

Chapter 3

Accrual Accounting and Income

Short Exercises

(10 min.) **S 3-1**

a.

	<i>(Millions)</i>
Sales revenue	\$ 700
Cost of goods sold.....	(300)
All other expenses	<u>(350)</u>
Net income	<u>\$ 50</u>

b.

Beginning cash	\$ 100
Collections (\$700 – \$30).....	670
Payments for: costs.....	<u>(680)</u>
Ending cash.....	<u>\$ 90</u>

(10 min.) S 3-2

Statement	Reports (<i>Amounts in millions</i>)
Income statement	Interest expense \$1.0
Balance sheet	Notes payable
	(\$4.0 + \$2.6 – \$2.5) \$4.1
	Interest payable 0.2

(10 min.) **S 3-3**

Ford Canada should record sales revenue when the revenue is earned by delivering automobiles to the auto rental companies. Ford should not record any revenue prior to delivery of the vehicles to the auto rental companies because Ford hasn't earned the revenue yet. The *revenue principle* governs this decision.

When Ford records the revenue from the sale, at that time—and not before or after—Ford should also record cost of goods sold, the expense.

Req. 1a)

Dec. 31 **Rent Expense (\$6,000 × 2/3) ... 4,000**
 Prepaid Rent 4,000
 To record rent expense.

Prepaid Rent				Rent Expense			
Nov. 1	6,000	Dec. 31	4,000	Dec. 31	4,000		
Bal.	2,000			Bal.	4,000		

Req. 2

Dec. 31 **Supplies Expense (\$800 – \$500) 300**
 Supplies 300
 To record supplies expense.

Supplies				Supplies Expense			
Dec. 1	800	Dec. 21	300	Dec. 31	300		
Bal.	500			Bal.	300		

Req. 1

		<i>Amounts in dollars (\$)</i>	
1.	Jan. 1	Computer Equipment	30,000
		Cash	30,000
		Purchased computer equipment.	
2.	Dec. 31	Depreciation Expense – Computer Equipment (\$30,000 / 3)	10,000
		Accumulated Depreciation – Computer Equipment	10,000
		To record computer depreciation expense for the year.	

Req. 2

Computer Equipment		Accumulated Depreciation – Computer Equipment		Depreciation Expense – Computer Equipment		
Jan. 1	30,000		Dec. 31	10,000	Dec. 31	10,000
Bal.	30,000		Bal.	10,000	Bal.	10,000

Req. 3

Computer equipment	\$30,000
Less accumulated depreciation.....	<u>(10,000)</u>
Carrying amount	\$20,000

Req. 4

Income statement:

Depreciation expense – computer equipment ... \$10,000

Balance sheet:

Computer equipment \$30,000

Less accumulated depreciation..... (10,000)

**Income Statement
2014**

Salary expense	\$40,000,000
	<u>2,000,000</u>
	<u>\$42,000,000</u>

**Balance Sheet
2014**

Accrued salary	\$2,000,000
(or salary payable)	

(10 min.) S 3-7

Req. 1

Oct. 31	Interest Expense	500	
	Interest Payable		500
	To accrue interest expense for October.		
Nov. 30	Interest Expense	500	
	Interest Payable		500
	To accrue interest expense for November.		
Dec. 31	Interest Expense	500	
	Interest Payable		500
	To accrue interest expense for December.		

Req. 2

Interest Payable		
	Oct. 31	500
	Nov. 30	500
	Dec. 31	500
	Bal.	1,500

Req. 3

Dec. 31	Interest Payable	1,500	
	Cash		1,500
	To pay interest.		

(10 min.) S 3-8

Req. 1

Oct. 31	Interest Receivable.....	500	
	Interest Revenue.....		500
	To accrue interest revenue for October.		
Nov. 30	Interest Receivable.....	500	
	Interest Revenue.....		500
	To accrue interest revenue for November.		
Dec. 31	Interest Receivable.....	500	
	Interest Revenue.....		500
	To accrue interest revenue for December.		

Req. 2

Interest Receivable	
Oct. 31	500
Nov. 30	500
Dec. 31	500
Bal.	1,500

Req. 3

Dec. 31	Cash	1,500	
	Interest Receivable		1,500
	To collect interest.		

(5-10 min.) S 3-9

Unearned revenues are *liabilities* because *Macleans Magazine* has received cash from subscribers in advance of providing them with magazines. Receiving the cash in advance creates an obligation (a liability) for *Macleans Magazine*. As *Macleans Magazine* delivers magazines to subscribers, *Macleans Magazine* earns the revenue, and the dollar amount of the earned revenue is transferred from the unearned revenue to earned revenue.

a) Cash	40,000	
Unearned subscription revenue		40,000
To record subscriptions received.		

b) Adjusting entry:	Unearned Subscription Revenue	10,000	
	Subscription Revenue		10,000
	To record unearned subscription revenue that has been earned during the period.		

(5-10 min.) S 3-10

Unadjusted amount of Prepaid Rent: \$6,000

Adjusted amount of Prepaid Rent: \$0

Unadjusted amount of rent expense: \$0

Adjusted amount of rent expense: \$6,000

a. Accounts Receivable	50,000	
Service Revenue		50,000
To record service revenue provided on account.		
Cash	40,000	
Accounts Receivable		40,000
To record collection of accounts receivable.		
b. Cash	7,000	
Unearned Revenue		7,000
To record cash in advance of service performed.		
Unearned Revenue	6,000	
Service Revenue		6,000
To record prepaid services performed.		

**Entertainment Centre Ltd.
Income Statement
For the Year Ended March 31, 2014**

	<i>(Thousands)</i>
Net revenues	\$174,500
Cost of goods sold	(126,000)
All other expenses	<u>(45,000)</u>
Net income.....	<u>\$ 3,500</u>

**Entertainment Centre Ltd.
Statement of Retained Earnings
For the Year Ended March 31, 2014**

	<i>(Thousands)</i>
Retained earnings, March 31, 2013	\$1,300
Add: Net income	<u>3,500</u> ←
Retained earnings, March 31, 2014	<u>\$4,800</u>

Entertainment Centre Ltd.
Balance Sheet
March 31, 2014

	<i>(Thousands)</i>
ASSETS	
Current	
Cash.....	\$ 900
Accounts receivable	27,700
Inventories	33,000
Other current assets	<u>4,800</u>
Total current assets	66,400
Property and equipment, net.....	7,200
Other assets.....	<u>24,300</u>
Total assets	<u>\$97,900</u>
LIABILITIES	
Total current liabilities	\$53,600
Long-term liabilities	<u>13,500</u>
Total liabilities	67,100
SHAREHOLDERS' EQUITY	
Common shares	26,000
Retained earnings	<u>4,800</u>
Total shareholders' equity.....	<u>30,800</u>
Total liabilities and shareholders' equity .	<u>\$97,900</u>



CLOSING ENTRIES

March 31	Net Revenues	174,500	
	Retained Earnings		174,500
31	Retained Earnings	171,000	
	Cost of Goods Sold		126,000
	All Other Expenses.....		45,000

Retained Earnings

March 31, 2014 Expenses	171,000	March 31, 2014 Bal.	1,300
		March 31, 2014 Revenues	174,500
		March 31, 2014 Bal.	4,800

Retained Earnings' ending balance agrees with the amounts reported on the statement of retained earnings and the balance sheet. It is important that this balance agrees with the amounts reported to confirm the amounts reported as recorded in the post-closing trial balance.

a. Entertainment Centre Ltd.'s current ratio is

$$\frac{\text{Current assets}}{\text{Current liabilities}} = \frac{66,400}{53,600} = 1.24$$

b. Entertainment Centre Ltd.'s debt ratio is

$$\frac{\text{Total liabilities}}{\text{Total assets}} = \frac{67,100}{97,900} = 0.69$$

Entertainment Centre Ltd.'s current ratio of 1.24 is in the mid-range of current ratio. This current ratio indicates ECL should be able to pay all current liabilities with current assets.

Entertainment Centre Ltd.'s debt ratio of 0.69 is within the normal debt ratio range. This ratio indicates that ECL is not financing a high proportion of its assets by debt.

All ratios indicate a satisfactory performance by ECL; however, there is room for improved performance.

(10-15 min.) S 3-15

- 1. The net revenue was high enough to cover ECI's costs; however, not by much.**
- 2. To improve this situation, net revenues must be increased either by increased sales prices, increased sales volumes, and/or the addition of new products. It may also be improved by reducing expenses, thereby increasing net income.**

Exercises

(5-10 min.) E 3-16

(All amounts in millions)

<u>Statement</u>	<u>Report</u>
1. Income statement	Sales revenue \$4,000 Operating expenses.... 800
Balance sheet	Accounts receivable ... \$ 400 Accounts payable 700
2. Cash basis would report only the cash transactions of the company.	

<u>Statement</u>	<u>Report</u>
Income statement	Sales revenue \$4,100 Operating expenses... 800
Balance sheet	Accounts receivable .. 0 Accounts payable 0

**Valley Sales Inc.
Income Statement
For the year ending December 31, 2014**

	Cash basis	Accrual basis
Revenue	\$410,000	\$500,000
Expenses	<u>400,000</u>	<u>420,000</u>
Net income.....	<u><u>\$ 10,000</u></u>	<u><u>\$ 80,000</u></u>

The cash basis income statement understates revenue by \$90,000 and understates expenses by \$20,000. In addition neither the revenue principle nor the matching principle are followed.

On the cash basis income statement important information has been omitted, thus making the income statement incomplete.

- a. Dish Networks should report revenue of \$700 million.

The amount of revenue reported is what Dish Networks earned, regardless of when cash is collected.

- b. Dish Networks should report total expenses of \$540 million.

All expenses incurred to earn revenues in the accounting period should be recorded.

- c. The *income statement* reports revenues and expenses. The *statement of cash flows* reports cash receipts and cash payments.

(5-10 min.) E 3-19

Depreciation is a process whereby the cost of a long-lived tangible asset, such as buildings, furniture, or equipment, is allocated to expenses over its useful life. These long-lived tangible assets are resources that will be used over more than one fiscal accounting period. Depreciation is calculated based on the useful life of the asset. This process matches the expense of the asset against the revenue it produces.

(5-10 min.) E 3-20

- a. Yes, the company is obligated to pay its employees for the work they did during the current month, so the \$20,000 in wages should be accrued as a liability and expense at the end of the month.**
- b. Under accrual accounting, expenses must be recorded when they are incurred, not when they are paid. This treatment is therefore not acceptable.**
- c. Revenue should be recorded now as it has been earned.**
- d. Revenue should be recorded as earned. The company should record its revenue based on the percentage of the project completed at each year end.**
- e. It should record utility expense in the year the utilities were consumed, which is the year ended December 31.**

Req. 1

Adjusting Entries

ACCOUNT TITLES	DEBIT	CREDIT
a. Insurance Expense (\$700 + \$2,100 – \$800)	2,000	
Prepaid Insurance.....		2,000
b. Interest Receivable.....	900	
Interest Revenue.....		900
c. Unearned Service Revenue (\$800 – \$300)	500	
Service Revenue.....		500
d. Depreciation Expense.....	6,200	
Accumulated Depreciation.....		6,200
e. Salary Expense (\$9,000 × 3/5).....	5,400	
Salary Payable.....		5,400
f. Income Tax Expense (\$20,000 × 0.25).....	5,000	
Income Tax Payable.....		5,000

Req. 2

Net income *overstated* by omission of:

Depreciation expense	\$ 6,200	
Salary expense	5,400	
Income tax expense	5,000	
Insurance expense	<u>2,000</u>	
Total overstatement		\$18,600

Net income *understated* by omission of:

Interest revenue.....	\$ 900	
Service revenue.....	<u>500</u>	
Total understatement.....		<u>1,400</u>

Overall effect — net income *overstated* by.. **\$17,200**

Missing amounts in italics.

	1	2	3	4
Beginning Supplies	\$ 500	\$1,000	\$ 300	\$ 900
Add: Payments for supplies				
during the year	<u>800</u>	<u>3,100</u>	<u>1,100</u>	<u>1,100</u>
Total amount to account for	<u>1,300</u>	<u>4,100</u>	<u>1,400</u>	<u>2,000</u>
Less: Ending Supplies	<u>(400)</u>	<u>(500)</u>	<u>(700)</u>	<u>(600)</u>
Supplies Expense	<u>\$ 900</u>	<u>\$3,600</u>	<u>\$ 700</u>	<u>\$1,400</u>

Journal entries:

Situation 1:	Supplies.....	800	
	Cash		800
Situation 2:	Supplies Expense.....	3,600	
	Supplies		3,600

Adjusting Entries

DATE	ACCOUNT TITLES	DEBIT	CREDIT
Dec. 31			
a.	Interest Expense.....	9,000	
	Interest Payable		9,000
b.	Interest Receivable.....	3,000	
	Interest Revenue		3,000
c.	Unearned Revenue (\$12,000 / 2)	6,000	
	Sales Revenue.....		6,000
d.	Salary Expense (\$1,000 × 2)	2,000	
	Salary Payable.....		2,000
e.	Supplies Expense.....	2,300	
	Supplies (\$3,100 – \$800).....		2,300
f.	Depreciation Expense (\$60,000 / 5)	12,000	
	Accumulated Depreciation.....		12,000
	Carrying amount = \$48,000 (\$60,000 – \$12,000)		

(10-20 min.) E 3-24

Accounts Receivable	
	1,300
(c)	600
Bal.	1,900

Supplies		
	900	(a) 600
Bal.	300	

Salary Payable	
	(b) 2,000
Bal.	2,000

Unearned Service Revenue		
(d)	700	800
	Bal.	100

Service Revenue	
	14,400
(c)	600
(d)	700
Bal.	15,700

Salary Expense		
	4,200	
(b)	2,000	
Bal.	6,200	

Supplies Expense	
(a)	600
Bal.	600

**Honeybee Hams Inc.
Income Statement
For the Year Ended December 31, 2014**

(thousands)

Revenues:	
Sales revenue	\$41,000
 Expenses:	
Cost of goods sold	\$25,000
Selling, administrative, and general expense	10,000
Total expenses	<u>35,000</u>
Income before tax	6,000
Income tax expense	<u>2,000</u>
Net income	<u><u>\$ 4,000</u></u>

**Honeybee Hams Inc.
Statement of Retained Earnings
For the Year Ended December 31, 2014**

(thousands)

Retained earnings, December 31, 2013	\$4,500
Add: Net income	<u>4,000</u>
	8,500
Less: Dividends	<u>(1,700)</u>
Retained earnings, December 31, 2014	<u><u>\$6,800</u></u>

(continued) E 3-25

Honeybee Hams Inc.
Balance Sheet
December 31, 2014

ASSETS		<i>(thousands)</i>	LIABILITIES	
Cash	\$ 3,300		Accounts payable	\$ 7,700
Accounts receivable	1,800		Income tax payable	600
Inventories	1,100		Other liabilities	<u>2,200</u>
Prepaid expenses	1,900		Total liabilities	10,500
Capital assets	\$6,600		SHAREHOLDERS'	
Less: Accum.			EQUITY	
Depreciation	<u>(2,400)</u>	4,200	Common shares	4,900
Other assets	9,900		Retained earnings	<u>6,800</u> ←
			Total shareholders'	
			equity	<u>11,700</u>
			Total liabilities and	
Total assets	<u>\$22,200</u>		shareholders' equity	<u>\$22,200</u>

One mechanism for solving this exercise is to prepare the relevant T-accounts, insert the given information, and solve for the unknown amounts, shown in italics.

Amounts in millions
Receivables

Beg. bal.	200		
<i>Sales revenue</i>	20,900	Cash receipts	20,800
End. bal.	300		

Prepaid Insurance

Beg. bal.	110		
Cash payment	400	<i>Insurance expense</i>	330
End. bal.	180		

Accrued Liabilities

		Beg. bal.	600
Cash payment	4,100	<i>Other operating expense</i>	4,200
		End. bal.	700

Req. 1

Mountain's income statement:

Service revenue ($\$12,000 \times 9/12$) \$9,000

Mountain's balance sheet:

Unearned service revenue ($\$12,000 \times 3/12$) \$3,000

Req. 2

Squamish's income statement:

Consulting expense ($\$12,000 \times 9/12$)..... \$9,000

Squamish's balance sheet:

Prepaid consulting expense ($\$12,000 \times 3/12$) \$3,000

Req. 1

(Millions)

Income statement	
Service revenue (\$400 – \$90)	\$310
 Balance sheet	
Unearned service revenue	\$90

Req. 2

Income statement	
Service revenue (\$80 + \$400 – \$90)	\$390
 Balance sheet	
Unearned service revenue	\$90

Service revenue is greater in (2) because Rogers began the year owing phone service to customers. With collections for the year and the amount of the ending liability unchanged, Rogers must have earned more revenue in situation 2 than in situation 1.

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
Closing Entries			
<i>(Amounts in thousands)</i>			
Dec. 31	Revenue	23,600	
	Other Revenue	600	
	Retained Earnings.....		24,200
31	Retained Earnings	23,000	
	Cost of Services Sold.....		11,600
	Selling, General, and Administrative Expense.....		6,900
	Depreciation Expense.....		4,100
	Income Tax Expense.....		400
31	Retained Earnings.....	400	
	Dividends.....		400

Net income for 2014 was \$1,200 thousand (\$24,200 – \$23,000).

Retained Earnings			
Clo. Expenses	23,000	Dec. 31, 2013	1,900
Clo. Dividends	400	Clo. Revenue	24,200
		Dec. 31, 2014	2,700

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
Adjusting Entries			
December 31	Unearned Service Revenue	6,700	
	Service Revenue (\$19,500 – \$12,800)		6,700
31	Salary Expense (\$4,900 – \$4,000)	900	
	Salary Payable		900
31	Rent Expense (\$1,400 – \$1,200)	200	
	Prepaid Rent		200
31	Depreciation Expense (\$300 – \$0)	300	
	Accumulated Depreciation		300
31	Income Tax Expense (\$1,600 – \$0)	1,600	
	Income Tax Payable		1,600
Closing Entries			
31	Service Revenue	19,500	
	Retained Earnings		19,500
31	Retained Earnings	8,200	
	Salary Expense		4,900
	Rent Expense		1,400
	Amortization Expense		300
	Income Tax Expense		1,600
31	Retained Earnings	1,000	
	Dividends		1,000

Req. 1

**Yosaf Portraits Ltd.
Balance Sheet
December 31, 2014**

ASSETS

Current Assets:

Cash		\$10,200
Prepaid rent [\$1,100 – (\$1,400 – \$1,200)]		<u>900</u>
Total current assets.....		11,100

Capital Assets:

Equipment.....	\$32,100	
Less accumulated depreciation ((\$3,800 + \$300)	<u>(4,100)</u>	<u>28,000</u>
Total assets		<u>\$39,100</u>

LIABILITIES

Current Liabilities:

Accounts payable.....		\$ 4,600
Salary payable (\$4,900 – \$4,000)		900
Unearned service revenue [\$8,400 – (\$19,500 – \$12,800)]		1,700
Income tax payable		<u>1,600</u>
Total current liabilities.....		8,800
Note payable, long-term		<u>10,000</u>
Total liabilities		<u>18,800</u>

SHAREHOLDERS' EQUITY

Common shares.....		8,700
Retained earnings (\$1,300 + \$19,500 – \$8,200 – \$1,000)..		<u>11,600</u>
Total shareholders' equity.....		<u>20,300</u>
Total liabilities and shareholders' equity		<u>\$39,100</u>

Req. 2

			<u>Current Year</u>	<u>Prior Year</u>
Current ratio	=	$\frac{\text{Total current assets}}{\text{Total current liabilities}} = \frac{\$11,100}{\$8,800} =$	1.26	1.55

The ability to pay current liabilities with current assets has deteriorated during 2014.

Debt ratio	=	$\frac{\text{Total liabilities}}{\text{Total assets}} = \frac{\$18,800}{\$39,100} =$	0.48	0.45
------------	---	--------------------------------------------------------------------------------------	------	------

The overall ability to pay total liabilities has deteriorated slightly during 2014.

Req. 1

	2014	2013	2012
Current ratio	$\frac{\$ 20}{\$ 10} = 2.0$	$\frac{\$ 15}{\$ 8} = 1.88$	$\frac{\$ 8}{\$ 6} = 1.33$
Debt ratio	$\frac{\$ 20}{\$ 50} = 0.40$	$\frac{\$ 20}{\$ 57} = 0.35$	$\frac{\$ 10}{\$ 35} = 0.29$

Req. 2

The current ratio improved over the three years. This indicates that Le Gasse is able to pay its current liabilities with its current assets and that the financial position of the company has improved over the three years.

The debt ratio has deteriorated slightly over the last three years; however, it is still in a good range. As LeGasse is earning income, it will have the cashflow to pay its debt.

Reqs. 1, 3, 6, and 8

Cash			
Jan. 2	5,000	Jan. 2	500
9	800	3	3,000
21	900	12	200
28	600	26	900
		31	1,000
Bal.	1,700		

Accounts Receivable			
Jan. 18	1,700	Jan. 28	600
Bal.	1,100		
Adj.	1,000		
Bal.	2,100		

Supplies			
Jan. 5	900	Adj.	600
Bal.	300		

Equipment			
Jan. 3	3,000		

Accumulated Depreciation – Equipment			
		Adj.	100

Furniture			
Jan. 4	6,000		

Accumulated Depreciation – Furniture			
		Adj.	200

Accounts Payable			
Jan. 26	900	Jan. 4	6,000
		5	900
		Bal.	6,000

Reqs. 1, 3, 6, and 8

Salary Payable

	Adj.	1,000
--	------	-------

Unearned Service Revenue

Adj.	300	Jan. 21	900
		Bal.	600

Common Shares

	Jan. 2	5,000
--	--------	-------

Retained Earnings

Clo.	2,600		
Clo.	1,000	Clo.	3,800
		Bal.	200

Dividends

Jan. 31	1,000	Clo.	1,000
---------	-------	------	-------

Service Revenue

	Jan. 9	800	
	18	1,700	
	Bal.	2,500	
	Adj.	1,000	
	Adj.	300	
Clo.	3,800	Bal.	3,800

Rent Expense

Jan. 2	500	Clo.	500
--------	-----	------	-----

Utilities Expense

Jan. 12	200	Clo.	200
---------	-----	------	-----

Salary Expense

Adj.	1,000	Clo.	1,000
------	-------	------	-------

**Depreciation Expense –
Equipment**

Adj.	100	Clo.	100
------	-----	------	-----

**Depreciation Expense –
Furniture**

Adj.	200	Clo.	200
------	-----	------	-----

Supplies Expense

Adj.	600	Clo.	600
------	-----	------	-----

Req. 2

January 2 through 18 entries are repeated from Solution to Exercise 2-25.

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
Jan. 2	Cash	5,000	
	Common shares.....		5,000
2	Rent Expense	500	
	Cash		500
3	Equipment.....	3,000	
	Cash		3,000
4	Furniture	6,000	
	Accounts Payable		6,000
5	Supplies	900	
	Accounts Payable		900
9	Cash	800	
	Service Revenue		800
12	Utilities Expense	200	
	Cash		200
18	Accounts Receivable	1,700	
	Service Revenue		1,700

Req. 2

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
Jan. 21	Cash	900	
	 Unearned Service Revenue		900
21	No entry; no transaction yet		
26	Accounts Payable	900	
	 Cash		900
28	Cash	600	
	 Accounts Receivable		600
30	Dividends	1,000	
	 Cash		1,000

Reqs. 4 and 5

(continued) E 3-33

**Web Marketing Services Inc.
Adjusted Trial Balance
January 31, 2014**

ACCOUNT TITLE	TRIAL BALANCE		ADJUSTMENTS		ADJUSTED TRIAL BALANCE	
	DEBIT	CREDIT	DEBIT	CREDIT	DEBIT	CREDIT
Cash	1,700				1,700	
Accounts receivable	1,100		(a) 1,000		2,100	
Supplies	900			(c) 600	300	
Equipment	3,000				3,000	
Accumulated dep'n. – equip.		—		(d1) 100		100
Furniture	6,000				6,000	
Accumulated dep'n. – furn.		—		(d2) 200		200
Accounts payable		6,000				6,000
Salary payable		—		(e) 1,000		1,000
Unearned service revenue		900	(b) 300			600
Common shares		5,000				5,000
Retained earnings		—				—
Dividends	1,000				1,000	
Service revenue		2,500		(a) 1,000 (b) 300		3,800
Rent expense	500				500	
Utilities expense	200				200	
Salary expense			(e) 1,000		1,000	
Depreciation expense – equip.			(d1) 100		100	
Depreciation expense – furn.			(d2) 200		200	
Supplies expense			(c) 600		600	
	<u>14,400</u>	<u>14,400</u>	<u>3,200</u>	<u>3,200</u>	<u>16,700</u>	<u>16,700</u>

Req. 6

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
Adjusting Entries			
(a) Jan. 31	Accounts Receivable	1,000	
	Service Revenue		1,000
(b) 31	Unearned Service Revenue.....	300	
	Service Revenue		300
(c) 31	Supplies Expense (\$900 – \$300).....	600	
	Supplies		600
(d1) 31	Depreciation Expense – Equipment	100	
	Accumulated Depreciation – Equip.		100
(d2) 31	Depreciation Expense – Furniture	200	
	Accumulated Depreciation – Furn.		200
(e) 31	Salary Expense	1,000	
	Salary Payable		1,000

Req. 7

Web Marketing Services Inc.
Income Statement
For the Month Ended January 31, 2014

Revenues:		
Service revenue		\$3,800
Expenses:		
Salary expense	1,000	
Supplies expense	600	
Rent expense	500	
Utilities expense	200	
Depreciation expense – furniture	200	
Depreciation expense – equipment	<u>100</u>	
Total expenses		<u>2,600</u>
Net income		<u>\$1,200</u>

Web Marketing Services Inc.
Statement of Retained Earnings
For the Month Ended January 31, 2014

Retained earnings, January 1, 2013	\$ 0
Add: Net income	<u>1,200</u>
	1,200
Less: Dividends	<u>(1,000)</u>
Retained earnings, January 31, 2014	<u>\$ 200</u>

Req. 7

Web Marketing Services Ltd.
Balance Sheet
January 31, 2014

ASSETS		LIABILITIES	
Current assets:		Current liabilities:	
Cash	\$ 1,700	Accounts payable	\$ 6,000
Accounts receivable	2,100	Salary payable	1,000
Supplies	<u>300</u>	Unearned service revenue	<u>600</u>
Total current assets	4,100	Total current liabilities	7,600
Capital assets:		SHAREHOLDERS' EQUITY	
Equipment	\$3,000	Common shares	5,000
Less accum. dep'n.	<u>(100)</u>	Retained earnings	<u>200</u>
Furniture	\$6,000	Total shareholders' equity	<u>5,200</u>
Less accum. dep'n.	<u>(200)</u>	Total liabilities and shareholders' equity	<u>\$12,800</u>
Total assets	<u>\$12,800</u>		

Req. 8**Journal**

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
Closing Entries			
Jan. 31	Service Revenue	3,800	
	Retained Earnings.....		3,800
31	Retained Earnings	2,600	
	Rent Expense.....		500
	Utilities Expense.....		200
	Salary Expense.....		1,000
	Depreciation Expense – Equipment ..		100
	Depreciation Expense – Furniture		200
	Supplies Expense.....		600
31	Retained Earnings	1,000	
	Dividends		1,000

Req. 9

$$\text{Current ratio} = \frac{\text{Total current assets}}{\text{Total current liabilities}} = \frac{\$4,100}{\$7,600} = 0.54$$

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}} = \frac{\$7,600}{\$12,800} = 0.59$$

The current ratio indicates a weak current financial position. The business has \$0.54 in current assets for every \$1.00 of current liabilities. It could possibly have trouble paying current liabilities with current assets. The debt ratio of 0.59 is low enough to suggest that, overall, the business should be able to pay its debts, as it is not financing its assets with high levels of debt.

(Dollar amounts in thousands of dollars)

December 31, 2013

$$\text{Current ratio} = \frac{\$1,700 + \$5,600 + \$800 + \$1,800}{\$2,400 + \$1,200 + \$1,700} = \frac{\$9,900}{\$5,300} = 1.868$$

December 31, 2014

$$\text{Current ratio} = \frac{\$3,700^1 + \$4,600^2 + \$200^3 + \$1,500^4}{\$900^5 + \$1,200^6 + \$2,500^7} = \frac{\$10,000}{\$4,600} = 2.174$$

Computations of December 31, 2014, balances:

$$^1\text{Cash} = \$1,700 + \$7,500 - \$5,000 - \$500 = \$3,700$$

$$^2\text{Receivables} = \$5,600 + \$6,500 - \$7,500 = \$4,600$$

$$^3\text{Prepaid expenses} = \$800 - \$600 = \$200$$

$$^4\text{Inventory} = \$1,800 + \$3,500 - \$3,800 = \$1,500$$

$$^5\text{Accounts payable} = \$2,400 + \$3,500 - \$5,000 = \$900$$

$$^6\text{Unearned revenue} = \$1,200$$

$$^7\text{Accrued expenses payable} = \$1,700 + \$1,300 - \$500 = \$2,500$$

Conclusion: The current ratio improved during 2014.

a. Net income:	Revenues:		
	Service		
	(\$155,000 + \$1,000 + \$2,000).....		\$158,000
	Expenses:		
	Salary (\$32,000 + \$3,000).....	\$ 35,000	
	Depreciation – building.....	2,000	
	Supplies	3,000	
	Insurance	1,000	
	Advertising	7,000	
	Utilities	<u>2,000</u>	<u>50,000</u>
	Net income		<u>\$108,000</u>
b. Total assets:	Cash.....		\$ 4,000
	Accounts receivable		
	(\$7,000 + \$2,000).....		9,000
	Supplies (\$4,000 – \$3,000).....		1,000
	Prepaid insurance		
	(\$3,000 – \$1,000).....		2,000
	Building	\$107,000	
	Less: Accum. Dep'n.		
	(\$14,000 + \$2,000).....	<u>(16,000)</u>	91,000
	Land		<u>51,000</u>
	Total assets		<u>\$ 158,000</u>

c. Total liabilities:	Accounts payable	\$ 6,000
	Salary payable.....	3,000
	Unearned service revenue	
	(\$5,000 – \$1,000).....	<u>4,000</u>
	Total liabilities.....	<u>\$ 13,000</u>
d. Total shareholders' equity:	Common shares.....	\$ 10,000
	Retained earnings, beginning.....	43,000
	Add: Net income for the year.....	<u>108,000</u>
		161,000
	Less: Dividends during the year.....	<u>(16,000)</u>
	Total shareholders' equity.....	<u>\$145,000</u>
e. Total assets	= Total liabilities	+ Total shareholders' equity
\$158,000	= \$13,000	+ \$145,000

Quiz

- Q3-36 b)
- Q3-37 b)
- Q3-38 a)
- Q3-39 b)
- Q3-40 d)
- Q3-41 d)
- Q3-42 c)
- Q3-43 c)
- Q3-44 c)
- Q3-45 d)
- Q3-46 b)
- Q3-47 c)
- Q3-48 a)
- Q3-49 d)
- Q3-50 c)

Problems

Group A

(15-20 min.) P 3-51A

(All amounts in millions)

1. $\$35 - \$8 = \$27$

2.	Revenues	\$ 35
	Expenses.....	<u>(27)</u>
	Net income	<u>\$ 8</u>

3.	Beginning receivables	\$ 4
	Add: Revenues	35
	Less: Collections.....	<u>(33)</u>
	Ending receivables	<u>\$ 6</u>

Balance sheet

ASSETS

Current assets:

Receivables	\$ 6
-------------------	------

(All amounts in millions)

4.	Beginning accounts payable	\$ 9
	Add: Expenses	27
	Less: Payments (\$27 + \$1).....	<u>(28)</u>
	Ending accounts payable	<u>\$ 8</u>

Balance sheet

LIABILITIES

Current liabilities:

Accounts payable	\$ 8
------------------	------

Req. 1

Prairies Consultants Inc.
Amount of Revenue (Expense) for August 2014

Date	Cash Basis		Accrual Basis
August 1	Expense	\$(1,000)	\$ 0
4	Expense	(800)	(30)
5	Revenue	900	900
8	Expense	(300)	(300)
11		0	3,000
19		0	(30)
24	Revenue	3,000	0
26	Expense	(1,600)	0
29	Expense	(900)	(900)
31		0	(200)*
31		<u>0</u>	<u>800</u>

*\$1,000 ÷ 5 = 200

Req. 2

Income (loss)		Income	
before tax	<u>\$(700)</u>	before tax	<u>\$3,240</u>

Req. 3

The accrual-basis accounting for net income is preferable because it accounts for revenues and expenses when they occur (earned or incurred), not when they are received or paid in cash. For example, on August 11, 2014, the company earned \$3,000 of revenue and increased its wealth as a result. The accrual basis records this revenue, but the cash basis ignores it. On August 24, the business collected the receivable that was created by the revenue earned on account at August 11. The accrual basis records no revenue on August 24 because the company's increase in wealth occurred back on August 11. The cash basis waits until cash is received, on August 24, to record the revenue. The example in Req. 2 indicates that income is understated on the cash basis method.

TO: New Employee

FROM: Student Name

The cash basis of accounting regards all cash receipts as revenues and all cash payments as expenses. The accrual basis records revenues as they are earned and expenses as they are incurred, not when cash is received or paid. There is a difference in the timing of the recognition of revenues and expenses using the cash basis and the accrual basis. Under the accrual basis, revenues are recorded when revenue is earned and the amount to record (cash value transferred to customer). Expenses are recorded based on the cost of assets used up and liabilities created in the earning of revenue.

Note: Student responses may vary.

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
2014			
Dec. 31	a. Insurance Expense	3,100*	
	Prepaid Insurance		3,100
	To record insurance expense.		
31	b. Salary Expense (\$6,000 × 3/5)	3,600	
	Salary Payable		3,600
	To accrue salary expense.		
31	c. Interest Receivable	500	
	Interest Revenue		500
	To accrue interest revenue.		
31	d. Supplies Expense	6,600***	
	Supplies		6,600
	To record supplies expense.		
31	e. Unearned Service Revenue		
	(\$12,000 × 1/3)	4,000	
	Service Revenue		4,000
	To record unearned service revenue that was earned during the year.		

	Cost of asset available during the period		Cost of asset on hand at the end of the period		Cost of asset used (expense) during the period
*	(\$400 + \$3,600) \$4,000	–	\$900**	=	\$3,100
**	\$3,600 × 3/12 = \$900 asset at December 31, 2012				
***	(\$2,600 + \$6,100) \$8,700	–	\$2,100	=	\$6,600

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
2014			
Dec. 31	f. Depreciation Expense – Office Furniture	1,000	
	Depreciation Expense – Equipment.	2,700	
	Accumulated Depreciation – Office Furniture		1,000
	Accumulated Depreciation – Equipment.....		2,700
	To record depreciation expense.		

Req. 1

(45-60 min.)P 3-55A

**The Rock Industries
Adjusted Trial Balance
January 31, 2014**

ACCOUNT TITLE	TRIAL BALANCE		ADJUSTMENTS		ADJUSTED TRIAL BALANCE	
	DEBIT	CREDIT	DEBIT	CREDIT	DEBIT	CREDIT
Cash	8,000				8,000	
Accounts receivable	10,000		(a) 2,000		12,000	
Prepaid rent	3,000			(b) 1,000*	2,000	
Supplies	2,000			(c) 2,000		
Furniture	36,000				36,000	
Accumulated depreciation		3,000		(d) 1,000**		4,000
Accounts payable		10,000				10,000
Salary payable				(e) 3,000***		3,000
Common shares		26,000				26,000
Retained earnings		13,000				13,000
Dividends	4,000				4,000	
Service revenue		14,000		(a) 2,000		16,000
Salary expense	2,000		(e) 3,000***		5,000	
Rent expense			(b) 1,000*		1,000	
Utilities expense	1,000				1,000	
Depreciation expense			(d) 1,000**		1,000	
Supplies expense			(c) 2,000		2,000	
	<u>66,000</u>	<u>66,000</u>	<u>9,000</u>	<u>9,000</u>	<u>72,000</u>	<u>72,000</u>

* $\$3,000 \div 3 = \$1,000$

** $\$36,000 \div 3 = \$12,000 \div 12 = \$1,000$

*** $\$5,000 \times 3/5 = \$3,000$

Req. 2

**The Rock Industries Ltd.
Income Statement
For the Month Ended January 31, 2014**

Revenues:		
Service revenue		\$16,000
Expenses:		
Salary expense	\$5,000	
Supplies expense	2,000	
Rent expense	1,000	
Utilities expense	1,000	
Depreciation expense	<u>1,000</u>	
Total expenses		<u>10,000</u>
Net income		<u><u>\$ 6,000</u></u>

**The Rock Industries Ltd.
Statement of Retained Earnings
For the Month Ended January 31, 2014**

Retained earnings, December 31, 2013	\$13,000	
Add: Net income for the month	<u>6,000</u>	←
	19,000	
Less: Dividends	<u>(4,000)</u>	
Retained earnings, January 31, 2014	<u><u>\$15,000</u></u>	

Req. 2

The Rock Industries Ltd.
Balance Sheet
January 31, 2014

ASSETS		LIABILITIES	
Current assets:		Current liabilities:	
Cash	\$ 8,000	Accounts payable	\$10,000
Accounts receivable	12,000	Salary payable	<u>3,000</u>
Prepaid rent	<u>2,000</u>	Total current liabilities	13,000
Total current assets	22,000		
Furniture	\$36,000	SHAREHOLDERS' EQUITY	
Less: Accum. dep'n. <u>(4,000)</u>	32,000	Common shares	26,000
		Retained earnings	<u>15,000</u>
		Total shareholders' equity	<u>41,000</u>
		Total liabilities and shareholders' equity	<u>\$54,000</u>
Total assets	<u>\$54,000</u>		

Req. 1

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
2014			
April 30	Accounts Receivable (\$6,800 – \$6,300)...	500	
	Rental Revenue		500
	To accrue rental revenue.		
30	Interest Receivable (\$300 – \$0)	300	
	Interest Revenue (\$300 – \$0).....		300
	To accrue interest revenue.		
30	Supplies Expense (\$700 – \$0)	700	
	Supplies (\$900 – \$200).....		700
	To record supplies expense.		
30	Insurance Expense (\$1,700 – \$0)	1,700	
	Prepaid Insurance (\$2,400 – \$700)		1,700
	To record insurance expense.		
30	Depreciation Expense (\$2,200 – \$0)	2,200	
	Accumulated Depreciation		
	(\$18,200 – \$16,000).....		2,200
	To record depreciation expense.		
30	Wages Expense (\$2,000 – \$1,600).....	400	
	Wages Payable (\$400 – \$0)		400
	To accrue wages expense.		
30	Unearned Rental Revenue (\$600 – \$100)	500	
	Rental Revenue		500
	To record unearned rental revenue that was earned during the period.		

Req. 2

Total assets = \$68,600 (\$8,300 + \$6,800 + \$300 + \$4,100 + \$200 + \$700 + \$66,400 – \$18,200)

Total liabilities = \$7,400 (\$6,900 + \$400 + \$100)

Total equity = \$61,200 (\$18,000 + \$42,700 + \$4,100* – \$3,600)

Net income* = \$4,100 (\$10,900 + \$300 – \$2,000 – \$1,700 – \$2,200 – \$300 – \$700 – \$200)

Assets = Liabilities + Shareholders' Equity

\$68,600 = \$7,400 + \$61,200

Req. 1

Marshall Ltd.
Income Statement
For the Year Ended December 31, 2014

Revenues:		
Service revenue		\$107,900
Expenses:		
Salary expense	\$39,900	
Rent expense	10,300	
Insurance expense	3,800	
Interest expense	3,100	
Supplies expense	2,900	
Depreciation expense	<u>1,600</u>	<u>61,600</u>
Income before tax		46,300
Income tax expense		<u>7,100</u>
Net income		<u><u>\$ 39,200</u></u>

Marshall Ltd.
Statement of Retained Earnings
For the Year Ended December 31, 2014

Retained earnings, December 31, 2013	\$ 1,000
Add: Net income	<u>39,200</u>
	40,200
Less: Dividends	<u>(24,000)</u>
Retained earnings, December 31, 2014	<u><u>\$16,200</u></u>

Req. 1

Marshall Ltd.
Balance Sheet
December 31, 2014

ASSETS		LIABILITIES	
Cash	\$ 1,400	Accounts payable	\$ 3,700
Accounts receivable	8,900	Interest payable	800
Supplies	2,300	Unearned service revenue	600
Prepaid rent	1,600	Income tax payable	2,100
		Note payable	<u>18,600</u>
Equipment	\$37,100	Total Liabilities	25,800
Less: Accum. dep'n.	<u>(4,300)</u>		
	32,800	SHAREHOLDERS' EQUITY	
		Common shares	5,000
		Retained earnings	<u>16,200</u>
		Total shareholders' equity	<u>21,200</u>
		Total liabilities and	
Total assets	<u>\$47,000</u>	shareholders' equity	<u>\$47,000</u>

Req. 2

$$\text{Debt ratio: } \frac{\$25,800}{\$47,000} = 0.549$$

Marshall Ltd. is in violation of its debt agreement, which requires the company to maintain a debt ratio no higher than 0.50.

To avoid this difficult situation, the company could have paid out less in dividends. By decreasing dividends by \$4,600, the company could have kept assets high enough to maintain a debt ratio of 0.50, as required. Or, the company could have borrowed less or could have paid off a liability.

$$\text{Debt ratio: } \frac{\$25,800}{\text{Assets}} = 0.50$$

To achieve a debt ratio of 0.50 assets need to be

$$\frac{\$25,800}{0.50} = \$51,600$$

\$51,600 – 47,000 = \$4,600, the asset value required to meet debt ratio requirements with liabilities = \$25,800.

Req. 1

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
2014			
Closing Entries			
March 31	Service Revenue	94,100	
	Retained Earnings		94,100
31	Retained Earnings	35,800	
	Salary Expense		17,800
	Supplies Expense		4,600
	Depreciation Expense		1,900
	Advertising Expense		10,900
	Insurance Expense		600
31	Retained Earnings	31,200	
	Dividends		31,200

Req. 2

Retained Earnings

March 31, 2014 Expenses	35,800	March 31, 2013 Bal.	20,200
March 31, 2014 Dividends	31,200	March 31, 2014 Revenues	94,100
		March 31, 2014 Bal.	47,300

$$\begin{aligned}
 \text{Net Income} &= \text{Revenues} - \text{Expenses} \\
 &= \$94,100 - \$35,800 \\
 &= \$58,300
 \end{aligned}$$

Ending Balance of Retained Earnings = \$47,300

Req. 3

Retained earnings increased during the year because net income of \$58,300 ($\$94,100 - \$35,800$) exceeded dividends of \$31,200.

Req. 1

**Marciano Ltd.
Balance Sheet
March 31, 2014**

ASSETS		
Current assets:		
Cash		\$ 7,500
Accounts receivable		16,500
Prepaid expenses		5,300
Supplies		<u>3,800</u>
Total current assets		33,100
Capital assets:		
Equipment	\$43,200	
Less accumulated depreciation	<u>(7,100)</u>	36,100
Other assets		<u>14,100</u>
Total assets		<u>\$83,300</u>
LIABILITIES		
Current liabilities:		
Current portion of note payable		\$ 800
Accounts payable		14,700
Salary payable		2,400
Unearned service revenue		<u>2,800</u>
Total current liabilities		20,700
Note payable, long-term		<u>6,200</u>
Total liabilities		26,900
SHAREHOLDERS' EQUITY		
Common shares		9,100
Retained earnings		<u>47,300*</u>
Total shareholders' equity		<u>56,400</u>
Total liabilities and shareholders' equity		<u>\$83,300</u>

* from P3-58A Req. 2

Req. 2

			<u>2014</u>	<u>2013</u>
Current ratio	=	$\frac{\text{Total current assets}}{\text{Total current liabilities}}$	= $\frac{\\$33,100}{\\$20,700}$ = 1.60	1.30
Debt ratio	=	$\frac{\text{Total liabilities}}{\text{Total assets}}$	= $\frac{\\$26,900}{\\$83,300}$ = 0.32	0.30

Marciano Ltd.'s debt position is strong based on both the current ratio of 1.60 and debt ratio of 0.32. Both are better than the norm for successful companies. A comparison with ratios in 2013 indicates the current ratio has improved and the debt ratio has had a slight deterioration, although it still is in the strong range.

Req. 1

		2014		2013		2012	
Current ratio	= $\frac{\text{Total current assets}}{\text{Total current liabilities}}$	$= \frac{11}{6.5} = 1.69$		$= \frac{6.0}{5.5} = 1.09$		$= \frac{4.0}{3.5} = 1.14$	

Req. 2

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}} = \frac{15.5}{27.0} = 0.574 \quad = \frac{10.5}{15.5} = 0.677 \quad = \frac{7.0}{7.0} = 1.00$$

Req. 3

The current ratio has improved over the 3 years (some deterioration in 2013 was reversed in 2014). This means that Ojibway Inc. had sufficient cash to pay its accounts payable and salaries payable every year. In 2014, the current ratio is very good and indicates that Ojibway can pay its debts.

The debt ratio has improved over the 3 years. In 2012, Ojibway financed 100% of its assets with debt. At December 31, 2014, only 57% of the assets were financed. This ratio is still high if the company needs to borrow in order to finance more equipment or expand their office space.

Problems

Group B

(15-20 min.) P 3-61B

(All amounts in millions)

1. Revenue – Expenses = Income
Revenue – Income = Expenses
\$19 – \$4 = \$15

2. Revenues	\$19
Expenses.....	<u>(15)</u>
Net income	<u>\$ 4</u>

3. Beginning receivables	\$ 6
Add: Revenue	19
Less: Collections	<u>(20)</u>
Ending receivables.....	<u>\$ 5</u>

Balance sheet

ASSETS

Current assets:

Receivables	\$5
-------------------	-----

(All amounts in millions)

4. Beginning accounts payable	\$ 9
Add: Expenses	15
Less: Payments	<u>(18)</u>
Ending accounts payable	<u>\$ 6</u>

Balance sheet

LIABILITIES

Current liabilities:

Accounts payable **\$6**

Req. 1

Fred's Catering Ltd.
Amount of Revenue (Expense) for May 2014

Date	Cash Basis		Accrual Basis	
May 1	Revenue	\$ 800		\$ 0
5	Expense	(700)	Expense	(700)
9	Revenue	2,000	Revenue	2,000
14	Expense	(1,800)		0
23		0	Revenue	700
31		0	Expense	(900)
31	Expense	<u>(3,000)</u>		<u>0</u>

Req. 2	Income (loss) before tax	<u><u>\$(2,700)</u></u>	Income before tax	<u><u>\$1,100</u></u>
---------------	--------------------------------	-------------------------	-------------------------	-----------------------

Req. 3

The accrual basis better measures net income. For example, the accrual basis accounts for the rent prepayment on May 31 as an asset because prepaid rent gives the business future use of the building for two months. The cash basis ignores the future benefit (asset nature) of the prepayment and accounts for the prepayment as an expense. The accrual basis records revenue as it is earned and matches expenses incurred to earn the revenue and thus the appropriate income is reported.

(10-15 min.) P 3-63B

TO: New Employee

FROM: Student Name, Controller

At the end of the period, we must make an adjusting entry for accrued utility expense to include among the expenses all our utility expense of the period. Our utility expense includes both the amounts we have paid and the amounts we have used, but which we have not yet paid. The unpaid utility expense is our liability to our service provider. If we fail to make this adjustment, we understate both expense and liabilities. As a result we would overstate net income and owners' equity on our financial statements.

***Note:* Student responses may vary.**

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
2014			
Dec. 31	a. Salary Expense (\$5,000 × 2/5)	2,000	
	 Salary Payable.....		2,000
	 To accrue salary expense.		
31	b. Interest Receivable	1,100	
	 Interest Revenue		1,100
	 To accrue interest revenue.		
31	c. Supplies Expense	11,400*	
	 Supplies		11,400
	 To record supplies expense.		
31	d. Unearned Service Revenue		
	 (\$20,000 × 3/4)	15,000	
	 Service Revenue		15,000
	 To record unearned service		
	 revenue that was earned during		
	 the period.		

***See next page.**

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
Dec. 31	e. Depreciation Expense – Computer Equipment	6,300	
	Depreciation Expense – Building	3,700	
	Accumulated Depreciation – Computer Equipment		6,300
	Accumulated Depreciation – Building.....		3,700
	To record depreciation expense.		
31	f. Insurance Expense	2,700**	
	Prepaid Insurance.....		2,700
	To record insurance expense.		

	Cost of asset available during the period	–	Cost of asset on hand at the end of the period	=	Cost of asset used (expense) during the period
*	(\$1,800 + \$12,500) \$14,300	–	\$2,900	=	\$11,400
**	(\$1,800 + \$3,600) \$5,400	–	\$2,700***	=	\$2,700
***	\$3,600 × 9/12 = \$2,700 asset at December 31				

Req. 1

(45-60 min.)P 3-65B

**Creative Advertising Ltd.
Adjusted Trial Balance
October 31, 2014**

ACCOUNT TITLE	TRIAL BALANCE		ADJUSTMENTS		ADJUSTED TRIAL BALANCE	
	DEBIT	CREDIT	DEBIT	CREDIT	DEBIT	CREDIT
Cash	16,300				16,300	
Accounts receivable	7,000		(a) 2,900		9,900	
Prepaid rent	4,000			(b) 1,000*	3,000	
Supplies	600			(c) 200	400	
Computers	36,000				36,000	
Accumulated depreciation		3,000		(d) 1,000**		4,000
Accounts payable		8,800				8,800
Salary payable				(e) 1,600***		1,600
Common shares		15,000				15,000
Retained earnings		21,000				21,000
Dividends	4,600				4,600	
Advertising revenue		25,400		(a) 2,900		28,300
Salary expense	4,400		(e) 1,600***		6,000	
Rent expense			(b) 1,000*		1,000	
Utilities expense	300				300	
Depreciation expense			(d) 1,000**		1,000	
Supplies expense			(c) 200		200	
	<u>73,200</u>	<u>73,200</u>	<u>6,700</u>	<u>6,700</u>	<u>78,700</u>	<u>78,700</u>

* $\$4,000 \div 4 = \$1,000$

** $\$36,000 \div 3 = \$12,000 \div 12 = \$1,000$

*** $\$2,000 \times 4/5 = \$1,600$

Req. 2

Creative Advertising Ltd.
Income Statement
For the Month Ended October 31, 2014

Revenues:		
Design revenue		\$28,300
Expenses:		
Salary expense	\$6,000	
Rent expense	1,000	
Depreciation expense	1,000	
Utilities expense	300	
Supplies expense	<u>200</u>	
Total expenses		<u>8,500</u>
Net income		<u>\$ 19,800</u>

Creative Advertising Ltd.
Statement of Retained Earnings
For the Month Ended October 31, 2014

Retained earnings, September 30, 2013	\$21,000	
Add: Net income	<u>19,800</u>	←
	40,800	
Less: Dividends	<u>(4,600)</u>	
Retained earnings, October 31, 2014	<u>\$36,200</u>	

Req. 2

Creative Advertising Ltd.
Balance Sheet
October 31, 2014

ASSETS		LIABILITIES	
Current assets:		Current liabilities:	
Cash	\$16,300	Accounts payable	\$ 8,800
Accounts receivable	9,900	Salary payable	<u>1,600</u>
Prepaid rent	3,000	Total current liabilities	10,400
Supplies	<u>400</u>		
Total current assets	29,600		
Computers	\$36,000	SHAREHOLDERS' EQUITY	
Less: Accum.		Common shares	15,000
amort. <u>(4,000)</u>	32,000	Retained earnings	<u>36,200</u> ←
		Total shareholders' equity	51,200
		Total liabilities and	
Total assets	<u>\$61,600</u>	shareholders' equity	<u>\$61,600</u>

Req. 3

a. Creative Advertising's net income exceeded dividends for the month. Continuation of this trend will increase both the assets and the shareholders' equity (retained earnings) of the business, as follows:

$$\begin{array}{ccccccc} \text{Assets} & = & \text{Liabilities} & + & \text{Shareholders'} & & \\ & & & & \text{Equity} & & \\ & \uparrow & = & 0 & + & \uparrow & \end{array}$$

b. This trend will make it easier to borrow because more and more assets will be available for the business to pay debts as they come due.

c. Current ratio = $\$29,600 / \$10,400 = 2.85$

The current ratio is strong. It does not appear that the business will need to borrow. The cash position of \$16,300 will cover all the current liabilities.

Req. 1**Journal**

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
2014			
Dec. 31	Accounts Receivable (\$12,400 – \$11,200).....	1,200	
	 Commission Revenue		1,200
	To accrue commission revenue.		
31	Supplies Expense (\$300 – \$0).....	300	
	 Supplies (\$1,000 – \$700)		300
	To record supplies expense.		
31	Insurance Expense (\$1,700 – \$0).....	1,700	
	 Prepaid Insurance (\$2,600 – \$900)		1,700
	To record insurance expense.		
31	Depreciation Expense (\$1,100 – \$0)	1,100	
	 Accumulated Depreciation		
	 (\$9,300 – \$8,200)		1,100
	To record depreciation expense.		
31	Salary Expense (\$27,500 – \$26,600)	900	
	 Salary Payable (\$900 – \$0).....		900
	To accrue salary expense.		
31	Interest Expense (\$1,200 – \$800).....	400	
	 Interest Payable (\$400 – \$0).....		400
	To accrue interest expense.		
31	Unearned Commission Revenue		
	(\$1,500 – \$1,100)	400	
	 Commission Revenue		400
	To record unearned commission revenue		
	that was earned during the period.		

Req. 2

Total assets	=	\$30,400	(\$4,100 + \$12,400 + \$700 + \$900 + \$21,600 – \$9,300)
Total liabilities	=	\$14,700	(\$6,300 + \$900 + \$400 + \$6,000 + \$1,100)
Total equity	=	\$15,700	(\$5,000 + \$3,500 + \$25,500*** – \$18,300)
***Net income	=	\$25,500	(\$74,400 – \$1,100 – \$300 – \$4,900 – \$27,500 – \$12,200 – \$1,200 – \$1,700)
Assets	=	Liabilities	+ Shareholders' Equity
\$30,400	=	\$14,700	+ \$15,700

Req. 1

Reid and Campbell Ltd.
Income Statement
For the Year Ended December 31, 2014

Revenues:		
Sales		\$165,900
Expenses:		
Salary expense	\$44,000	
Rent expense	12,000	
Depreciation expense	11,300	
Interest expense	<u>1,200</u>	<u>68,500</u>
Income before tax		97,400
Income tax expense		<u>18,800</u>
Net income		<u><u>\$ 78,600</u></u>

Reid and Campbell Ltd.
Statement of Retained Earnings
For the Year Ended December 31, 2014

Retained earnings, December 31, 2013	\$ 20,300
Add: Net income	<u>78,600</u>
	98,900
Less: Dividends	<u>(48,000)</u>
Retained earnings, December 31, 2014	<u><u>\$ 50,900</u></u>

Req. 1

Reid and Campbell Ltd.
Balance Sheet
December 31, 2014

ASSETS		LIABILITIES	
Cash	\$ 11,600	Accounts payable	\$ 3,600
Accounts receivable	41,400	Deposits	4,500
Prepaid rent	1,300	Interest payable	2,100
		Salary payable	900
Store furnishing	\$67,600	Income tax payable	8,800
Less: Accum. dep'n.	<u>(12,900)</u>	Note payable	<u>26,200</u>
	54,700	Total liabilities	46,100
		SHAREHOLDERS' EQUITY	
		Common shares	12,000
		Retained earnings	<u>50,900</u>
		Total shareholders' equity	<u>62,900</u>
Total assets	<u><u>\$109,000</u></u>	Total liabilities and shareholders' equity	<u><u>\$109,000</u></u>

Req. 2

$$\text{Debt ratio: } \frac{\$46,100}{\$109,000} = 0.42$$

Reid and Campbell's debt ratio is low, which indicates a strong financial position. This ratio indicates the company will have no difficulty paying its debt.

Req. 1

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
2014			
Closing Entries			
Dec. 31	Service Revenue	93,500	
	Retained Earnings		93,500
31	Retained Earnings	34,600	
	Salary Expense		24,600
	Supplies Expense		5,700
	Advertising Expense		2,200
	Depreciation Expense		1,300
	Interest Expense		800
31	Retained Earnings	47,400	
	Dividends		47,400

Req. 2

Retained Earnings

Dec. 31, 2014 Expenses	34,600	Dec. 31, 2013 Bal.	5,300
Dec. 31, 2014 Dividends	47,400	Dec. 31, 2014 Revenues	93,500
		Dec. 31, 2014 Bal.	16,800

$$\begin{aligned} \text{Net Income} &= \text{Revenues} - \text{Expenses} \\ &= \$93,500 - \$34,600 \\ &= \$58,900 \end{aligned}$$

Ending Balance of Retained Earnings = \$16,800

Req. 3

Retained Earnings increased during the year because net income of \$58,900 (\$93,500 – \$34,600) exceeded dividends of \$47,400.

Req. 1

**For You eTravel Inc.
Balance Sheet
December 31, 2014**

ASSETS

Current assets:

Cash	\$ 7,300
Accounts receivable	6,600
Supplies	<u>7,700</u>
Total current assets	21,600

Capital assets:

Furniture	\$41,400	
Less accumulated depreciation ..	<u>(11,600)</u>	29,800

Other assets	<u>3,600</u>
Total assets	<u>\$55,000</u>

LIABILITIES

Current liabilities:

Accounts payable	\$ 5,100
Salary payable	3,900
Unearned service revenue	<u>3,600</u>
Total current liabilities	12,600

Note payable, long-term	<u>10,600</u>
Total liabilities	23,200

SHAREHOLDERS' EQUITY

Common shares	15,000
Retained earnings	<u>16,800*</u>
Total shareholders' equity	<u>31,800</u>
Total liabilities and shareholders' equity	<u>\$55,000</u>

Req. 1

*Computation: (see P3-68B, Req. 1)

Retained earnings, December 31, 2013	\$ 5,300
Add: Net income (\$93,500 – \$34,600)	<u>58,900</u>
	64,200
Less: Dividends	<u>(47,400)</u>
Retained earnings, December 31, 2014	<u>\$16,800</u>

Req. 2

$$\text{Current ratio} = \frac{\text{Total current assets}}{\text{Total current liabilities}} = \frac{\$21,600}{\$12,600} = \frac{\underline{2014}}{1.71} \frac{\underline{2013}}{1.50}$$

The ability to pay current liabilities with current assets improved during 2014.

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}} = \frac{\$23,200}{\$55,000} = 0.42 \quad 0.45$$

The overall ability to pay total liabilities was greater in 2014 than it was in 2013.

Overall the company's debt position is strong with current and debt ratios better than the norm.

Req. 1

		2014		2013		2012
Current ratio	= $\frac{\text{Total current assets}}{\text{Total current liabilities}}$	$= \frac{17}{12.5}$	= 1.36	$= \frac{12}{11}$	= 1.09	$= \frac{10}{9.5}$ = 1.05

Req. 2

Debt ratio	= $\frac{\text{Total liabilities}}{\text{Total assets}}$	$= \frac{24.5}{36}$	= 0.681	$= \frac{17}{24.5}$	= 0.694	$= \frac{15}{16}$ = 0.938
------------	----------------------------------------------------------	---------------------	---------	---------------------	---------	---------------------------

Req. 3

The current ratio has improved over the 3 years (some deterioration in 2013 was reversed in 2014). This means the company had sufficient cash to pay its accounts payable and salaries payable every year. In 2014, the current ratio is very good and indicates that the company can pay its debts.

The debt ratio has improved over the 3 years. In 2012, the company financed almost 100% of its assets with debt. At December 31, 2014, only 68% of the assets were financed. This ratio is still high if the company needs to borrow in order to finance more equipment or expand their office space.

Decision Cases

(25 min.) Decision Case 1

Req. 1 Unadjusted trial balance:

Cash	\$ 6,000	
Accounts receivable	2,200	
Supplies	800	
Prepaid rent	12,000	
Land	41,000	
Accounts payable		\$10,000
Salary payable		0
Unearned service revenue		1,500
Note payable, due in three years		25,400
Common shares		15,000
Retained earnings		7,300
Service revenue		9,100
Salary expense	3,400	
Rent expense	0	
Advertising expense	900	
Supplies expense	0	
Totals	<u>\$66,300</u>	<u>\$68,300</u>


\$2,000
out of balance

(continued) Decision Case 1

Req. 2 Adjusted trial balance:

Cash	\$ 6,000	
Accounts receivable.....	2,200	
Supplies (\$800 – \$600)	200	
Prepaid rent (\$12,000 – \$1,000)	11,000	
Land (\$41,000 + \$2,000).....	43,000	
Accounts payable.....		\$10,000
Salary payable		400
Unearned service revenue (\$1,500 – \$800) .		700
Note payable, due in 3 years		25,400
Common shares		15,000
Retained earnings		7,300
Service revenue (\$9,100 + \$800).....		9,900
Salary expense (\$3,400 + \$400).....	3,800	
Rent expense (\$12,000 × 1/12).....	1,000	
Advertising expense	900	
Supplies expense	600	
Totals	<u>\$68,700</u>	<u>\$68,700</u>

Req. 3

$$\begin{aligned}\text{Current ratio} &= \frac{\$6,000 + \$2,200 + \$200 + \$11,000}{\$10,000 + \$400 + \$700} \\ &= \frac{\$19,400}{\$11,100} \\ &= 1.748\end{aligned}$$

Yes, we could sleep at night with a current ratio of 1.748. It's a great current ratio.

(20-30 min.) Decision Case 2

**Silver Skates Ltd.
Income Statement**

For the Month Ended October 31, 2014

Sales revenue		\$32,000
Cost of goods sold	\$14,000	
Wages expense	5,000	
Rent expense	4,000	
Insurance expense	1,000	
Depreciation expense	<u>1,000</u>	<u>25,000</u>
Net income		<u><u>\$ 7,000</u></u>

**Silver Skates Ltd.
Statement of Retained Earnings**

For the Month Ended October 31, 2014

Retained earnings, October 1, 2013	\$ 0
+ Net income	7,000
- Dividends	<u>(3,000)</u>
Retained earnings, October 31, 2014	<u><u>\$ 4,000</u></u>

(continued) Decision Case 2

Silver Skates Ltd.
Balance Sheet
October 31, 2014

ASSETS		LIABILITIES	
Cash	\$ 6,000	Accounts payable	\$ 5,000
Food inventory	3,000	Unearned revenue	<u>3,000</u>
Prepaid insurance	1,000		8,000
Dishes, silverware	4,000		
Fixtures	\$19,000		
Less: Accum. amort. <u>(1,000)</u>	<u>18,000</u>	OWNERS' EQUITY	
		Common shares	\$20,000
		Retained earnings	<u>4,000</u>
Total assets	<u>\$32,000</u>	Total liability and equity	<u>\$32,000</u>

Recommendation: The business is profitable, but it is not meeting Skate's criteria for expansion. She needs to focus on reaching \$10,000 net income in the short term. Total assets could have reached \$35,000 if dividends had not been paid.

(30-40 min.) Decision Case 3

Req. 1 (your highest price)

Revenue (\$20,000 + 5,000)		\$ 25,000*
Expenses:		
Salary	\$4,000	
Utilities	900	
Other (unrecorded)	1,100	
Salary of your manager	<u>6,000</u>	<u>12,000**</u>
Your expected monthly net income		\$ 13,000
Multiplier to compute price		<u>× 20</u>
Your highest price		<u><u>\$260,000</u></u>

Req. 2 (Walter Liu's lowest price)

**LW Media Inc.
Statement of Shareholders' Equity
June 30, 2014**

Unadjusted retained earnings		\$ 88,000
Add: Net income		
*Revenue	\$25,000	
**Less: Expenses		
(\$12,000 – \$6,000)	<u>(6,000)</u>	<u>19,000</u>
		107,000
Less: Dividends		<u>(9,000)</u>
Ending retained earnings		\$ 98,000
Common shares		<u>50,000</u>
Shareholders' equity, June 30, 2014		<u>\$148,000</u>
Multiplier to compute price		<u>× 1.5</u>
Walter Liu's lowest price		<u><u>\$222,000</u></u>

Req. 3

Mr. Liu's asking price is less than the highest price you have set for purchasing the business.

You should offer Walter Liu approximately \$200,000 for the business because he is willing to take \$222,000. If Liu appears especially eager to sell out, you may be able to buy the firm for \$200,000. However, if he is not so eager to sell and if you want the business badly enough, you may have to pay his asking price of \$222,000. You can always raise your offer, but you cannot decrease it, so start the negotiating process with an offer of \$200,000.

Note: Students may suggest some other number that is less than \$222,000, but, as was pointed out above, they should offer less than the asking price, especially if it is less than their highest price.

Ethical Issue 1

1. The journal entry to record the revenue is as follows:

Dec.	Accounts Receivable.....	XXX	
	Sales Revenue		XXX

The debit to Accounts Receivable will increase total current assets and, as a result, increase (improve) the current ratio.

The credit to Sales Revenue will increase total owners' equity and, as a result, decrease (improve) the debt ratio.

2. To record this transaction in December is *unethical*. In this case ARAS has not performed the service for the client and, therefore, has not earned the revenue prior to December 31. Revenue should be recorded no earlier than when it is earned. ARAS expects to earn the revenue in January. After performing the service, ARAS can ethically record the revenue.

3. The authors would suggest that ARAS report the current ratio of 1.47 and the debt ratio of 0.51 because these are the true values. ARAS can tell the bank of the signed contract for work to be performed in January and the hope for a better set of ratio values in the next year. ARAS may have to renegotiate the agreement with the bank and ask for less stringent ratio requirements.

Ethical Issue 2

1. These transactions—recorded as directed by Smith—overstate the store's reported income by \$26,000 (\$20,000 + \$5,000 + \$1,000).
2. It appears that Smith wants to improve the store's income in order to borrow on favourable terms. His action is *unethical* because he is deliberately overstating the store's reported income and manipulating the current ratio.

Smith would be helped by his unethical actions. The business will need a bank loan, and perhaps the money would be used to pay bills, expand the business, and so on. However, based on Smith's lack of integrity shown in this case, the money may be destined for his own use. Regardless of its use, the money is obtained under false pretenses.

The bank is harmed by Smith's actions. Lending money to Smith under false pretenses may lead the bank to charge an unrealistically low interest rate that robs the bank of interest revenue. In the extreme, the public is robbed if taxpayers wind up financing the bailout of a failed financial institution.

(continued) Ethical Issue 2

If the accountant holds an accounting designation, he is putting himself in danger of losing his designation or being suspended by becoming party to what is in effect fraudulent accounting records and reporting.

- 3. Personal advice will vary from student to student. The purpose of asking this question is to challenge students to take the high road of ethical conduct by having nothing to do with Smith's scheme. The authors would advise the accountant to take these actions, in order:**
- a. Refuse to take any part in Smith's scheme, explaining that the result is an overstatement of reported income and is therefore wrong. Accountants are bound to standards of ethical conduct that these actions violate.**
 - b. To remain ethical, the accountant must be willing to lose his/her job. It is better to protect one's reputation and retain any professional designation held even if that causes short-term hardship.**

Focus on Financials

(15-20 min.) Telus Corporation

Req. 1

Prepaid expenses aren't true expenses because they provide a future benefit for the business. All future benefits are assets, so prepaid expenses are assets.

Req. 2 (balances in millions)

Accounts Payable and Accrued Liabilities	Prepaid Expenses
<hr/>	<hr/>
1,477	113

Req. 3 (amounts in millions)

Journal

DATE	ACCOUNT TITLES AND EXPLANATION	DEBIT	CREDIT
a.	Accounts Payable and Accrued Liabilities	1,477	
	Cash		1,477
b.	Goods and Services Purchased.....	113	
	Prepaid Expenses		113
c.	Goods and Services Purchased.....	1,419	
	Accounts Payable and Accrued Liabilities.....		1,419
d.	Prepaid Expenses.....	144	
	Cash		144

Req. 4 (in millions)

Accounts Payable and Accrued Liabilities		Prepaid Expenses	
1,477	1,477	113	113
	1,419	144	
	1,419	144	

The balances of both accounts agree with the amounts from the balance sheet.

(continued) Telus Corporation

Req. 5

Current ratio:

	<u>2011</u>		<u>2010</u>
	<i>(Dollar amounts in millions)</i>		
$\frac{\text{Total current assets}}{\text{Total current liabilities}}$	$= \frac{\$2,051}{\$3,845} = 0.53$		$\frac{\$1,797}{\$4,098} = 0.44$

Debt ratio:

$$\frac{\text{Total liabilities}}{\text{Total assets}} = \frac{\$12,418}{\$19,931} = 0.62 \quad \frac{\$11,843}{\$19,624} = 0.60$$

Telus's current ratio is very low compared to the general standard of 1.50, but has improved in the past year and the company also generates significant cash flows from operations (over \$2.5 billion in each of 2010 and 2011), so liquidity is not a concern for Telus.

Its debt ratio held relatively steady at 0.62 compared to 0.60 in the prior year. This is within the acceptable range of 0.60-0.70, so its debt level is not a concern.

Focus on Analysis

(15-20 min.) TELUS Corporation.

Req. 1 (amounts in millions)

The beginning receivables balance of \$1,318 represents revenue earned in 2010 and the ending receivables balance of \$1,428 represents revenues earned in 2011 (assuming all receivables are paid within a reasonable period of time).

The 2011 receivable balance of \$1,428 would be included in TELUS's 2011 revenue of \$10,325.

Req. 2

	(amounts in millions)
Accumulated depreciation, December 31, 2010	\$19,269
less:	
Adjustment for assets disposed during 2011	<u>(253)</u>
	19,016
Accumulated depreciation, December 31, 2011	<u>(20,347)</u>
Depreciation expense for 2011	<u>\$1,331</u>

Depreciation expense matches amount on the 2011 statement of income.

(continued) TELUS Corporation**Req. 3**

Operating revenues	→ Accounts receivable
Goods and services purchased	→ Accounts payable and accrued liabilities
	→ Inventories
	→ Prepaid expenses
Depreciation	→ Property, plant, and equipment
Amortization of intangible assets	→ Intangible assets
Financing costs	→ Short-term borrowings
	→ Current maturities of long-term debt
	→ Long-term debt
Income taxes	→ Income and other taxes receivable (Asset)
	→ Income and other taxes payable
	→ Deferred income taxes (Liability)