

## WEEK 4 Notes & Activity

### Sub-strands 12.1.1.5: Accounting Equation.

The accounting equation originates from the idea of the accounting entity concept. From this concept we only account from the point of view of the business treating the owner as an outsider or a separate entity (body).

When a business start, the owner may start the business with his own contribution of say \$20,000 then the business's total assets (A) equals the owner's equity (debt to the owner internal liability) at that date or point in time.

Assets (A) \$20,000 = Owner's Equity or Proprietorship (OE or P) \$20,000

If the owner start the business with a loan from the Tonga Development Bank of \$20,000 because he didn't have funds then the business's asset (cash of \$20,000) equal the business's future obligation (external liability) (loan of \$20,000) at that date or point of time. That is:

Assets (\$20,000) = liability (L) (\$20,000)

The equation still hold if the business starts with both a contribution from the owner (OE) and a borrowing from outside (L) then:

Assets (A) = Liabilities (L) + Proprietorship (P)

This can be re-written as:

L = A - P

OR

P = A - L

It can now be seen that L and P are the sources of funds (external sources and internal source) will always equal the form the funds take (uses of funds)

Form the funds take (uses of funds) = Sources of funds

When the business continue its operation it will either make a profit or a loss. The profit is the reward for the owner's capital invested and therefore add to the owner's equity. Now the equation is:

A = L + P + profit

OR

The business may incur a loss:

A = L + P - loss

**BUT**

$$\text{Profit (loss)} = \text{Revenue} - \text{Expenses}$$

**THEREFORE**

**From this simple accounting equation any revenue for the business is earned by the owner (addition to the OE) and any expense incur by the business is a subtraction to the owner's equity.**

This is because, it is the owner who will receive the business's profit or face the business's loss and not the external liabilities (L)

**Proprietorship (owner's equity) can increase by the owner's contribution or revenue and decreases by expenses or withdrawing by the owner..**

*For example A:*

Suppose, the business starts with a total assets of \$50,000 which were funded from the owners contribution of \$20,000 cash and a loan from the bank of \$30,000.

The accounting equation would be:

Assets	=	Liability +	Proprietorship
\$50,000	=	\$30,000 (loan) +	\$20,000 (capital)

Suppose that during the first week of operation the business:

- a) The business pay expenses of \$2,000
- b) Earn cash revenue of \$3,000

The effects on the equation would be:

	Assets	=	Liability	+	Proprietorship
	\$50,000	=	\$30,000	+	\$20,000
a)	<u>- \$2,000</u>	=			<u>-\$2,000</u>
	\$48,000	=	\$30,000	+	\$18,000
b)	<u>+ \$3,000</u>	=			<u>+\$3,000</u>
	\$51,000	=	\$30,000	+	\$21,000

**Extended Accounting Equation**

The inclusion of revenues and expenses to A = L + P show the new equation of:

$$A = L + P + (R - E)$$

OR

$$A = L + P + R - E$$

OR

$$A + E = L + P + R$$

Now the effects of revenues and expenses can show the separate effects on R and E respectively.

**Activity 1A: Basic accounting equation.**

1. Show the effects of each transaction on the Accounting Equation table below.
  - a). 1<sup>st</sup> July 2020 – Owner contributed \$100,000 cash into the business.
  - b). 10<sup>th</sup> July 2020 - Paid salaries \$ 300.
  - c). 18<sup>th</sup> July 2020 – Received \$700 cash from Tevita Fifita.
  - d). 20<sup>th</sup> July 2020 – purchase a new equipment from PTH \$250 cash.

	Assets	=	Liability	+	Proprietorship
a)		=			
b)		=			
		=			
c)		=			
		=			
d)		=			
		=			

**Example B: Working with the Accounting Equation.**

Sela Kalu purchases the hairdressing business. The business has the following assets:

- ❖ Cash \$ 11,000 and a Car \$5,800.

The relationship between the assets, liabilities and owner’s equity for Sela Kalu hairdressing business can be written as an accounting equation:

$$\begin{array}{rcl}
 \text{OE} & = & \text{A} - \text{L} \\
 \$16,800 & = & \text{Cash } \$ 11,000 + \text{Car } \$ 5,800
 \end{array}$$

Sela Kalu still does not have sufficient funds to set up the business, so her bank agrees to olend the business \$ 18,000.

Sela’s business now has the following assets: cash \$29,000 (\$18,000 + \$ 11, 000), car \$5,800. However, the business also owes \$ 18,000 to the bank and \$ 16, 800 to Sela.

The equation can now be written:

Owner's equity	=	Assets	-	Liabilities
		Cash    Car		Loan
\$ 16,800	=	\$11,000 + \$5,800		
		+ \$ 18,000		+\$ 18,600
<b>\$ 16,800</b>	=	<b>\$ 29,000 + \$ 5,800</b>	-	<b>\$ 18,600</b>

❖ The accounting equation can be expanded to show the items which make up the total assets of the business.

A	=	L	+	P/OE
\$29,000 + \$ 5,800	=	\$18,000	+	\$ 16,800
Cash    Car		Loan		Capital
				
Uses of funds	=	sources of funds		

Activity 1B:

1. Complete the following table and fill in the correct numbers:

	OWNER'S EQUITY	=	ASSETS	-	LIABILITIES
a.			10,000		7,000
b.	13, 000				6,000
c.	26,000		50,000		
d.	117, 000		180,000		
e.	292, 000				60, 000

2. James Bee owns a record store. The assets and liabilities for the record store are:

- Land and building                      \$ 150,000
- Fixtures and Fittings                 \$ 16,000
- Stocks of Disks and Tapes            \$ 27,000

- Account Payable                      \$ 15,600

*Use the accounting equation to calculate:*

a. Total Liabilities.

b. Total Assets.

c. Total Owner's Equity.

d. The sources of funds.

e. The uses of funds.



Activity 1C: Changes to the Accounting Equation

1. Using the equation produced in Activity 1B (3), record the following transactions. (Draw up a new equation after each new transaction using the previous example as a guide.)

- a. Caroline buys some more play equipment on credit for \$ 2,500.
- b. She draws \$ 1,200 from her personal bank account and puts it into the business bank account.
- c. Caroline needs more **cash on hand** so she withdraws \$ 100 from the business bank account.
- d. She draws cheque for \$ 400 to purchase more tables.

<i>OE</i>	=	<i>A</i>	-	<i>L</i>
a.	=		-	
	=		-	
b.	=		-	
	=		-	
c.	=		-	
	=		-	
d.	=		-	
	=		-	