

Fundamental Accounting Equation/Balance Sheet Equation

The fundamental or the basic accounting equation is the basis of double-entry system of accounting. It states that total assets of the business are provided by the creditors/ lenders and the owners. Therefore, at any point of time, the total assets of the business are equal to total liabilities. Liabilities to the outsiders are known as liabilities but liability to the owners, in accounting, is referred to as 'capital'.

The relationship that exists among assets, liabilities and capital can be expressed in the form of an equation named accounting equation in the following way:

$$\text{Assets} = \text{Equities or} \\ \text{Assets} = \text{Liabilities} + \text{Capital}$$

ACCOUNTING EQUATION-Servicing Business

Qno1: Following are the transactions relating the business of Mr.Ali:

- i. Mr. Ali started his business with cash investment of Rs.500, 000.
- ii. Purchased furniture for cash Rs.50, 000.
- iii. Deposited cash into bank Rs.10, 000.
- iv. Purchased office supplies for cash Rs.5, 000.
- v. Purchased equipment for Rs.5, 000 and paid by cheque.

Qno2: The following transactions relate to the business of Faraz Bhollo:

- i. Faraz Bhollo started his business with cash, land, building, and furniture for Rs.300, 000, 100,000, 250,000 and 50,000 respectively.
- ii. Deposited cash into bank Rs.100, 000.
- iii. Purchased supplies and furniture in cash and equipment by check Rs.10, 000, 15,000 and 10,000 respectively.
- iv. Purchased equipment on credit from Mr.Zahid Rs.15, 000.

Qno3: Following transactions relate to the business of "Carachi Dry Cleaners".

- i. Mr. Kara commenced his dry cleaning business with a cash investment of Rs.500, 000.
- ii. Deposited cash into bank Rs.100, 000.
- iii. Purchased office supplies in cash, furniture by cheque and equipment on credit from Mr.Ali for Rs.10, 000, 25,000 and 15,000 respectively.
- iv. Purchased dry cleaning machine from Mr. Shams Rs.100, 000.
- v. Rendered services for cash Rs.200, 000.
- vi. Rendered services for cash Rs.300, 000 of which 100,000 was deposited into bank.
- vii. Rendered services on account Rs.50,000

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Qno4: Following are the transactions relating to the business of "Javed & Co", the auditors:

- i. Invested cash in business Rs.5, 000.
- ii. Purchased furniture for cash Rs.2, 500.
- iii. Paid office rent for the current month Rs.300.
- iv. Rendered services and collected cash Rs.1, 000.
- v. Purchased supplies on account from Rex & Co for Rs.200.
- vi. Rendered services on account and billed Ulfat & Sons for Rs.750.
- vii. Withdrew cash from business for personal use Rs.100.
- viii. Paid cash Rs.100 to Rex & Co.
- ix. Received cash Rs.500 from Ulfat & Sons.

Qno5: The following transactions related to the business of "Imran Printing & Co":

- i. Started business with a cash investment of Rs.50,000.
- ii. Purchased office supplies for cash Rs.1,000.
- iii. Purchased furniture for cash Rs.1,000.
- iv. Purchased printing equipment on account for Rs.80,000.
- v. Rendered professional services and received cash Rs.11,000.
- vi. Paid office rent for the current month Rs.4,000.
- vii. Withdrew cash for personal use Rs.6,000.
- viii. Rendered professional services on account to the Agha Khan Hospital and billed for Rs.140,000.
- ix. Received cash Rs.130,000 from Agha Khan Hospital.

Qno6: Given:

- i. Mr.Akram started his business with cash investment of Rs,50,000.
- ii. Purchased supplies for cash Rs.1,000.
- iii. Purchased dry cleaning machine worth Rs.80,000 by paying cash Rs.20,000 and the balance on account from Hilal & Co.
- iv. Purchased furniture for cash Rs.10,000.
- v. Received cash from customers against services rendered to them Rs.20,000.
- vi. Paid wages for the first month Rs.2,000.
- vii. Sent a bill to Agha Khan Hospital for Rs.80,000 against services rendered to them.
- viii. Paid electric & telephone bill for Rs.5,000.
- ix. Received Rs.75,000 from Agha Khan Hospital.
- x. Paid Rs.5,500 to Hilal & Co.

Qno7: Given:

- i. Started business with cash investment of Rs.100,000.
- ii. Purchased office equipment for cash Rs.20,000.
- iii. Purchased office supplies from Mr.Ali for Rs.10,000.
- iv. Paid cash to Mr.Ali Rs.5,000.
- v. Rendered services to Mr.Akram Rs.10,000.

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- vi. Rendered services for cash Rs.5,000.
- vii. Received cash from Mr.Akram Rs.5,000.
- viii. Paid salaries Rs,5,000.
- ix. Withdrew cash for personal use Rs.5,000.

Qno8: Given:

- i. Mr.Aslam started business with cash investment of Rs.60,000.
- ii. Purchased office supplies for cash Rs.500.
- iii. Purchased dry cleaning machine worth Rs.50,000 from Mr.Shahid.
- iv. Rendered professional services and received cash Rs.15,000.
- v. Rendered professional services on account to Agha Khan Hospital for Rs.30,000.
- vi. Paid rent expense Rs.5,000.
- vii. Paid salaries expense Rs.15,000.

Qno9:The following transactions were completed by Mr.Farhan during the month of January 2002:

- i. Invested cash Rs.100,000 in the business.
- ii. Purchased shop from Mr.Qazi for Rs.50,000 by paying cash Rs.5,000 and balance on credit.
- iii. Purchased land for cash Rs.30,000.
- iv. Sold a part of land costing Rs.15,000 to Mr.Wazir on account.
- v. Purchased office equipment on credit from Fine Equipment for Rs,10,000.
- vi. Received cash from Mr.Wazir Rs.10,000.
- vii. Paid cash to Mr.Qazi Rs.10,000.
- viii. Paid salaries Rs.20,000.

Qn10: Following are the transactions related to the business of "Iqbal & Sons" (Broker):

- i. Iqbal started business with a cash investment of Rs.5, 000.
- ii. Purchased office supplies for cash Rs.300.
- iii. Purchased furniture for cash Rs.4, 000.
- iv. Paid office rent Rs.350.
- v. Commission earned for cash Rs.4, 000.
- vi. Rendered services to Kamal & Co who paid Rs.500 in cash and promising to pay the balance of Rs. 3,500 after a week.
- vii. Purchased furniture from Hilal & Co by paying cash Rs.300 and promising to pay the balance of Rs.700 after two weeks.

Qno11: Given:

- i. The owner invested cash Rs.2,500 in the business.
- ii. Paid two months tent in advance Rs.600.
- iii. Purchased office equipment for cash Rs.1,200.
- iv. Purchased office supplies Rs.60 and office equipment Rs.300 on account.
- v. Rendered services to customers by receiving cash Rs.400.
- vi. Paid salaries Rs.250.

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- vii. Rendered services on account to customers Rs.750.
- viii. Collected cash from customers on account Rs.750.
- ix. Paid Rs.100 to suppliers.

Qno12:Mr.Aziz , an agent , started his business on March 1 , 2008 and invested cash Rs.100,000 , furniture Rs,30,000 , shop Rs.150,000 and deposited into firm's bank Rs.50,000.He performed the following transactions during the current financial year:

- i. Purchased office supplies Rs.20,000.
- ii. Purchased a computer for Rs.10,000 on account.
- iii. Rendered services to customers on cash Rs.30,000.
- iv. Purchased air conditioner for Rs.40,000 on account.
- v. Rendered services to customers on account Rs.100,000.
- vi. Paid salaries Rs.15,000.
- vii. Collection from customers Rs.60,000.
- viii. Paid to suppliers Rs.30,000.
- ix. Rendered services on account Rs.5,000 and on cash Rs.10,000.

Qno13:On Jan 1 , 2008 , "Januu Babba" started a dry cleaning business with the name and style of " New Tiger One Dry Cleaners". His transactions relating to 2008 are following:

- i. Invested Rs.600,000 cash in the business.
- ii. Transferred his personal bank account having the balance of Rs.300,000 into his business account.
- iii. Purchased three dry cleaning machines for Rs.100,000 each by paying 1/2 of the amount from Mr.Noman.
- iv. Purchased furniture for Rs.40,000 and paid by cheque.
- v. Acquired a shop and paid advance rent to the landlord Rs.50,000.
- vi. Purchased supplies Rs.20,000.
- vii. Purchased computer , fans and water pump for Rs.50,000 and paid by cheque.
- viii. Rendered services to customers Rs.100,000 and received cash.
- ix. Rendered services to Bukhari Medical Rs.150,000.
- x. Paid salaries to employees Rs.30,000.
- xi. Paid advertising expense Rs.10,000.
- xii. Collected cash from Bukhari Medical Rs.100,000.
- xiii. Paid Rs.50,000 to Mr.Noman.
- xiv. Withdrew Rs.15,000 for the personal expenditure.
- xv. Paid the residential rent Rs.4,000.
- xvi. Rendered services to Mr.Akram for Rs.30,000 and received the promissory note.

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Qno14: Water-Wise Landscaping was, organized on September 1 of the current year and had the following account balances at December 31, listed in tabular form.

Assets				=	Liabilities		+	Owner's Equity
Cash	Land	Building	Office Equipment	=	Notes Payable	Accounts Payable	+	J. Green, Capital
Balances \$14,800	\$50,000	\$45,000	\$22,500	=	\$32,000	\$25,300	+	\$75,000

Early in January, the company carried out the following transactions:

- 1 The owner, J. Green, deposited \$20,000 in personal funds into the bank account of the business.
- 2 Purchased land and a small office building for a total price of \$80,000, of which \$30,000 was the value of the land and \$50,000 was the value of the building. Paid \$20,000 in cash and signed a note payable for the remaining \$60,000.
- 3 Bought a Xerox copying machine on credit for \$9,500 (30-day open account).
- 4 Obtained a loan from Gulf Coast Bank in the amount of \$18,000. Signed a note payable.
- 5 Paid the \$9,500 account payable originating in transaction 3.

Required:

- a List the December 31 balances of assets, liabilities, and owner's equity in tabular form as shown above.
- b Record the effects of each of the six transactions in the tabular arrangement illustrated above. Show the totals for all columns after each transaction.

Qno15: Complete the columns to show the effects of the following transactions:

- (a) We pay a creditor Rs.70 in cash.
- (h) Bought fixtures Rs.200 paying by cheque.
- (c) Bought goods on credit Rs.275.
- (d) The proprietor introduces another Rs.500 cash into the firm.
- (e) J. Walker lends the firm Rs.200 in cash.
- (f) A debtor pays us Rs.50 by cheque.
- (g) We return goods costing Rs.60 to a supplier whose bill we had not paid.
- (h) Bought additional shop premises paying Rs.5,000 by cheque.

Effects upon		
Assets	Liabilities	Capital

1.1 Complete the gaps in the following table:

	<i>Assets</i>	<i>Liabilities</i>	<i>Capital</i>
	£	£	£
(a)	12,500	1,800	?
(b)	28,000	4,900	?
(c)	16,800	?	12,500
(d)	19,600	?	16,450
(e)	?	6,300	19,200
(f)	?	11,650	39,750

1.2A Complete the gaps in the following table:

	<i>Assets</i>	<i>Liabilities</i>	<i>Capital</i>
	£	£	£
(a)	55,000	16,900	?
(b)	?	17,200	34,400
(c)	36,100	?	28,500
(d)	119,500	15,400	?
(e)	88,000	?	62,000
(f)	?	49,000	110,000

1.3 Which of the items in the following list are liabilities and which of them are assets?

- | | |
|---------------------------|---------------------------------|
| (a) Loan to C Shirley | (d) Computers |
| (b) Bank overdraft | (e) We owe a supplier for goods |
| (c) Fixtures and fittings | (f) Warehouse we own |

1.4A Classify the following items into liabilities and assets:

- | | |
|-------------------------|-----------------------|
| (a) Motor vehicles | (f) Owing to bank |
| (b) Premises | (g) Cash in hand |
| (c) Creditors for goods | (h) Loan from D Jones |
| (d) Stock of goods | (i) Machinery |
| (e) Debtors | |

1.5 State which of the following are wrongly classified:

<i>Assets</i>	<i>Liabilities</i>
Loan from C Smith	Stock of goods
Cash in hand	Debtors
Machinery	Money owing to bank
Creditors	
Premises	
Motor vehicles	

1.6A Which of the following are shown under the wrong headings?

<i>Assets</i>	<i>Liabilities</i>
Cash at bank	Loan from J Graham
Fixtures	Machinery
Creditors	Motor vehicles
Building	
Stock of goods	
Debtors	
Capital	

1.7 B Wise is setting up a new business. Before actually selling anything, he bought a van for £4,500, a market stall for £2,000 and a stock of goods for £1,500. He did not pay in full for his stock of goods and still owes £1,000 in respect of them. He borrowed £5,000 from C Fox. After the events just described, and before trading starts, he has £400 cash in hand and £1,100 cash at bank. Calculate the amount of his capital.

1.8A F Flint is starting a business. Before actually starting to sell anything, he bought fixtures for £1,200, a van for £6,000 and a stock of goods for £2,800. Although he has paid in full for the fixtures and the van, he still owes £1,600 for some of the goods. B Rub lent him £2,500. After the above, Flint has £200 in the business bank account and £175 cash in hand. You are required to calculate his capital.

1.9 Draw up G Putty's balance sheet from the following information as at 31 December 20X8:

	£
Capital	7,200
Debtors	1,200
Van	3,800
Creditors	1,600
Fixtures	1,800
Stock of goods	4,200
Cash at bank	300

1.10A Draw up A Brick's balance sheet as at 30 June 20X6 from the following items:

	£
Capital	10,200
Equipment	3,400
Creditors	4,100
Stock of goods	3,600
Debtors	4,500
Cash at bank	2,800

1.12A Complete the columns to show the effects of the following transactions;

	Effect upon		
	Assets	Liabilities	Capital
(a) Bought a van on credit £8,700.			
(b) Repaid by cash a loan owed to F Duff £10,000.			
(c) Bought goods for £1,400 paying by cheque.			
(d) The owner puts a further £4,000 cash into the business.			
(e) A debtor returns to us £150 goods. We agree to make an allowance for them.			
(f) Bought goods on credit £760.			
(g) The owner takes out £200 cash for his personal use			
(h) We pay a creditor £1,150 by cheque.			

1.13 G Brown has the following items in her balance sheet as on 30 April 20X8: Capital £18,400; Creditors £2,100; Fixtures £2,800; Car £3,900; Stock of goods £4,550; Debtors £2,780; Cash at bank £6,250; Cash in hand £220.

During the first week of May 20X8

- She bought extra stock for goods £400 on credit.
- One of the debtors paid her £920 by cheque.
- She bought a computer by cheque £850.

You are asked to draw up a balance sheet as on 7 May 20X8 after the above transactions have been completed.

1.14A J. Hill has the following assets and liabilities as on 30 November 20X9: Creditors £2,800; Equipment £6,200; Car £7,300; Stock of goods £8,100; Debtors £4,050; Cash at bank £9,100; Cash in hand £195.

You are not given the capital amount at that date.

During the first week of December 20X9

- (a) Hill bought extra equipment on credit for £110.
- (b) Hill bought extra stock by cheque £380.
- (c) Hill paid creditors by cheque £1,150.
- (d) Debtors paid Hill £640 by cheque and £90 by cash.
- (e) Hill put in an extra £1,500 into the business, £1,300 by cheque and £200 in cash.

You are to draw up a balance sheet as on 7 December 20X9 after the above transactions have been completed.