attorney, takes a case that he estimates will require 40 hours of legal work to be billed at $\$ 200$ per hour. Teague request and receives a retainer (prepayment of legal fees) of $\$ 2,000$. Teague uses a calendar year accounting cycle and performs no work on the case in the present year.

| (asset) | Cash ............... | 2,000 |
| :--- | :---: | ---: |
| (liability) | Retainer revenue............. | 2,000 |

Note: The earnings process is not complete, and no exchange has taken place. The fees have been prepaid, but Teague has performed no services for which compensation has been earned, so a liability (debt) is recorded on Teague's books. Note that Retainer revenue is unearned income. Because it is unearned, it is a liability (debt) to the client until services are rendered. The process of Teague rendering services to the client converts the liability from a debt (owed the client for prepayment of fees) to revenue from services rendered.
c. Service is prepaid and partially earned in the current period.

Assume the facts described in case (b) above except that Teague performed 5 hours of legal work prior to December 31, 19x1 (the end of the accounting cycle):

| (asset) | Cash.................................... | 2,000 |
| :--- | ---: | ---: |
| (liability) | Retainer Revenue (2,000-1,000)..... |  |
|  | 1,000 |  |

(revenue) Legal Service Revenue (5 @ \$200)..... 1,000

To the extent that the revenue as been earned it should be recognized in the current period, to the extent that it has not been earned it's recognition as revenue must be put off until the earnings process is complete and recorded as a liability in the meantime.
d. Expenses incurred and paid for in current period.

Assume the same facts as in case (c) above except that Teague also pays $\$ 500$ for investigative services and receives the completed report prior to the end of the period.
(asset) Cash................................. 2,000
(expense) Investigation expenses ... 500

| (liability) | Retainer revenue (2,000-1,000)... | 1,000 |
| :--- | :---: | :---: |
| (revenue) | Legal service revenue............... | 1,000 |
| (asset) | Cash (pay for investigation)..... | 500 |

The cost of the investigation is expensed (charged against revenues) in the current period because the utility it rendered (the report) was utilized in the present period. That is to say that the knowledge rendered by the investigation was made available in the present period.

## e. Prepaid expenses

Assume the same facts described in case (d) above except that Teague also contracts for computerized legal research to be conducted January 2, 19x2.
The estimated charge is $\$ 300$.

| (asset) | Cash................................... | 2,000 |  |  |
| :--- | :--- | ---: | :--- | ---: |
| (expense) | Investigation expenses ............. | 500 |  |  |
| (asset) | Research expenses...................... | 300 |  |  |
| (liability) | Retainer revenue $(2,000-1,000) .$. | 1,000 |  |  |
| (revenue) | Legal service revenue...... | 1,000 |  |  |
| (asset) | Cash........................... | 500 |  |  |
| (liability) | Accounts payable......... | 300 |  |  |

To the extent that research expenses are prepaid they represent an asset. Recall that expenses are only charged against revenues in the current period if the benefits they create are utilized in that period.

## D. Differentiating between Costs, Assets, Expenses and Mixed Accounts.

1. For financial accounting purposes (as opposed to economic purposes) the Cost of anything is the historical cost amount, expressed in dollars that must be given up in order to attain its use. Historical cost is used because it is objective (verifiable). It should be noted that only at the time of purchase (because the transaction is assumed to be at "arms-length) does historical cost bare any relationship to market value.
a. If the item attained for a certain cost is going to benefit the business in the current period only, the item attained is considered an expense.
b. If the item attained for a certain cost is going to benefit the business both in the current and future periods, the item attained is considered an asset. As the asset is utilized by the business its utility is diminished and it is expensed, in increments to the periods over which it will provide benefit. The process of assigning the utility of assets to different accounting periods is called depreciation.
2. A Mixed Account is an account that contains both a real (balance sheet) and nominal (income statement) component. During the adjusting process, these two components (real and nominal) are separated and placed on the appropriate statement (balance sheet or income statement). For example, prior to adjusting the accounts inventory has a real component (that portion on hand at the end of the period) and a nominal component (that portion that has been sold during the period and must be charged against revenues). In the adjusting process inventory will be reduced (credited) on the balance sheet and expensed (debited) on the income statement.

## E. Depreciation

1. Depreciation is a method of allocating the historical cost (less the salvage value) of an asset to the periods that asset provides benefit.
a. Salvage value is the residual or scrap value an asset will have at the end of its useful (economic) life. The salvage value is not depreciated.
b. Straight line depreciation allocates an equal portion of historical cost to each period the asset will benefit. The amount of straight line depreciation allocated in a given period is computed as follows:

$$
\text { Depreciation Expense = Cost }- \text { Salvage/Life }
$$

c. The journal entry to record depreciation is:
(expense) Depreciation expense........ xxxx
(contra asset)* Accumulated depreciation........ ${ }^{*}$ xxx

* a contra (offset) account is any account whose balance is deducted (offset) from the account to which it relates. Contra accounts can only exist in relationship with a control account. Contra accounts are utilized to allow the control account to remain at historical cost in the ledger for reporting purposes while the net value of the control account offset by the contra account reflects the historical cost of the asset after allocation of depreciation expense to the present and past periods.

2. A common misconception is that depreciation sets funds aside for asset replacement; depreciation does not set any funds aside to replace the asset in the future; it is an allocation scheme only. It has no relationship with the market value of the asset.

## F. The accounting process revisited:

1. The accounting process as described in Chapter Two of the Study guide is presented below:
a. transactions are recorded in the general journal;

The purpose of the journal is to provide a complete historical record of the transaction in a single location;
b. the amounts recorded in the journal are posted to (recorded in) the appropriate ledger account;

The purpose of the ledger is to provide a complete historical record of each account.
c. a pre-closing trial balance is taken to assure that the accounting equation is in balance;
d. the nominal (temporary or income statement accounts) are closed to the expense and revenue summary and any otheradjustments necessary to correct
the accounts to the end of year balances are made to the ledger;

1. This procedure is known and the adjusting and closing process.
2. The purpose of the adjusting process is to allow an accurate measurement of net income (revenues less expenses) and financial position on the accrual basis in order to conform to the matching principle.
3. Adjusting entries always affect at least one real and at least one nominal account.
4. The closing process involves closing all the nominal accounts to the expense and revenue summary. The balance in the expense and revenue summary is net income and is closed to retained earnings.
e. Adjustments are posted to the ledger
f. a post-closing trial balance is taken to assure that the accounts remain in balance after all adjustments to real and nominal accounts and closing of nominal accounts;
g. the financial statements are produced using the numbers in the post closing trial balance; the balance sheet (real) accounts are reported on the balance sheet and the income statement (nominal or expense and revenue) accounts are reported on the income statement. The statement of cash flows reconciles the changes that have occurred in each of the ledger accounts and explains the sources and uses of cash for the accounting period.

## Key Concept Comprehension

1. The amount of the use of each fixed asset is accumulated in a separate account which is called a $\qquad$ account.
2. The recognition of an accrued expense results in credit entry to a $\qquad$ .
3. $\qquad$ is a system of allocating the cost of fixed assets to operations over their useful life.
4. Under a $\qquad$ based system of accounting, revenues are only recognized when cash is received.
5. $\qquad$ are entries required at the end of an accounting period to correct certain account balances.
6. The estimated scrap value of a fixed asset is referred to as the $\qquad$ .
7. The process of identifying all expenses related to the earning of revenue for a particular accounting period is called the $\qquad$ principle.
8. When insurance premiums are paid on a two-year policy, a debit is made to $\qquad$ for the unexpired portion.
9. Cash received for services to be performed in the next accounting period is credited to $\qquad$ .
10. $\qquad$ costs, such as prepaid insurance are expenses paid in the current period for the benefit of future accounting periods.
11. A $\qquad$ account is an account that contains both balance sheet and income statement components.
12. After the adjusting entries are posted to the general ledger, the account balances are checked for equality with the $\qquad$ .
13. $\qquad$ is a contra-account that shows the cumulative amount of the cost of depreciable fixed assets written off as expenses since the assets were acquired.
14. List the seven steps in the accounting cycle.
a.
b.
c.
d.
e.
f.
g.

## TRUE OR FALSE

1. All cash received in a month does not represent revenues for that month.
2. Adjusting entries are not recorded in the general journal.
3. All adjusted balances in the expense accounts represent costs incurred to earn the revenue for the period.
4. Depreciation expense represents a cost allocation of the purchase price of fixed assets, such as buildings, over one or more accounting periods that benefit from the use of these assets.
5. Cash received for services to be performed in a future period is recorded as service revenue earned.
6. A mixed balance sheet account contains both asset and liability entries.
7. Prepaid rent is a payment of rent for the receipt of rental service during the current period.
8. Journal entries are always prepared after the posting to the ledger accounts.
9. An adjusted trial balance is taken to prove the equality of debits and credits after the posting of the adjusting entries.
10. Supplies used in the operation of the business are shown as an expense on the income statement.
11. Services performed for customers who have not paid by the balance sheet date are referred to as accounts payable.
12. To accrue means to increase over time.
13. Expenses decrease net income.
14. Salvage value represents an estimate of the amount that will be received for fixed assets at the end of their useful life.

## Problem 1 (Preparation of adjusting entries)

The following information for adjustments was available on December 31, 19X3, at the end of the annual accounting period of a firm that adjusts its accounts each December 31.

Required: 1. Prepare an adjusting journal entry for each unit of information that follows:
a. An examination of the insurance policies showed the following:

| Policy No. | Date of Purchase | Life of Policy Cost |  |
| :---: | :---: | :---: | :---: |
| A-143567 | Jun. 1 of previous year | 1 year | \$144 |
| B-586849 | Sep. 1 of current year | 3 years | 288 |
| C-4D85 | 7 May 1 of current year | 2 years | 360 |

All payments were debited to Prepaid Insurance.
b. The Office Supplies account had a $\$ 44$ balance at the beginning of the year; \$520-worth of office supplies were purchased during the year; and an inventory of unused supplies on hand at the year-end totalled $\$ 76$.
c. The company owns a building that it completed and occupied for the first time on May 1 of the current year. The building cost $\$ 154,000$, has an estimated $40-$ year life, and a $\$ 10,000$ salvage value at the end of that time.
d. The company occupies most of the space in its building but it also rents space to a tenant. The tenant agreed beginning on May 1 to rent a small amount of space at $\$ 150$ per month, and on that date he paid six months rent in advance. The amount paid was credited to the Unearned Rent account.
e. The tenant of (d), above has not paid since the payment in May.
f. The company borrowed $\$ 10,000$ on September 1, 19X3, at 12 percent. Interest is payable when the loan is repaid on January 31, 19X4.

This next problem is included to show the importance of adjusting entries. Note how the net income figure changes with the recording of the adjusting entries

Problem 2 (The effect of adjusting entries on net income)
Murray Inc.'s income statement showed a net income of $\$ 2,640$ for the year ended December 31, 19X2. However, the following adjusting entries were not recorded:
a. Supplies of $\$ 140$ were on hand on January 2, 19X2; $\$ 415$ of supplies were purchased during the year; and $\$ 185$ of supplies were on hand on December 31, 19X2. All purchases were posted to the Supplies account.
b. Insurance Expense account had a balance of $\$ 1,280$ on December 31, 19X2. Data revealed that $\$ 470$ of this insurance was unexpired on the balance sheet date. All insurance policies are posted to the Insurance Expense account.
c. Depreciation expense for the year on the office equipment was $\$ 740$ and was not recorded
d. Customer advances of $\$ 1,100$ had been posted to the Revenue Earned account in error. The work will be done in March 19X3.

Required: Prepare the adjusting entries and then compute the adjusted net income or loss of Murray Inc. for the year ended December 31, 19X2.

The third problem is an example of the recording of the business transactions in the general journal to the adjusted trial balance.

Mayfair Moving Co. Inc. was incorporated February 1, 19X1 and the following transactions occurred during February.
a. Issued common shares for $\$ 30,000$. b. Paid CRKO Radio Station for two months of radio advertising, $\$ 1,800$.
c. Paid the first three months rent, $\$ 1,350$, which was posted to the Prepaid Rent account.
d. Paid cash for office supplies, $\$ 1,240$ to be used over the next several months.
e. Paid February salaries, \$7,200.
f. Purchased office equipment costing $\$ 2,700$ for $\$ 700$ cash and the balance on account. This equipment is expected to have a 5 -year useful life and a salvage value of \$300.
g. Purchased a moving van for $\$ 18,500$, paying $\$ 3,000$ in cash and the balance with the proceeds of a bank loan. This moving van is expected to have a 3 -year useful life and a salvage value of $\$ 4,100$.
h. Paid \$2,880 premium for a two-year insurance policy on the trucks.
i. Paid gas and oil bills for February, $\$ 800$.
j. Paid $\$ 1,000$ toward the accounts owed.
k. Billed customers $\$ 21,500$ for moving services, of which $\$ 9,000$ was collected during the month.

1. Received $\$ 800$ from customers for work to be done in the future
m. Paid the February utility bill $\$ 300$.

## Required:

1. Journalize the February transactions.
2. Post to the general ledger using T-accounts.
3. Prepare a trial balance of the general ledger at February 28, 19 X 1.
4. Prepare the adjusting entries for the month of February for the following:
a. Depreciation on the office equipment.
b. Depreciation on the moving van.
c. Office supplies on hand at the end of the month totalled $\$ 120$.
d. Recognize $\$ 200$ of unearned revenue, which was earned in February. e. Recognize insurance expense for the month.
f. Recognize the rent expense for the month.
g. Recognize the advertising expense for the month.
5. Post adjusting entries to the general ledger T-accounts.
6. Prepare adjusted trial balance as at February 28, 19X1.

Problem 4 (Preparing the financial statements)
The following trial balance is from the general ledger of Goodman Paving Co. Inc. at May 31, 19X2 before the year-end adjusting entries have been prepared.

| Account Title | Debit |  | Credit |  | Goodman Paving Co. Inc. TRIAL BALANCE May 31, 19X2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |
| Cash | \$ | 9,140 |  |  |  |  |  |
| Accounts Receivable |  | 2,600 |  |  |  |
| Prepaid Insurance |  | 1,280 |  |  |  |
| Supplies |  | 1,400 |  |  |  |
| Equipment |  | 2,700 |  |  |  |
| Truck |  | 17,900 |  |  |  |
| Accounts Payable |  |  | \$ | 1,470 |  |
| Loans Payable |  |  |  | 4,000 |  |
| Unearned Revenue |  |  |  | 1,600 |  |
| Common Stock |  |  |  | 15,000 |  |
| Paving Revenue |  |  |  | 56,000 |  |
| Advertising Expense |  | 2,500 |  |  |  |
| Interest Expense |  | 1,300 |  |  |  |
| Miscellaneous Expense |  | 2,750 |  |  |  |
| Rent Expense |  | 4,400 |  |  |  |
| Salaries Expense |  | 32,100 |  |  |  |
| Totals | \$ | 78,070 | \$ | 78,070 |  |

## Supplementary information concerning the adjustments to be made are included below:

a. Prepaid insurance consists of a premium for a comprehensive two-year insurance policy on the company's truck and equipment effective June 1, 19X1.
b. The company's monthly rent is $\$ 400$ and has not been paid for May.
c. A physical inventory taken May 31, 19X2 showed $\$ 280$-worth of unused supplies.
d. The truck was purchased on June 1, 19X1; the company estimates it to have a useful life of 5 years and a salvage value of $\$ 900$. It is the company's policy to depreciate all assets in the year of purchase for the period that benefits from its use.
e. The equipment was purchased on July 2, 19X1 and has an estimated useful life of 3 years and no salvage value.
f. During the year the company completed work worth $\$ 750$, for which payment was received in March 19X2. The payment for this work was credited to Unearned Revenue.
g. The company collected $\$ 2,000$ from customers for work to be completed in July 19X2. The bookkeeper incorrectly credited this payment to Paving Revenue.

## Required:

1. Prepare general ledger accounts for all the accounts in the trial balance using the T-account form.
2. Prepare adjusting entries for the year ended May 31, 19X2.
3. Post adjusting entries to the general ledger.
4. Prepare an adjusted trial balance.
5. Prepare financial statements for the year ended May 31, 19X2 from the data listed in the adjusted trial balance.

Problem 5 Adjusting entries
Brown Financial Services Inc. was incorporated February 1, 19X1. The following selected accounts and balances have been taken from the general ledger trial balance at September 30, 19X1 before the monthly adjusting entries have been prepared. All adjusting entries were made to the end of August.

Prepaid Advertising
Prepaid Insurance
Prepaid Rent
Office Supplies
Postage Supplies
Office Furniture
Office Equipment
Accumulated Depreciation-Office Furniture
Accumulated Depreciation-Office Equipment
Unearned Revenue
\$ 1,000
1,500
3,150
510
1,150
3,820
6,700
(156)
$(2,800)$

Additional information:
a. The premium on the 2-year insurance policy was $\$ 1,800$.
b. Annual rent for the business is $\$ 5,400$.
c. Office furniture has an estimated useful life of 10 years and a salvage value of $\$ 700$.
d. Annual advertising costs are $\$ 1,500$.
e. The company received $\$ 1,400$ from customers for work to be completed in November. The bookkeeper incorrectly credited this payment to Revenue.
f. Work paid for in August and completed in September was $\$ 2,300$; credit for the payment was to Unearned Revenue.
g. A physical inventory on September 30, 19X1 showed $\$ 280$ unused office supplies and $\$ 900$ unused postage supplies.
h. Office equipment has an estimated useful life of 5 years and a salvage value of $\$ 1,000$.

Required: Answer each of the following questions.

1. In what month was the premium on the insurance policy set up as prepaid insurance?
2. What was the original entry made by the bookkeeper in (e), above?
3. In what month was the payment for advertising set up as prepaid advertising?
4. In what month was the payment for the rent set up as prepaid rent?
5. In what month did the company start charging depreciation expense for office equipment? for office furniture?
6. Prepare and journalize adjusting entries for September from the information given.

Problem 6 Adjusting entries; Preparation of Financial Statements
The following accounts and balances have been taken from the general ledger trial balance of Neufeld Repairs Inc. as at December 31, 19X1 after its first year of operation but before adjusting entries have been made.

|  | Debit | (Credit) |
| :--- | :---: | ---: |
| Accounts Payable |  | $(3,100)$ |
| Accounts Receivable | 1,650 |  |
| Advertising Expense |  | $(7,000)$ |
| Bank Loan |  |  |
| Cash | 8,400 | $(23,000)$ |
| Common Stock | 2,750 |  |
| Equipment | 840 |  |
| Furniture and Fixtures | 930 |  |
| Insurance Expense | 1,395 |  |
| Miscellaneous Expense | 7,200 |  |
| Office Supplies Used |  |  |
| Prepaid Rent | 32,500 |  |
| Repair Revenue | 35,005 |  |
| Repair Supplies Used | 18,100 |  |
| Salaries Expense | 2,400 |  |
| Truck |  |  |

Additional information:
a. The company billed and included in Revenue $\$ 2,800$ for work to be completed in January 19X2.
b. On January 2, 19X1 Neufeld Repairs Inc. was required to pay the first year's rent in advance and debited the amount to Prepaid Rent when the payment was made.
c. A physical inventory taken December 31 showed: unused office supplies on hand of $\$ 215$, and unused repair supplies on hand of $\$ 1,950$. Purchases were posted to the expense account.
d. The insurance premium paid May 1, 19X1 is for a one-year policy.
e. Summary of Assets:

| Asset | Estimated Useful <br> Life | Salvage <br> Value | Date <br> Acquired |
| :--- | :--- | :---: | :--- |
| Furniture and Fixtures | 10 years | $\$ 350$ | Mar. 1, 19X1 |
| Equipment | 5 years | 600 | Jan. 2, 19X1 |
| Trucks | 3 years | 820 | Feb. 1, 19X1 |

f. The advertising expense includes $\$ 600$ paid in October for television and radio ads to begin in January 19 X 2 .
g. Income tax expense for the year ended December 31, 19X1 is $\$ 4,300$.

## Required:

1. Prepare general ledger accounts (using T-accounts) for each account listed in the alphabetical list in the problem.
2. Prepare and journalize the December adjusting entries.
3. Post adjusting entries to the general ledger accounts.
4. Prepare an adjusted trial balance.

## SOLUTIONS

Key Concept Comprehension

1. contra
2. liability account
3. Depreciation
4. cash
5. Adjusting entries
6. salvage value
7. matching
8. prepaid insurance
9. unearned revenue
10. Deferred
11. mixed balance sheet
12. adjusted trial balance
13. accumulated depreciation
14. a. Transactions are first analyzed and entered in the general journal.
b. The entries are then posted in the general ledger.
c. The equality of the debits and credits is then established by a pre-closing trial balance.
d. The account balances are analyzed and adjusting entries prepared.
e. The adjusting entries are posted in the general ledger.
f. The equality of debits and credits is then established by the adjusted trial balance.
g. The summarized financial information is communicated to interested parties through the financial statements.

## True or False Questions

1. T.
2. F Adjusting entries are always entered first in the general journal and then posted in the general ledger.
3. T
4. T
5. F
6. F
7. F
8. T
9. T
10. T
11. T

14 T
8. F Journal entries are always prepared before the posting to ledger account.
11. F Services performed for customers who have not paid are referred to on the balance sheet as accounts receivable.

Cash received for services to be performed in a future period is recorded in a liability account, i.e., Unearned Revenue.
A mixed account contains both real (balance sheet) and nominal (income statement) amounts.
Prepaid rent is a payment of rent before receipt of the rental service.

Solution Problem 1 (Preparing adjusting entries)
GENERAL JOURNAL

| Journal $\quad$ Description | Debit | Credit |
| :--- | :--- | :---: | ---: |
| a.Insurance Expense <br> Prepaid Insurance | 212 |  |
|  |  | 212 |
| To record insurance expense for the |  |  |
| year ended December 31, 19X3. |  |  |

```
A-143567 \$144/12 months = \$12 per month.
During the current year the policy will
be in effect from January I to June 1,
which is 5 months or \(\$ 60\)
    B-586849 \$288/36 months = \$8 per month.
    During the current year the policy will
    be in effect from September 1 to December
    31 , which is 4 months or \(\$ 32\)
    C-4D857 \$360/24 months = \$15 per month.
    During the current year the policy will
    be in effect from May 1 to December 31,
    which is 8 months or \(\$ 120\)
    Expense for the year \(\$ 60+\$ 32+\$ 120=\$ 212\)
```

* b. Office Supplies Used

Office Supplies
To record office supplies used during the year
c. Depreciation Expense-Building

Accumulated Depreciation-Building
To record depreciation expense on the building for the period in which the company occupied it.

Building cost \$154,000 less salvage value $\$ 10,000=\$ 144,000$ to be depreciated over the 40 years expected life $=\$ 3,600$ per year, or $\$ 3,600 / 12$ months $=\$ 300$. The company occupied the building from May 1 to December 31 or 8 months x $\$ 300=\$ 2,400$
d. Unearned Rent Rental Revenue
To recognize rental revenue earned during the year ended December 31.
$\$ 150 /$ month $\times 6$ months $=\$ 900$
e. Rent Receivable

300
Rental Revenue
o record rent receivable for the months of
November and December.
$\$ 150 \times 2$ months $=\$ 300$
f. Interest Expense 400 Interest Payable 400

To record interest expense on the $\$ 10,000$
loan for the period from September 1 to December 31.

Loan $\$ 10,000 \times 12 \%=\$ 1,200 / 12$ months $=$ $\$ 100$ per month $\$ 100 \times 4$ months $=\$ 400$

Solution Problem 2 (Part 1)

d. Revenue Earned 1,100

Unearned Revenue
Unearned Revenue 1,100
Adjusted net income or loss of Murray Inc. is $\$ 900$ net income computed as follows:

| Net Income Reported | $\$$ | 2,640 |
| :--- | :---: | :---: |
| Supplies Used |  | $(370)$ |
| Insurance Unexpired | 470 |  |
| Depreciation Expense-Office Equipment |  | $(740)$ |
| Unearned Revenue |  | $\frac{(1,100)}{900}$ |

## SOLUTION TO PROBLEM 3

| Journal | Description | Debit | Credit |
| :--- | :--- | ---: | ---: |
| a. | Cash | 30,000 |  |
|  | Common Stock |  | 30,000 |

To record investment in business.
b. Prepaid Advertising

1,800
Cash 1,800

To record the payment for two months
c. Prepaid Rent 1,350

Cash
To record payment of three months rent.
d. Office Supplies

1,240
Cash
1,240
To record purchase of office supplies.
e. Salaries Expense 7,200 Cash 7,200
To record payment of February salaries.
f. Office Equipment
2,700

Cash
700
Accounts Payable
2,000
To record purchases of office equipment $\$ 700$ cash and $\$ 2,000$ on account.
g. Moving Vans

18,500
Cash 3,000
Bank Loan 15,500
To record purchase of a moving van with $\$ 3,000$ cash and the proceeds of a bank loan.
h. Prepaid Insurance

2,880
Cash 2,880
To record purchase of a two-year insurance policy on moving van.
i. Maintenance-Gas and Oil Expense 800 Cash
To record February payment.
j Accounts Payable 1,000 Cash 1,000
To record payment on accounts owed.

| k. | 9,000 |  |
| :--- | ---: | ---: |
| Accounts Receivable | 12,500 |  |
| $\quad$ Moving Revenue |  | 21,500 |
|  |  |  |
|  | To record revenue on account and for cash |  |

1. Cash

Unearned moving revenue
To record prepayment for March
m. Utilities Expense

Cash
Sollution Problem 3 continued: (Parts 2 and 5)

| Cash |
| :--- |
| No. 101 <br> (a) 30,000 <br> (k) 9,000 <br> (l) 800(b) 1,800 <br>  <br>  <br>  <br>  <br>  <br>  <br> (c) 1,350 <br> (d) 1,240 <br> (e) 7,200 <br> (f) 700 <br> (g) 3,000 <br> (h) 2,880 <br> (i) 800 <br> (i) 1,000 <br> (m) 300 |


| Accounts |
| :--- |
| $\begin{array}{l}\text { Receivable }\end{array}$ |
| (k) 12,500 |
| Bal. 12,500 |

Prepaid

| Advertising | No. 160 |
| :--- | :--- |
| (b) 1,800 | (4g) 900 |
| Bal. 900 |  |

Prepaid

| Insurance | No. 161 |
| :--- | ---: |
| (g) 2,880 | (4e) 120 |
| Bal. 2,760 |  |

Prepaid
$\begin{aligned} & \text { Rent }\end{aligned}$

| (c) 1,350 | No. 162 |
| :--- | :--- |
| Bal. 900 | (4f) 450 |

Office

| Supplies | No. 170 |
| :--- | ---: |
| (d) 1,240 | (4c) 1,120 |
| Bal. 120 |  |

Office
Equipment No. 183
(f) 2,700

Bal. 2,700
Moving
Vans No. 184

| (g) 18,500 |  |
| :--- | :--- |
| Bal. 18,500 |  |


| Accumulated Depreciation-Office |
| :--- |
| Equipment | | No. 193 |
| :--- |

Maintenance-
Gas and Oil
Gas and Oi



## Rent

| Expense |  | No. 654 |
| :--- | :--- | :--- |
| $(4 \mathrm{f})$ | 450 |  |
| Bal. | 450 |  |

300


Moving
Revenue No. 470
(k) 21,500
, 500

| 200 |  |
| :---: | :--- |
| Bal. 21,700 |  |



Depreciation Expense-

Insurance

| Expense | No. 631 |  |
| :--- | :---: | :--- |
| $(4 \mathrm{e})$ |  |  |
| Bal. | 120 |  |



Solution Problem 3 (Part 3)

Mayfair Moving Co. Inc TRIAL BALANCE February 28, 19X1

Mayfair Moving Co. Inc.
GENERAL JOURNAL

Journal Description
4a. Depreciation Expense-Office Equipment Accumulated Deprec.-Office Equip.
To record depreciation expense on office equipment for February. Cost \$2,700 less $\$ 300$ salvage value $=\$ 2,400 / 5$ years $=\$ 480$
per year/ 12 months $=\$ 40$
per month
4b. Depreciation Expense-Moving Vans Accumulated Depreciation-Moving Vans
To record depreciation expense on moving vans for month of February. Cost \$18,500 less $\$ 4,100$ salvage value $=\$ 14,400 / 3$ $\$ 4,800$ per year $/ 12$ months $=\$ 400 /$ month.

4c. Office Supplies Used
1,120 Office Supplies
To record office supplies used during
February. Purchased and available for use
$\$ 1,240$ less $\$ 120$ on hand at the end of the month $=\$ 1,120$ used.

4d. Unearned Moving Revenue Moving Revenue

200

To recognize $\$ 200$ moving revenue earned.
Payment was credited to unearned
revenue when received.
4e. Insurance Expense Prepaid Insurance
To record insurance expense for the month
of February. $\$ 2,880 / 2$ years $=\$ 1,440$ per
year, $\$ 1,440 / 12$ months $=\$ 120$ per month.
4f. Rent Expense
450
Prepaid Rent
To record rent expense for the month of
February. \$1,350 payment/3 months = 450 per month.

4g. Advertising Expense
Prepaid Advertising
900
To record advertising expense for the month
of February. $\$ 1,800$ payment/2 months = \$900

Solution Problem 3 (Part 6)
Mayfair Moving Co. Inc.
ADJUSTED TRIAL BALANCE
February 28, 19X1

| Account Title | Debit | Credit |
| :---: | :---: | :---: |
| Cash | \$ 19,530 |  |
| Accounts Receivable | 12,500 |  |
| Prepaid Advertising | 900 |  |
| Prepaid Insurance | 2,760 |  |
| Prepaid Rent | 900 |  |
| Office Supplies | 120 |  |
| Office Equipment | 2,700 |  |
| Moving Vans | 18,500 |  |
| Accumulated Depreciation-Office Equipment |  | \$ 40 |
| Accumulated Depreciation-Moving Vans |  | 400 |
| Bank Loan |  | 15,500 |
| Accounts Payable |  | 1,000 |
| Unearned Moving Revenue |  | 600 |
| Common Stock |  | 30,000 |
| Moving Revenue |  | 21,700 |
| Advertising Expense | 900 |  |
| Depreciation Expense-Office Equipment | 40 |  |
| Depreciation Expense-Moving Vans | 400 |  |
| Insurance Expense | 120 |  |
| Maintenance_Gas and Oil Expense | 800 |  |
| Office Supplies Used | 1,120 |  |
| Rent Expense | 450 |  |
| Salaries Expense | 7,200 |  |
| Utilities Expense | 300 |  |
| Totals | \$ 69,240 | \$ 69,240 |

SOLUTION TO PROBLEM 4 (Parts 1 and 3)
Goodman Paving Co. Inc.
GENERAL LEDGER

| Cash | No. 101 |
| :--- | :--- |
| Bal. 9,140 | (g) 2,000 |

Accounts

| Receivable | No. 110 |
| :--- | :--- |
| Bal. 2,600 |  |
| Prepaid |  |
| Insurance | No. 161 |
| Bal. 1,280 | (a) 640 |
| Bal. 640 |  |


| Supplies |  | No. 173 |
| :--- | :---: | :---: |
| Bal. 1,400 |  |  |
| Bal. 280 |  |  |


| Equipment | No. 183 |
| :--- | :--- |
| Bal. 2,700 |  |


| Truck | No. 184 |
| :--- | :--- |
| Bal. 17,900 |  |

Accumulated Depreciation-


Accumulated Depreciation-

| Truck | No. 194 |
| :--- | :--- |
|  | (d) 3,400 |
|  | Bal. 3,400 |

Accounts
Payable No. 210
Bal. 1,470


| Advertising <br> Expense |
| :--- |
| Bal. 2,500 |


| Depreciation Expense- |
| :--- |
| Equipment |


| (e) 825 |  |
| :--- | :--- |
| Bal. 825 |  | No. 62


| Loans <br> Loayable | No. 214 |
| :--- | ---: |
| Bal. 4,000 |  |
| Salaries |  |
| Expense |  |$\quad$| Bal. 32,100 |
| :--- |$\quad$ No. 656

Insurance

| Expense | No. 631 |
| :---: | :---: |
| (a) 640 |  |
| Bal. 640 |  |
|  |  |

Interest
Expense No. 632
Bal. 1,300
Miscellaneous
Expense No. 642
Bal. 2,750
No. 642

Rent
Expense No. 654
Bal. 4,400
(b) 400

Bal. 4,800

## Solution Problem 4 (Part 2)

Goodman Paving Co. Inc GENERAL JOURNAL

Journal Description
Debit
Credit
a. Insurance Expense

640
Prepaid Insurance
640
To record insurance expense for the year.
$\$ 1,280 / 2$ years $=\$ 640 /$ year
b. Rent Expense 400 Rent Payable
record rent expense for the month of May.
c. Supplies Used 1,120 Supplies
To record supplies used during the year.
\$ 1,400-\$280 = \$ 1,120
d. Depreciation Expense-Truck 3,400
Accumulated Depreciation-Truck 3,400

To record depreciation expense for the year.
Truck cost $\$ 17,900-\$ 900$ salvage value $=$
$\$ 17,000$ over 5 years $=\$ 3,400$ per year.
e. Depreciation Expense-Equipment 825

Accumulated Depreciation-Equipment
To record depreciation expense for eleven
months. Cost $\$ 2,700 / 3$ years $=\$ 900$ per year
$/ 12$ months $=\$ 75 /$ month $\times 11$ months $=\$ 825$.
f. Unearned Revenue 750

Paving Revenue
record recognition of revenue on completion of services.
g. Paving Revenue 2,000
Unearned Revenue 2,000

To correct the entry for cash received in advance of services rendered, originally credited to Revenue in error.

| Solution Problem 4 (Part 4) |  |  | $\begin{array}{r} \mathrm{Gc} \\ \text { ADJU } \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Account Title |  | Debit |  | Credit |
| Cash | \$ | 9,140 |  |  |
| Accounts Receivable |  | 2,600 |  |  |
| Prepaid Insurance |  | 640 |  |  |
| Supplies |  |  |  |  |
| Equipment |  | 2,700 |  |  |
| Truck |  | 17,900 |  |  |
| Accumulated Depreciation-Equipment |  |  | \$ | 825 |
| Accumulated Depreciation-Truck |  |  |  | 3,400 |
| Accounts Payable |  |  |  | 1,470 |
| Loans Payable |  |  |  | 4,000 |
| Rent Payable |  |  |  | 400 |
| Unearned Revenue |  |  |  | 2,850 |
| Common Stock |  |  |  |  |
| Paving Revenue |  |  |  | 54,750 |
| Advertising Expense |  | 2,500 |  |  |
| Depreciation Expense-Equipment |  | 825 |  |  |
| Depreciation Expense-Truck |  | 3,400 |  |  |
| Insurance Expense |  |  |  |  |
| Interest Expense |  | 1,300 |  |  |
| Miscellaneous Expense |  | 2,750 |  |  |
| Rent Expense |  | 4,800 |  |  |
| Salaries Expense |  | 32,100 |  |  |
| Supplies Used |  | 1,120 |  |  |
| Totals | \$ | 82,695 | \$ | 82,695 |

Solution Problem 4 (Part 5)
Goodman Paving Co. Inc
INCOME STATEMENT
For the Year Ended May 31, 19X2

| Paving Revenue |  |
| :--- | ---: | ---: |
|  |  |
| EXPENSES |  |
| Advertising Expense | $\$, 500$ |
| Depreciation Expense-Equipment | 825 |
| Depreciation Expense-Truck | 3,400 |
| Insurance Expense | 640 |
| Interest Expense | 1,300 |
| Miscellaneous Expense | 2,750 |
| Rent Expense | 4,800 |
| Salaries Expense | 32,100 |
| Supplies Used | 1,120 |
| $\quad$ Total Expenses | $\underline{49,435}$ |
| $\quad$ Net Income | $\underline{5,315}$ |

\$ 54,750

Solution Problem 4 (Part 6)
Goodman Paving Co. Inc
BALANCE SHEET
May 31, 19X2
Assets

| Assets |  |  |  |
| :---: | :---: | :---: | :---: |
| Cash |  | \$ | 9,140 |
| Accounts Receivable |  |  | 2,600 |
| Prepaid Insurance |  |  | 640 |
| Supplies |  |  | 280 |
| Equipment \$ |  |  |  |
| Less: Accumulated Depreciation-Equipment |  | ( 825) | 1,875 |
| Truck | \$ | 17,900 |  |
| Less: Accumulated Depreciation-Truck |  | $(3,400)$ | 14,500 |
| Total Assets |  | \$ | 29,035 |


| Liabilities and Shareholders' Equity |  |  |
| :---: | :---: | :---: |
| Accounts Payable | \$ | 1,470 |
| Loans Payable |  | 4,000 |
| Rent Payable |  | 400 |
| Unearned Revenue |  | 2,850 |
| Total Liabilities | \$ | 8,720 |
| Common Stock |  | 15,000 |
| Retained Earnings |  | 5,315 |
| Total Shareholders' Equity |  | 20,315 |
| Total Liabilities and Shareholders' Equity |  | \$ 29,035 |

## Solution Problem 5

1. May

Insurance expense per month $=\$ 1,800$ premium $/ 24$ months $=\$ 75 /$ month
Number of months expired $=(\$ 1,800-\$ 1,500) / \$ 75=4$ months
2. Cash................ 1,400

$$
\text { Revenue ...... } 1,400
$$

3. May

Advertising expense per month = \$1,500 annual/12 months = \$125
Number of months charged $=(\$ 1,500-\$ 1,000) / \$ 125=4$ months
4. April

Rent expense per month = \$5,400/12 months = \$450
Number of months charged $=(\$ 5,400-\$ 3,150) / \$ 450=5$ months
5. Office Equipment: April

Depreciation expense per month $=(\$ 6,700-\$ 1,000) / 60$ months $=\$ 95$
Number of months charged $=\$ 475 / \$ 95=5$ months
Office Furniture: March Depreciation expense per month $=(\$ 3,820-\$ 700) / 120$
months $=\$ 26$ Number of months charged $=\$ 156 / \$ 26=6$ months.

Solution Problem 5 (Part 6)
Brown Financial Services Inc.
GENERAL JOURNAL

Journal Description
Debit GENERAL JOURNAL
a. Insurance Expense

Prepaid Insurance
To record insurance expense for August.
$\$ 1,800 / 24$ months $=\$ 75$
b. Rent Expense Prepaid Rent

450
To record rent expense. \$5,400/12 months
c. Depreciation Expense-Office Furniture Accumulated Depreciation-Office Furn.
To record depreciation expense. (\$3,820-
$\$ 700$ )/120 months $=\$ 26$
d. Advertising Expense

125
Prepaid Advertising
To record advertising exp. \$1,500/12 = \$125
e. Revenue

Unearned Revenue
1,400

To correct entry: cash received in adv. of
services rendered credited to Revenue in err
f. Unearned Revenue Revenue
To record recognition of revenue.
g. Office Supplies Used

230
Supplies Used-Postage
250
Office Supplies
230
Postage Supplies
250
To record office supplies and postage
supplies used.
\$ 510 - $\$ 280=\$ 230$
$\$ 1,150-\$ 900=\$ 250$
h. Depreciation Expense-Office Equipment 95 Accumulated Deprec.-Office Equip.
To record depreciation expense. \$6,700 -
\$1,000/60 months

SOLUTION TO PROBLEM 6 (Parts 1 and 3)
Neufeld Repairs Inc.
GENERAL LEDGER

| Cash No. 101 |  |
| :---: | :---: |
| Bal. 1,435 |  |
| Accounts |  |
| Receivable | No. 110 |
| Bal. 4,650 |  |
| Prepaid |  |
| Advertising | No. 160 |
| Bal. 600 |  |
| Prepaid |  |
| Insurance | No. 161 |
| Bal. 280 |  |
| Prepaid | Repair |
| Rent | No. 162 |
| Bal. 7,200 | (b) 7,200 |

Office

| Supplies |  |
| :--- | :--- |
| (c) 215 | No. 170 |

Repair
Supplies
No. 171
(c) 1,950

Furniture and

| Fixtures | No. 182 |
| :--- | :---: |
| Bal. 2,750 |  |
| Equipment | No. 183 |
| Bal. 8,400 |  |
| Truck | No. 184 |
| Bal. 18,100 | (e) 5,280 |

Accumulated Depreciation-
Furniture and Fixtures No. 192
(e) 200

Accumulated Depreciation-

| Equipment <br> (e) 1,560 | No. 193 |
| :--- | :---: |
| Accumulated Depreciation- <br> Truck | No. 194 |
|  | (e) 5,280 |
| Bank <br> Loan | No. 201 |


| Rent <br> Expense | No. 654 |
| :--- | :---: |
| (b) 7,200 | Bal. 35,005 |


| Repair Supplies <br> Used | No. 655 |
| :--- | :--- |
| Bal. 32,500 | (c) 1,950 |
| Bal. 30,550 |  |


| Accounts |  |
| :---: | :---: |
| Payable | No. 210 |
|  | Bal. 3,100 |
| Unearned Revenue | No. 249 |
|  | (a) 2,800 |
| Income Tax |  |
|  | (g) 4.300 |
| Common |  |
| Stock | No. 320 |
|  | Bal.23,000 |
| Revenue | No. 450 |
| (e) 2,800 | Bal. 84,065 |
|  | Bal. 81,265 |
| Advertising |  |
|  |  |
| Expense | (f) 600 |
| Bal. 960 |  |

Depreciation Expense-
Furniture and Fixtures No. 622
(e) 200

Depreciation Expense-

| Equipment |  |
| :--- | :--- |
| (e) 1,560 No. 623 <br> Depreciation Expense-  <br> Truck  |  |
|  |  |
| Insurance |  |
| Expense |  |
| Bal. 840 | No. 634 |
| Bal. 560 | (d) 280 |

Miscellaneous

| Expense | No. 642 |
| :--- | :--- |
| Bal. 930 |  |

Office Supplies

| Used | No. 650 |
| :--- | :--- |
| Bal. 1,395 | (c) 215 |
| 1,180 |  |

Salaries


Utilities
Expense No. 676
Bal. 2,400
Income Tax
Expense No. 830
(g) 4,300

SOLUTION TO PROBLEM 6 continues (Part 2)

| Journal | 1 Description | Debit | Neufeld Repairs Inc. GENERAL JOURNAL Credit |
| :---: | :---: | :---: | :---: |
| a. | Repair Revenue | 2,800 |  |
|  | Unearned Revenue |  | 2,800 |
|  | To record unearned portion of revenue as a liability. |  |  |
| b. | Rent Expense 7, | 7,200 |  |
|  | Prepaid Rent |  | 7,200 |
|  | To record expense for the year. |  |  |
| c. | Office Supplies | 215 |  |
|  | Repair Supplies | 1,950 |  |
|  | Office Supplies Used |  | 215 |
|  | Repair Supplies Used |  | 1,950 |
|  | To record unused supplies as an asset. |  |  |
| d. | Prepaid Insurance | 280 |  |
|  | Insurance Expense |  | 280 |
|  | To record prepaid portion of insurance exp. |  |  |
|  | \$840/12 months= \$70/month |  |  |
|  | \$70/month x 4 (Prepaid Jan. - Apr.) = \$280 |  |  |
| e. | Depreciation Expense-Furniture and Fixtures | s 200 |  |
|  | Depreciation Expense-Equipment | 1,560 |  |
|  | Depreciation Expense-Truck | 5,280 |  |
|  | Accumulated Depreciation-Furn.and Fixt | 200 |  |
|  | Accumulated Depreciation-Equipment |  | 1,560 |
|  | Accumulated Depreciation-Truck |  | 5,280 |
|  | To record depreciation expense for the year. |  |  |
|  | F \& F (\$2,750-\$350)/120 months =\$20 x 10 |  |  |
|  | months \$200 Equip. (\$8,400-\$600)/5 years |  |  |
|  | $=\$ 1,560$ Truck (\$18,100-\$820)/36 months |  |  |
|  | $=\$ 480 /$ month $\times 1$ months $=\$ 5,280$ |  |  |
| f. | Prepaid Advertising | 600 |  |
|  | Advertising Expense |  | 600 |
|  | To record prepaid portion of advertising exp |  |  |
| g. | Income Tax Expense | 4,300 |  |
|  | Income Tax Payable |  | 4,300 |
|  | To record the income tax expense for the yr. |  |  |

## Solution to Problem 6 (Part 4)

Neufeld Repairs Inc. ADJUSTED TRIAL BALANCE December 31, 19X1

| Account Title | Debit |  | Credit |
| :---: | :---: | :---: | :---: |
| Cash \$ | 1,435 |  |  |
| Accounts Receivable | 4,650 |  |  |
| Prepaid Advertising | 600 |  |  |
| Prepaid Insurance | 280 |  |  |
| Office Supplies | 215 |  |  |
| Repair Supplies | 1,950 |  |  |
| Furniture and Fixtures | 2,750 |  |  |
| Equipment | 8,400 |  |  |
| Truck | 18,100 |  |  |
| Accumulated Depreciation-Furn. and Fixt. |  | \$ | 200 |
| Accumulated Depreciation-Equipment |  |  | 1,560 |
| Accumulated Depreciation-Truck |  |  | 5,280 |
| Bank Loan |  |  |  |
| Accounts Payable |  |  | 3,100 |
| Unearned Revenue |  |  | 2,800 |
| Income Tax Payable |  |  | 4,300 |
| Common Stock |  |  | 23,000 |
| Repair Revenue |  |  |  |
| Advertising Expense | 960 |  |  |
| Depreciation Expense-Furniture and Fixt | 200 |  |  |
| Depreciation Expense-Equipment | 1,560 |  |  |
| Depreciation Expense-Truck | 5,280 |  |  |
| Insurance Expense | 560 |  |  |
| Miscellaneous Expense | 930 |  |  |
| Office Supplies Used | 1,180 |  |  |
| Rent Expense | 7,200 |  |  |
| Repair Supplies Used | 30,550 |  |  |
| Salaries Expense | 35,005 |  |  |
| Utilities Expense | 2,400 |  |  |
| Income Tax Expense | 4,300 |  |  |
| Totals \$ | 128,505 | \$ | 128,505 |

