

Chapter 2 Analyzing Changes in the Accounting Equation

Topic 1 and 2 Vocabulary

- Business transactions
- Drawing
- Revenue and expense transactions
- Commissions
- Accounts receivable
- Revenue
- Revenue Principle
- Expenses
- Expense Principle
- Matching Principle
- Net Income
- Net Loss

Topic 3 - ANALYZING THE INCOME STATEMENT AND THE RELATED BALANCE SHEET

In Topic 2 we saw how revenue and expense transactions expand the accounting equation under owner's equity so that net income (net loss) may be calculated for a certain time period.

The results of this expanded equation may be summarized in two kinds of accounting reports.

1.) **An Income Statement** - summarizes the revenue and related expenses and reports the net income or net loss for a specific accounting period

2.) **A Related Balance Sheet** - reports assets, liabilities and owner's equity as at the end of a specific accounting period.

ANALYZING AN INCOME STATEMENT

Turn to page 48 in your text for an example of an income statement printed and a hand written Income Statement

Income Statement - has 2 sections

- 1.) heading
- 2.) body

Heading has three lines

Line 1 - shows the name of the business (who)

Line 2 - the name of the financial statement (what)

Line 3 - the specific period for which revenue and expenses are matched - notice the difference between the date in the income statement and the date in the balance sheet (when)

Example:

✓ J. Emery Real Estate

✓ Income Statement



For the Month Ended October 31, 2009

Body

- At the beginning of the body is a summary of reported revenue for the accounting period
- Revenue is followed by expenses for the same accounting period
- The results of operating the business - the net income or net loss for the accounting period - concludes the income statement

Example:

1st column 2nd column

Revenue:

 Commission Earned

\$51 800.00

Expenses:

 Salaries Expense

\$4 500.00

 Rent Expense

1 600.00

 Utilities Expense

595.00

 Telephone Expense

40.00

 Advertising Expense

2 000.00

 Total Expenses

8 735.00

Net Income

\$43 065.00

The second column is the main money column for the match-up of revenue with related expenses

PREPARING AN INCOME STATEMENT

By Hand

HEADING - who

what

when - *** explains the accounting period covered by the statement

Examples:

one month (January 2009) For the Period Ended January 31, 2009
three months (Jan -Mar 2009) For the Quarter Ended March 31, 2009
calendar year (Jan-Dec 2009) For the Year Ended December 31, 2009

Note: the period has ended, incorrect to use ending

REVENUE SECTION:

Revenue:

Admissions Revenue
Concessions Revenue
Parking Fees Earned
Total Revenue

\$ 8 000.00
4 500.00
2 500.00

\$15 000.00

enter the title, Revenue followed by a :

If more than one type of revenue, indent, list and total. Remember to start each with a capital letter

Indent the Total Line

notice the \$

Source of Sales depends on the nature of a business operations

- Retailing, wholesaling and manufacturing businesses earn revenue mainly by selling goods. They may describe their main source of sales as Sales Revenue or simply Sales.
- Businesses who charge a commission for their service may report their revenue as Commissions Earned.
- Many service businesses are professional - law, medicine, dentistry, accounting etc. These businesses charge a fee for their services. They may describe their source of revenue as Professional Fees Earned or Fees Earned.

The EXPENSE SECTION

Starts on the line below the last entry in the revenue section

enter the title, followed by a colon

Expenses:			
Salaries Expense		\$4 500.00	
Rent Expense		1 600.00	
Utilities Expense		595.00	
Telephone Expense		40.00	
Advertising Expense		<u>2 000.00</u>	
Total Expenses			8 735.00

notice the \$

no \$ sign



Indent and list the expenses beneath the title. Begin each word with a capital letter. If only one expense, list in the 2nd money column

Indent the total line

NET INCOME or NET LOSS SECTION

- the income statement concludes with net income or net loss. This is the final result of operating a business for an accounting period.
- draw a single line under the amount of total expenses
- subtract the difference between total revenue and total expenses, record
- draw a double line under the amount of Net Income or Net Loss to indicate the match of revenue and related expenses, - the statement is complete

Revenue:		
Commission Earned		\$51 800.00
Expenses:		
Salaries Expense	\$4 500.00	
Rent Expense	1 600.00	
Utilities Expense	595.00	
Telephone Expense	40.00	
Advertising Expense	<u>2 000.00</u>	
Total Expenses		<u>8 735.00</u>
Net Income		<u><u>\$43 065.00</u></u>

Dollar Signs:

- Income Statement is a formal financial statement so dollar signs should appear with the first amount in each money column and the final result in the second money column

Revenue:		
Commission Earned		\$51 800.00
Expenses:		
Salaries Expense	\$4 500.00	
Rent Expense	1 600.00	
Utilities Expense	595.00	
Telephone Expense	40.00	
Advertising Expense	<u>2 000.00</u>	
Total Expenses		<u>8 735.00</u>
Net Income		<u><u>\$43 065.00</u></u>

Income Statement - a financial report of the results of matching revenues with related expenses for a definite accounting period

(2-7)

Diamond Theatre
Income Statement
For the Year Ended December 31, 2016

Revenue:

Admissions Revenue	\$ 202 000. ⁰⁰	
Parking Fees Earned	23 570. ⁰⁰	
Concession's Revenue	37 500. ⁰⁰	
Total Revenue	<u>263 070.⁰⁰</u>	\$ 263 070. ⁰⁰

Expenses:

Telephone Expense	\$ 112. ⁰⁰	
Salaries Expense	96 300. ⁰⁰	
Advertising Expense	6 000. ⁰⁰	
Insurance Expense	1 500. ⁰⁰	
Miscellaneous Expense	56. ⁰⁰	
Building Rental Expense	18 000. ⁰⁰	
Utilities Expense	3 000. ⁰⁰	
Film Rental Expense	57 175. ⁰⁰	
Projection Rental Expense	<u>4 800.⁰⁰</u>	
Total Expenses		<u>181 943.⁰⁰</u>
Net Income		<u><u>\$ 81 127.⁰⁰</u></u>

PREPARING A RELATED BALANCE SHEET

-Remember - Income is the amount remaining after revenues and related expenses have been matched for an accounting period

Revenue means an inflow of assets (cash and/or accounts receivable through sales and **expenses** means an outflow of assets (cash) or an increase in liabilities (accounts payable), then certain balances must be updated to reflect these changes.

- Once the Income Statement is complete you must immediately prepare a new balance sheet to report the new balances in assets, liabilities and owner's equity.

Assets					=	Liabilities		+	Owner's Equity		
Cash	Accts. Rec.	Auto	Furn.	Office Equip.	Bk. Loan Pay.	Accts. Pay.	J. Emery, Capital	Net Income	J. Emery, Drawing		
\$71 065	+ \$25 000	+ \$15 000	+ \$9 000	+ \$8 000	= \$16 000	+ \$8 000	+ \$63 000	+ \$43 065	- \$2 000		
\$128 065					=	\$24 000		+	\$104 065		

J. Emery Real Estate
Balance Sheet
as at October 30, 19—

ASSETS

Cash	\$71 065.00
Accounts Receivable:	
Pat Rogers	\$ 6 000.00
R. Scobie	4 000.00
Shannon Development Co.	<u>15 000.00</u>
	25 000.00
Automobile	15 000.00
Furniture	9 000.00
Office Equipment	8 000.00

LIABILITIES

Bank Loan Payable.....	\$ 16 000.00
Accounts Payable:	
Bell Furniture Co.	\$ 3 000.00
The City Record	2 000.00
Ryan Equipment Co.	<u>3 000.00</u>
	8 000.00
Total Liabilities	\$ 24 000.00

OWNER'S EQUITY

J. Emery, Capital	\$ 63 000.00
Add: Net Income	<u>43 065.00</u>
	106 065.00
Deduct: Drawing	<u>2 000.00</u>
Total Owner's Equity	<u>104 065.00</u>

Total Assets \$128 065.00

Total Liabilities and
Owner's Equity \$128 065.00

Why is Acc. Rec immediately after cash

Drawing comes after net income is added to capital

Net Income is added to the capital part of OE

What is the main goal of a business?
What is the main goal of the owner? } make profits
\$

Drawing: payments made in anticipation of profits (net income)
In order to live the owner may have to withdraw cash. Drawing are considered to be a distribution of profits. These payments (withdrawals) are often before the net income has been computed and recorded. - This is the reason it is very important to report withdrawals only after net income has been added to capital in OE.

No withdrawal of assets for the owner's personal use should ever be reported in the income statement. WHY???

How do you report a Net Loss??

Total Liabilities		\$24 000
OWNER'S EQUITY		
J. Emery, Capital	\$63 000	
Less: Net Loss	<u>3 000</u>	
	60 000	
Less: Drawing	<u>2 000</u>	
Total Owner's Equity		<u>58 000</u>
Total Liabilities & OE		<u><u>\$82 000</u></u>

Page 54 Problem P2-7 (we will do together)

Concept Reinforcement

Page 54-56 P2-8, P2-9

Page 56-57 MC2-7, MC2-8, MC2-9

KEY FOR TOPIC 3 PROBLEMS

P 2-7a

Diamond Theatre
Income Statement
For the Year Ended December 31, 19--

Revenues:		
Admissions Revenue	\$202 000	
Parking Fees Earned	23 570	
Concessions Revenue	37 500	
Total Revenues	_____	\$263 070
Expenses:		
Salaries Expense	\$96 300	
Telephone Expense	112	
Advertising Expense	6 000	
Insurance Expense	1 500	
Miscellaneous Expense	56	
Building Rental Expense	18 000	
Utilities Expense	3 000	
Film Rental Expense	52 175	
Projection Rental Expense	4 800	
Total Expenses	_____	181 943
Net Income (Loss)		\$ 81 127

P 2-8a

J.K. Teaching Services
Income Statement
For the Month Ended October 31, 19--

Revenue:		
Fees Earned	\$9 600	
Total Revenue		\$9 600
Expenses:		
Rent Expense	\$700	
Telephone Expense	55	
Office Supplies Expense	120	
Salaries Expense	1 300	
Utilities Expense	90	
Advertising Expense	210	
Total Expenses	_____	2 475
Net Income (Loss)		\$7 125

P 2-8b

J.K. Teaching Services
Balance Sheet
as at October 31, 19--

ASSETS

Cash	\$17 335
Accounts Receivable:	
A. Boushy	\$ 500
F. Rehman	1 300
R. Tuer	1 000
A. White	<u>600</u>
Equipment	13 000
	<u> </u>
Total Assets	<u><u>\$33 735</u></u>

LIABILITIES

Accounts Payable:	
B.C. Ed. Supplies	\$2 500
B.C. Herald	<u>210</u>
Total Liabilities	\$ 2 710

OWNER'S EQUITY

J. Kara, Capital	\$25 000
Net Income	7 125
	<u>32 125</u>
Less: J. Kara, Drawing	<u>1 100</u>
Total Owner's Equity	<u>31 025</u>

Total Liabilities and Owner's Equity	<u><u>\$33 735</u></u>
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P 2-9a, b, c

ASSETS

	(1) Date	(2) Cash	(3) Accts. Rec.	(4) Land	(5) Building	(6) Truck	(7) Office Equip.	(8) Binding Equip.	(9) Total Assets
1	May 1	250 000							250 000
2	3	-3 500						+8 500	255 000
3	5	-1 000				+15 000			269 000
4	6	-970							268 030
5	6	-185 000		+45 000	+140 000				268 030
6	7						+8 000		276 030
7	7	-6 500							269 530
8	8		+10 000						279 530
9	11	+22 000							301 530
10	12	-350							301 180
11	13	-99							301 081
12	15	-7 900							293 181
13	17	-8 000							285 181
14	18	+300							285 481
15	21		+15 000						300 481
16	23	-650							299 831
17	23	+3 200							303 031
18	26		+700						303 731
19	31	-85							303 646
20	31	+700	-700						303 646
21	31	-2 500							301 146
22	31	-7 900							293 246
23	31	-1 500							291 746
24	31		+450						292 196
25	31	50 246	25 450	45 000	140 000	15 000	8 000	8 500	292 196

Assets (\$292 196) = Liabilities (\$20 700) + Owner's Equity (\$271 496)

Total A (\$292 196) = Total L + OE (\$292 196)

LIABILITIES

OWNER'S EQUITY

(10) Bk. Loan Payable	(11) Accts. Payable	(12) Total Liabilities	(13) D. Egyed, Capital	(14) Revenue	(15) Expenses	(16) D. Egyed, Drawing	(17) Total O. E.
		00 000	250 000				250 000
	+5 000	5 000					250 000
	+14 000	19 000					250 000
		19 000			-970		249 030
		19 000			-6 500		249 030
	+8 000	27 000					249 030
		27 000		+10 000			242 530
		27 000		+22 000			252 530
		27 000			-350		274 180
		27 000			-99		274 081
		27 000			-7 900		266 181
	-8 000	19 000					266 181
		19 000		+300			266 481
		19 000		+15 000			281 481
		19 000			-650		280 831
+3 200		22 200					280 831
		22 200		+700			281 531
		22 200			-85		281 446
		22 200					281 446
		22 200				-2 500	278 946
		22 200			-7 900		271 046
-1 500		20 700					271 046
		20 700		+450			271 496
1 700	19 000	20 700	250 000	48 450	-24 454	-2 500	271 496

P 2-9d

Soft-Back → ^{May 11} 22 000 + ^{May 21} 15 000 + ^{May 26} 700 = 37 700
 Spiral Binding → ^{May 18} 300 + ^{May 31} 450 = 750
 Egyed Book Binders

Egyed Book Binders
 Income Statement 2016
 For the Month Ended May 31, 19--

Revenues:	
Hard-Back Binding Revenue	\$10 000
Soft-Back Binding Revenue	37 700 •
Spiral Binding Revenue	750 •
Total Revenues	<u>\$48 450</u>
Expenses:	
Insurance Expense	\$ 970
Binding Supplies Expense	6 500
Utilities Expense	350
Telephone Expense	99
Salaries Expense	15 800 •
Heat Expense	650
Gas and Oil Expense	85
Total Expenses	<u>24 454</u>
Net Income (Loss)	<u>\$23 996</u>

Salaries → ^{May 15} 7900 + ^{May 15} 7900 = 15800

P 2-9e

Egyed Book Binders
 Balance Sheet
 as at May 31, 19--

ASSETS		LIABILITIES	
Cash	\$ 50 246	Bank Loan Payable	\$ 1 700
Accounts Receivable:		Accounts Payable:	
Chamber of Commerce	\$15 000	Thorne Industries	\$ 5 000
Lambton Bd. of Ed.	10 000	Watertown Motors	14 000
Shell Canada Limited	450		<u>19 000</u>
Land	45 000	Total Liabilities	\$20 700
Building	140 000		
Truck	15 000		
Office Equipment	8 000		
Book Binding Equipment	8 500		
		OWNER'S EQUITY	
		D. Egyed, Capital	\$250 000
		Net Income	23 996
			<u>273 996</u>
		Less: D. Egyed, Drawing	2 500
		Total Owner's Equity	<u>271 496</u>
Total Assets	<u>\$292 196</u>	Total Liabilities and Owner's Equity	<u>\$292 196</u>

KEY FOR TOPIC 3 MINI-CASES**MC 2-7a**

The GAAP that affects the income statement is the matching principle. It states that wherever possible the revenues and expenses of a similar period should be matched together in order to arrive at the net income (loss) figure for that period of time.

MC 2-7b

The first two lines of the income statement and balance sheet are similar. They provide the name of the company and the name of the statement. The date line, however, is different. The date line in the balance sheet heading states the date "as at a particular day." The income statement date line tells you the period of time over which the net income (loss) has been calculated and that this period of time is historical; that is, the period of time has ended on the date reported on the date line.

MC 2-7c

The balance sheet is dependent upon the income statement. The net income (loss) figure calculated in the income statement is transferred to the owner's equity section of the balance sheet. It is this number that causes the balance sheet to come into agreement. In other words, the total assets equal the total liabilities plus the total owner's equity.

MC 2-8a

The income statement tells the reader:

- the name of the company
- the period of time over which the net income (loss) was calculated
- the total of the revenue earned for the period of time being measured
- the total of the expenses incurred for the period of time being measured
- the net income or net loss for the period of time being measured

MC 2-8b

The balance sheet tells the reader:

- the name of the company
- the date as at the balances of all assets, liabilities, and owner's equity are reported
- the details of individual assets, liabilities, and the owner's equity accounts of the business
- the total assets of the business as at a particular date
- the total liabilities of the business as at a particular date
- the total owner's equity of the business as at a particular date
- that the total assets is equal to the total liabilities and total owner's equity

MC 2-9a

GAAPs involved in the preparation and presentation of the income statement include:

- revenue and expense recognition principles. Revenues and expenses are recognized according to these two principles. As a result, the appropriate revenues and expenses are reported in the income statement.
- matching principle. This principle ensured that all revenues earned and all expenses incurred during the same period are matched to determine the net income or net loss for that period.

GAAPs involved in the preparation and presentation of the balance sheet include:

- cost principle. All assets are reported at their cost value; that is, at the original cost of acquiring those assets.
- objectivity principle. The cost principle is supported by the objective evidence provided by the source documents resulting from the purchase of the assets of the business.