


## CHAPTER 2

### ANALYZING CHANGES IN THE ACCOUNTING EQUATION

$$A = L + OE$$

**Business Transaction** - a financial event that affects assets, liabilities or owner's equity






simply means the event is expressed in terms of dollars or money

In Chapter 2 we will analyze changes in the accounting equation

### TOPIC 1 - ANALYZING OPENING BUSINESS TRANSACTIONS

Balances as at September 30, 2010

<b>ASSETS</b>				=	<b>LIABILITIES</b>		+	<b>OWNER'S EQUITY</b>
Cash	Auto- mobile	Furniture	Office Equipment	=	Bank Loan Payable	Accounts Payable	+	J.Emery, Capital
\$60000	+ \$15000	+ \$8000	+ \$7000	=	\$20000	+ \$10000	+	\$60000
				=			+	
\$ 90000				=	\$ 30000		+	\$60000

Transaction 1 - On October 1, 2010 J. Emery Real Estate buys more furniture for \$1000 from Enns Furniture Ltd., and pays by cheque

Note: only assets are affected by this transaction

ASSETS				=	LIABILITIES		+	OWNER'S EQUITY
Cash	Auto- mobile	Furniture	Office Equipment	=	Bank Loan Payable	Accounts Payable	+	J.Emery, Capital
\$60000	+	\$15000	+		\$20000	+		\$60000
+		\$8000	+			\$10000	+	
+			\$7000	=				
<u>- 1000</u>	<u>          </u>	<u>+ 1000</u>	<u>          </u>		<u>          </u>	<u>          </u>		<u>          </u>
59000	15000	9000	7000	=	20000	10000		60000
		90000		=		90000		

**Transaction 2** - On October 3, 2010 J. Emery Real Estate buys more office equipment valued at \$1200 this time from Ryan Equipment Co. on 60 days credit. In other words, the creditor allows 60 days for payment

**Note:** on the left side assets are affected and on the right side liabilities **OWNER'S**

ASSETS				=	LIABILITIES + EQUITY		
Cash	Auto- mobile	Furniture	Office Equipment	=	Bank Loan Payable	Accounts Payable	J.Emery, Capital
\$59000	+ \$15000	+ \$9000	+ \$7000		\$20000	+ \$10000	+ \$60000
<u>59000</u>	<u>15000</u>	<u>9000</u>	<u>7000</u> <u>+ 1200</u>	=	<u>20000</u>	<u>10000</u> <u>+ 1200</u>	<u>60000</u>
	<u>91200</u>			=		<u>91200</u>	

**Transaction 3** - On October 4, 2010 J. Emery Real Estate returns one calculator costing \$200 from Ryan Equipment Co. because it arrived damaged

**Note:** on the left side assets are affected and on the right side liabilities

ASSETS				=	LIABILITIES + OWNER'S EQUITY		
Cash	Auto-	Furniture	Office		Bank Loan	Accounts	J.Emery,
\$59000	mobile	\$9000	Equipment	=	Payable	Payable	Capital
+	\$15000	+	\$8200		\$20000	+	\$60000
+		+			+	\$11200	+
<hr/>	<hr/>	<hr/>	<hr/>	=	<hr/>	<hr/>	<hr/>
\$9000	15000	9000	8000		20000	11000	60000
		91000		=	91000		

**Transaction 4** - On October 5, 2010 J. Emery Real Estate writes a cheque for \$5000 to Western Motors Ltd. in payment for the car Jane Emery purchased in September, when she established the business. Prior to this payment, Western Motors Ltd. held a claim against the assets of J. Emery Real Estate; the cheque therefore eliminates this claim.

*Liability*

**Note:** on the left side assets are affected and on the right side liabilities

ASSETS				=	LIABILITIES + OWNER'S EQUITY		
Cash	Auto- mobile	Furniture	Office Equipment	=	Bank Loan Payable	Accounts Payable	J.Emery, Capital
\$59000	+ \$15000	+ \$9000	+ \$8000	=	\$20000	+ \$11000	+ \$60000
<u>-5000</u>	<u>          </u>	<u>          </u>	<u>          </u>	=	<u>          </u>	<u>-5000</u>	<u>          </u>
\$1000	15000	9000	8000	=	20000	6000	60000
86000				=	86000		

**Transaction 5** - On October 15, 2010 J. Emery Real Estate writes a cheque for \$4000 to the Royal Bank of Canada in partial payment of the bank loan.

Note: on the left side assets are affected and on the right side liabilities

ASSETS				=	LIABILITIES + OWNER'S EQUITY		
Cash	Auto-	Furniture	Office		Bank Loan	Accounts	J.Emery,
\$54000	mobile	\$9000	Equipment	=	Payable	Payable	Capital
\$54000	+ \$15000	+ \$9000	+ \$8000		\$20000	+ \$6000	+ \$60000
<u>-4000</u>				=	<u>-4000</u>		
50000	15000	9000	8000		16000	6000	60000
			82000	=	82000		



**Transaction 6** - On October 16, 2010 Jane Emery decides to increase her investment in the business by taking \$3000 from her personal savings account and depositing it into the firms bank account.

Note: on the left side assets are affected and on the right side owner's equity

*investment* ↓

ASSETS				=	LIABILITIES		+	OWNER'S EQUITY
Cash	Auto-	Furniture	Office		Bank Loan	Accounts		J.Emery,
\$50000	mobile	+ \$9000	Equipment	=	Payable	Payable	+	Capital
\$15000			+ \$8000		\$16000	+ \$6000		+ \$60000
<u>+3000</u>				=				<u>+3000</u>
53000	15000	9000	8000		16000	6000		63000
85000				=	85000			

**Transaction 7** - On October 30, 2010 Jane Emery withdraws \$2000 from her firms bank account and deposits it into her personal bank account.

Note: on the left side assets are affected and on the right side owner's equity

ASSETS				=	LIABILITIES		+	OWNER'S EQUITY	
Cash	Auto- mobile	Furniture	Office Equipment	=	Bank Loan Payable	Accounts Payable	+	J.Emery, Capital	J. Emery, Drawing
\$53000	+ \$15000	+ \$9000	+ \$8000	=	\$16000	+ \$6000	+	\$63000	- 2000
<del>53000</del> 51000	15000	9000	8000	=	16000	6000	+	61000	
83000				=	83000				

When the owner withdraws from the business it is recorded under a new subheading J. Emery, Drawing. Since the original investment has not decreased, we need a new item that will show a decrease in owner's equity, namely, drawings.

**Drawings**: decreasing owner's equity and resulting from the owner's withdrawal of assets for personal use.

## Preparing a Summary Table

SUMMARY TABLE												
Trans- actions	ASSETS					=	LIABILITIES			+	OWNER'S EQUITY	
	Cash	Auto- mobile	Furni- ture	Office Equip.	Total or Change in Assets	Bk. Loan Payable	Accts. Pay.	Total or Change in Lias.	J. Emery, Capital	J. Emery, Drawing	Total or Change in OE	
(Orig. bal)	\$60 000	+\$15 000	+\$8 000	+\$7 000	+\$90 000	\$20 000	\$10 000	\$30 000	\$60 000		\$60 000	
1	-1 000		+1 000		Ø							
2				+1 200	+1 200		+1 200	+1 200				
3				-200	-200		-200	-200				
4	-5 000				-5 000		-5 000	-5 000				
5	-4 000				-4 000	-4 000		-4 000				
6	+3 000				+3 000				+3 000		+3 000	
7	-2 000				-2 000					-2 000	-2 000	
<b>Totals</b>	<b>\$51 000</b>	<b>+\$15 000</b>	<b>+\$9 000</b>	<b>+\$8 000</b>	<b><u>\$83 000</u></b>	<b>\$16 000</b>	<b>+\$6 000</b>	<b><u>\$22 000</u></b>	<b>\$63 000</b>	<b>+\$2 000</b>	<b><u>\$61 000</u></b>	

Equality Check:    A    =    L    +    OE  
 \$83 000 = \$22 000 + \$61 000  
 \$83 000 =        \$83 000

Topic 1 - Problems

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	ASSETS				=	LIABILITIES			+	OWNER'S EQUITY		
	Cash	Truck	Tools	Total or Change in Assets		Bank Loan Payable	Accts Payable	Total or Change in Liab.		G. Truer, Capital	G. Truer, Drawings	Total or Changes in OE
O.B.	\$6000	\$15000	\$4000	\$25000		\$5000	\$6000	\$11000		\$14000		\$14000
1			+3000	+3000			+3000	+3000				
2	-4000			-4000			-4000	-4000				
3			-400	-400			-400	-400				
4	+7000			+7000						+7000		+7000
5	+8000			+8000		+8000		+8000				
Ttl	17000	15000	6600	<u>38600</u>		13000	4600	<u>17600</u>		21000	—	<u>21000</u>

Equality Check:

$$A = L + OE$$

$$38600 = 17600 + 21000$$

$$38600 = 38600 \quad \checkmark$$

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Topic 1 Mini-Cases Page 32 - 33

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SUMMARY TABLE

Trans- actions	Assets				=	Liabilities			+	Owner's Equity		
	Cash	Stage Props	Makeup Supplies	Total Assets	Bk. Loan Payable	Accts. Payable	Total Liabilities	A. Sousa, Capital	A. Sousa, Drawing	Total O. E.		
(i)	4 000			4 000				4 000		4 000		
(ii)	10 000			14 000	10 000		10 000			4 000		
(iii)		4 400		18 400		4 400	14 400			4 000		
(iv)	-900		900	18 400			14 400			4 000		
(v)	100		-100	18 400			14 400			4 000		
(vi)	-2 500	2 500		18 400			14 400			4 000		
(vii)	-300			18 100			14 400		-300	3 700		
(viii)	-1 000			17 100		-1 000	13 400			3 700		
(ix)			200	17 300			13 400	200		3 900		
<b>Totals</b>	<b>9 400</b>	<b>6 900</b>	<b>1 000</b>	<b>17 300</b>	<b>10 000</b>	<b>3 400</b>	<b>13 400</b>	<b>4 200</b>	<b>300</b>	<b>3 900</b>		

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SUMMARY TABLE

Trans- action Date	Assets							=	Liabilities			+	Owner's Equity
	Cash	Land	Building	Trans- mitter	Broadcast Equipment	Compact Disc Library	Total Assets	Bank Loan Payable	Accounts Payable	Total Liabilities	E. Greenwood, Capital		
Nov. 1	80 000						80 000		-	0	80 000		
3	-3 000	43 000					120 000		40 000	40 000			
4	30 000						150 000	30 000		70 000			
5	-15 000			55 000			190 000		40 000	110 000			
6	-68 000		68 000				190 000			110 000			
8	-450				450		190 000			110 000			
11	-1 250				1 250		190 000			110 000			
14	-1 750					5 750	194 000		4 000	114 000			
16	250					-250	194 000			114 000			
18	-500						193 500		-500	113 500			
30					1 125		194 625		1 125	114 625			
Totals	20 300	43 000	68 000	55 000	2 825	5 500	194 625	30 000	84 625	114 625	80 000		



**SUMMARY TABLE**

Tran. Date	ASSETS							=	LIABILITIES			OWNER'S + EQUITY
	Cash	Land	Building	Transmitter	Broad. Equip.	CD Library	Change in Total Assets	Bank Loan Pay.	Acc. Payable	Change in Total Liabilities	E. Greenwood, Capital	
Nov. 1	80 000						+80000				80 000	
Nov. 3	-3 000	43 000					+40000		40 000	+40000		
Nov. 4	30 000						+30000	30 000		+30000		
Nov. 5	-15 000			55 000			+40000		40 000	+40000		
Nov. 6	-68 000		68 000				0					
Nov. 8	-450				450		0					
Nov. 11	-1250				1250		0					
Nov. 14	-1750					5750	+4000		4 000	+4000		
Nov. 16	250					-250	0					
Nov. 18	-500						-500		-500	-500		
Nov. 30						1125	+1125		1125	+1125		
<b>Totals</b>	20 300	43 000	68 000	55 000	1 700	6625	194 625	30 000	84 625	114 625	80 000	

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Radio Station CHJK  
Balance Sheet  
as at November 30, 19--

ASSETS		LIABILITIES	
Cash .....	\$20 300	Bank Loan Payable .....	\$ 30 000
Land .....	43 000	Accounts Payable:	
Building .....	68 000	Dwelling Development .....	\$40 000
Transmitter .....	55 000	Ferris Music Centre .....	5 125
Broadcast Equipment .....	2 825	Radio Specialty Ltd. ....	<u>39 500</u>
Compact Disk Library .....	5 500	Total Liabilities .....	<u>\$114 625</u>
		OWNER'S EQUITY	
		E. Greenwood, Capital .....	<u>80 000</u>
Total Assets .....	<u>\$194 625</u>	Total Liabilities and Owner's Equity .....	<u>\$194 625</u>

Apr. 1 – Martha Whiting invested \$65 000 cash into her business.

Apr. 2 – She purchased land for \$17 000 from Superior Lots, Ltd. A cash down payment of \$4 500 was made, and 60 days' credit extended.

Apr. 3 – She took out a loan of \$42 000 on demand from the Bank of Montreal.

Apr. 5 - A tractor was purchased for \$32 000 from McIntosh Farms, Ltd. She made a down payment of \$6 250 cash on the tractor. The balance is to be paid in monthly instalments of \$750, beginning April 22<sup>nd</sup>.

Apr. 7 – The business built an office building for \$78 450. A mortgage of \$45 000 was taken out on the building. The remainder was paid in cash.

Apr. 9 – Various pieces of equipment were purchased for \$3 500 cash from Home Hardware.

Apr. 11 – Martha took \$3 000 out from the business's chequing account for personal use.

Apr. 15 - Tools were purchased for \$4 200 from Kent Building Supplies. A cash payment of \$1 300 was made, with the balance to be paid within 30 days.

Apr. 16 – A piece of equipment that was purchased from Home Hardware had to be returned. It cost \$625 and Home Hardware accepted the return.

Apr. 19 – Martha invested another \$10 000 into her business.

Apr. 22 – A cheque of \$750 was paid to McIntosh Farms, Ltd. as the first installment due that day.

Apr. 29 – New tools were purchased from Kent Building Supplies for \$650, to be paid within 30 days.

