



INDIAN SCHOOL AL WADI AL KABIR

ACCOUNTING EQUATION

1. What do you mean by accounting equation?
The accounting equation is a mathematical equation which shows that the assets and liabilities of a firm are equal, i.e., Assets = Liabilities + Capital. It is based on Dual Aspect Concept of Accounting.
2. Give one example of a transaction which has effect on two items on the assets side
Sales of goods on credit
3. Give an example of a transaction due to which owner's capital and an asset will decrease
Goods taken by proprietor for personal use
4. Indicate how accounting equation is affected if payment is made to a creditor
Cash decreases and liability also decreases.
5. If the Capital is Rs. 1,00,000 and outside liabilities are Rs. 2,50,000, find the total assets
Assets = Liabilities + Capital
= 2,50,000 + 1,00,000
= Rs. 3,50,000
6. Purchase of furniture on credit leads to **Increase in asset and increase in liability**
7. If total assets of a business are Rs. 1,30,000 and capital is Rs. 80,000, calculate the outside liabilities

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

$$1,30,000 = \text{Liabilities} + 80,000$$

$$\text{Liabilities} = 50,000$$

(or)

$$\text{Liabilities} = \text{Assets} - \text{Capital}$$

$$= 1,30,000 - 80,000$$

$$= 50,000$$

8. **Show the accounting equation for the following transactions:**

Raj started business with Capital Rs. 5,00,000

Purchased goods for Rs. 10,000

Sold goods for Rs. 5,000

Salary Paid Rs. 2,000

Rent Received Rs. 1,000

PARTICULARS	CASH	STOCK	=	LIABILITIES	+	CAPITAL
1. Started Business	5,00,000	-----		-----		5,00,000
2. Purchased goods	(10,000)	10,000		-----		-----
New Equation	4,90,000	10,000	=	-----		5,00,000
3. Sold goods	5,000	(5,000)		-----		-----
New Equation	4,95,000	5,000	=	-----		5,00,000
4. Salary paid	(2,000)	-----		-----		(2,000)
New Equation	4,93,000	5,000	=	-----		4,98,000
5. Rent Received	1,000	-----		-----		1,000
New Equation	4,94,000	5,000	=	-----		4,99,000

Assets = Liabilities + Capital

4,94,000 + 5,000 = 0 + 4,99,000

4,99,000 = 4,99,000

L.H.S. = R.H.S

9. Mr. X started a business with capital Rs. 2,00,000

Purchased furniture for Rs. 20,000

Mr. X introduced a further capital (additional capital) of Rs. 50,000

Depreciation on furniture @ 10% for 6 months

Opened a bank account with a deposit of Rs. 50,000

Bought goods from Ram Rs. 10,000

10. Started business with cash Rs. 20,000, Stock Rs. 10,000, Furniture Rs. 5,000 and Building Rs. 50,000

Obtained a loan from IDBI bank Rs. 12,000

Sold goods for credit to Rahul Rs. 4,000

Received commission Rs. 6,000

Paid Interest on loan @ 10%

Repaid Loan

Solution : 9

Particulars	Cash	Stock	Furniture	Bank	=	Ram (Creditor)	Capital
1. Started Business	2,00,000						2,00,000
2. Purchased Furniture	(20,000)		20,000				
New Equation	1,80,000		20,000		=		2,00,000
3. Additional Capital	50,000						50,000
New Equation	2,30,000		20,000		=		2,50,000
4. Depreciation on Furniture <small>20,000x10/100x6/12</small>			(1,000)				(1,000)
New Equation	2,30,000		19,000		=		2,49,000
5. Opened a bank Account	(50,000)			50,000			
New Equation	1,80,000		19,000	50,000	=		2,49,000
6. Bought goods from Ram		10,000				10,000	
New Equation	1,80,000	10,000	19,000	50,000	=	10,000	2,49,000

Solution : 10

Particulars	Cash	Stock	Furniture	Building	Rahul (Debtor)=	Bank Loan	Capital	
1. Started business	20,000	10,000	5,000	50,000			85,000	
2. Loan from IDBI	12,000					12,000		
New equation	32,000	10,000	5,000	50,000	=	12,000	85,000	
3. Credit Sales		(4,000)			4,000			
New equation	32,000	6,000	5,000	50,000	4,000	=	12,000	85,000
4. Recd Commission	6,000						6,000	
New Equation	38,000	6,000	5,000	50,000	4,000	=	12,000	91,000
5. Paid interest on loan = 12,000*10/100	(1,200)						(1,200)	
New Equation	36,800	6,000	5,000	50,000	4,000	=	12,000	89,800
6. Repaid Loan	(12,000)					(12,000)		
New Equation	24,800	6,000	5,000	50,000	4,000	=	0	89,800

$$A = I+C = 24.800 + 6.000 + 5.000 + 50.000 + 4.000 = 89800$$

$$89.800 = 89.800$$

$$L.H.S. = R.H.S$$

11. Develop an Accounting Equation from the following transactions:

- Mohan commenced business with cash Rs. 50,000
- Purchased goods for cash Rs.10,000 and credit Rs. 50,000
- Sold goods (costing Rs. 10,000) for Rs. 12,000
- Bought furniture on credit Rs. 2,000
- Paid cash to a creditor Rs. 15,000
- Commission paid Rs. 2,000

Particulars	Cash	Stock	Furniture	=	Creditors	Capital
Started business	50,000					50,000
Purchased goods for cash & credit	(10,000)	60,000			50,000	
New Equation	40,000	60,000		=	50,000	50,000
Sold goods	12,000	(10,000)				2,000
New Equation	52,000	50,000		=	50,000	52,000
Purchased furniture on credit			2,000		2,000	
New Equation	52,000	50,000	2,000	=	52,000	52,000
Paid cash to creditor	(15,000)				(15,000)	
New Equation	37,000	50,000	2,000	=	37,000	52,000
Commission paid	(2,000)					(2,000)
New Equation	35,000	50,000	2,000	=	37,000	50,000

12. What will be the effect of the following on the accounting equation?

- Harish started business with cash Rs. 18,000
- Purchased goods for cash Rs. 5,000 and for credit Rs. 2,000
- Sold goods for cash Rs. 4,000 (Costing Rs. 2,400)
- Rent Paid Rs. 1,000 and Rent Outstanding Rs. 200

Particulars	Cash	Stock	=	Creditors	Rent outstanding	Capital
Started business	18,000					18,000
Purchased goods	(5,000)	7,000		2,000		
New Equation	13,000	7,000	=	2,000		18,000
Sold goods	4,000	(2,400)				1,600
New Equation	17,000	4,600	=	2,000		19,600
Rent Paid and Rent outstanding	(1,000)				200	(1,200)
New Equation	16,000	4,600	=	2,000	200	18,400

13. Mr. A started a business with Cash Rs. 2,00,000, Stock Rs. 50,000, Furniture Rs. 10,000 and Bank Loan Rs. 30,000
Purchased goods for Cash Rs. 5,000 and Credit Rs. 3,000
Interest on loan @ 10% p.a for 6 months was paid and the loan was also repaid.
Stationery outstanding Rs. 1,000
Mr. A bought a typewriter worth Rs. 2,000 for personal use
Rent received for the month of April Rs. 5,000

Particulars	Cash	Stock	Furniture	Bank Loan	Creditors	Salary Outstanding	Capital
1. Started business	2,00,000	50,000	10,000	= 30,000			2,30,000
2. Purchased goods	(5,000)	8,000			3,000		
New equation	1,95,000	58,000	10,000	= 30,000	3,000		2,30,000
3. Interest on loan and loan repayment	(31,500)			(30,000)			(1,500)
New equation	1,63,500	58,000	10,000	= 0	3,000		2,28,500
4. Salary outstanding						1,000	1,000
New Equation	1,63,500	58,000	10,000	= 0	3,000	1,000	2,27,500
5. Drawings	(2,000)						(2,000)
New Equation	1,61,500	58,000	10,000	= 0	3,000	1,000	2,25,500
6. Rent Received	5,000						5,000
New Equation	1,66,500	58,000	10,000	= 0	3,000	1,000	2,30,500
A = L+C = 1,66,500 + 58,000 + 10,000 = 3,000 + 1,000 + 2,30,500							2,34,500 = 2,34,500
							L.H.S. = R.H.S

14. Mr. Akhil started a business with cash Rs. 1,00,000, Stock Rs. 20,000, Van Rs. 50,000 and Bank Balance Rs. 10,000
Purchased goods for Rs. 30,000 from Bharath
Sold goods for Rs. 10,000 to Suresh
Wages paid to workers Rs. 1,000
Interest paid to Bank Rs. 2,000
Withdrew from business goods worth Rs. 4,000 for personal use

Particulars	Cash	Stock	Van	Bank	Debtor (Bharath) =	Creditor (Suresh)	Capital
Started business	1,00,000	20,000	50,000	10,000			1,80,000
Purchased goods		30,000				30,000	
New Equation	1,00,000	50,000	50,000	10,000	=	30,000	1,80,000
Sold goods		(10,000)			10,000		
New Equation	1,00,000	40,000	50,000	10,000	10,000 =	30,000	1,80,000
Wages paid	(1,000)						(1,000)
New Equation	99,000	40,000	50,000	10,000	10,000 =	30,000	1,79,000
Interest paid	(2,000)						(2,000)
New Equation	97,000	40,000	50,000	10,000	10,000 =	30,000	1,77,000
Withdrew goods		(4,000)					(4,000)
New Equation	97,000	36,000	50,000	10,000	10,000 =	30,000	1,73,000

15. Started a business with cash Rs. 1,00,000, Goods Rs. 10,000 Cheque Rs. 10,000, Machinery Rs. 20,000, Bank Loan Rs. 20,000

Repaid Bank loan along with an interest of 10%
Sold goods for Rs. 5,000 to Ram for cash
Depreciate Machinery @ 10% for 6 months
Goods withdrawn Rs. 2000
Purchased furniture on credit for Rs. 30,000

16. Started business with cash Rs. 30,000 and goods Rs. 10,000
Salary paid Rs. 1,000 and Salary outstanding Rs. 200
Sold goods for cash Rs. 2,400 (costing Rs. 3,000)
Rent paid in advance Rs. 500
Accrued interest Rs. 1,000
Commission received in advance Rs. 2,000
Amount withdrawn Rs. 5,000

15. Solution

Particulars	Cash	Stock	Bank	Machinery	Furniture=	Creditors	Bank Loan	Capital
Started Business	1,00,000	10,000	10,000	20,000			20,000	1,20,000
Repaid bank loan along with interest (20,000+2,000 = 22,000)	(22,000)						(20,000)	(2,000)
New Equation	78,000	10,000	10,000	20,000	=		0	1,18,000
Sold goods for cash	5,000	(5,000)						
New Equation	83,000	5,000	10,000	20,000	=		0	1,18,000
Depreciation on Machinery (20,000x10/100x6/12)				(1,000)				(1,000)
New Equation	83,000	5,000	10,000	19,000	=		0	1,17,000
Goods withdrawn		(2,000)						(2,000)
New Equation	83,000	3,000	10,000	19,000	=		0	1,15,000
Purchased furniture on credit					30,000	30,000		
New Equation	83,000	3,000	10,000	19,000	30,000 =	30,000	0	1,15,000
	1,45,000 = 1,45,000							

16th solution

Particulars	Cash	Stock	Prepaid Rent	Accrued Interest =	Commission received in advance	Salary outstanding	Capital
Started business	30,000	10,000					40,000
Salary paid and salary outstanding	(1,000)					200	(1,200)
New Equation	29,000	10,000		=		200	38,800
Sold goods	2,400	(3,000)					(600)
New Equation	31,400	7,000		=		200	38,200
Rent paid in advance	(500)		500				
New Equation	30,900	7,000	500	=		200	38,200
Accrued interest				1,000			1,000
New Equation	30,900	7,000	500	1,000 =		200	39,200
Commission recd in adv	2,000				2,000		
New Equation	32,900	7,000	500	1,000 =	2,000	200	39,200
Drawings	(5,000)						(5,000)
New Equation	27,900	7,000	500	1,000 =	2,000	200	34,200

17. Started business with cash Rs. 1,00,000

Purchased goods for cash Rs. 20,000 and on credit Rs. 30,000

Sold goods for cash costing Rs. 10,000 and on credit costing Rs. 15,000, both at a profit of 20%

Paid to creditors in full settlement Rs. 29,500

Bought refrigerator for personal use Rs. 5,000

Purchased motorcycle for cash Rs. 30,000

Particulars	Cash	Stock	Debtor	Motor Cycle =	Creditors	Capital
Started business	1,00,000					1,00,000
Purchased goods	(20,000)	50,000			30,000	
New Equation	80,000	50,000		=	30,000	1,00,000
Goods sold at profit	12,000	(25,000)	18,000			5,000
New Equation	92,000	25,000	18,000	=	30,000	1,05,000
Paid to creditors in full settlement	(29,500)				(30,000)	500
New Equation	62,500	25,000	18,000	=	----	1,05,500
Bought furniture for personal use	(5,000)					(5,000)
New Equation	57,500	25,000	18,000	=		1,00,500
Purchased motor cycle	(30,000)			30,000		
New Equation	27,500	25,000	18,000	30,000 =		1,00,500

18. D. Mahapatra commenced business with cash Rs. 50,000, Rs. 1,00,000 by cheque, goods Rs. 60,000, machinery Rs. 1,00,000 and furniture Rs. 50,000.

1/3rd of the above goods sold at a profit of 10% on cost and half of the payment is received in cash.

Depreciation on machinery provided at 10%

Cash withdrawn for personal use Rs. 10,000

Interest on drawings charged at 5%

Sold goods to Gupta for Rs. 10,000 and received a Bill Receivable for the same amount for 3 months.

Received Rs. 10,000 from Gupta against the Bill Receivable on its maturity.

Particulars	Cash	Stock	Bank	Machinery	Furniture	Debtors	Bills Receivable	Capital
Started business	50,000	60,000	1,00,000	1,00,000	50,000			3,60,000
Goods sold	11,000	(20,000)				11,000		2,000
New Equation	61,000	40,000	1,00,000	1,00,000	50,000	11,000	=	3,62,000
Depreciation on machine				(10,000)				(10,000)
New Equation	61,000	40,000	1,00,000	90,000	50,000	11,000	=	3,52,000
Drawings	(10,000)							(10,000)
New Equation	51,000	40,000	1,00,000	90,000	50,000	11,000	=	3,42,000
Interest on Drawings								500 (500)
New Equation	51,000	40,000	1,00,000	90,000	50,000	11,000	=	3,42,000
Sold goods		(10,000)					10,000	
New Equation	51,000	30,000	1,00,000	90,000	50,000	11,000	10,000 =	3,42,000
Received cash against B/R	10,000						(10,000)	
New Equation	61,000	30,000	1,00,000	90,000	50,000	11,000	=	3,42,000

19. Ramesh commenced business with cash Rs. 1,00,000

Furniture Purchased for cash Rs. 40,000

Purchased goods from Madhu on credit Rs. 50,000

Sold goods costing Rs. 10,000 to Sanjay for cash

Additional capital introduced Rs. 10,000

Commission received in advance Rs. 7,000

Paid to Creditor in full settlement Rs. 49,000

Sold goods (costing Rs. 20,000) for Rs. 25,000 out of which Rs. 5,000 was received in cash

Depreciation on furniture provided @ 10% for 3 months

Prepaid insurance Rs. 4,000

20. Show the effect of the following transactions on Assets, Liabilities and Capital through accounting equation:

(a) Started business with cash Rs. 1,20,000

(b) Rent received Rs. 10,000

(c) Invested in shares Rs. 50,000

(d) Received dividend Rs. 5,000

(e) Purchase goods on credit from Rajani Rs. 35,000

(f) Paid cash for house hold Expenses Rs. 7,000

(g) Sold goods for cash (costing Rs.10,000) Rs. 14,000

(h) Cash paid to Rajani Rs. 35,000

(i) Deposited into bank Rs. 20,000

19 solution

Particulars	Cash	Stock	Furniture	Debtors	Prepaid ins	Comm rec in adv	Creditors	Capital
Started business	1,00,000							1,00,000
Purchased furniture	(40,000)		40,000					
New Equation	60,000		40,000					1,00,000
Purchased goods		50,000					50,000	
New Equation	60,000	50,000	40,000				50,000	1,00,000
Sold goods	10,000	(10,000)						
New Equation	70,000	40,000	40,000				50,000	1,00,000
Additional capital	10,000							10,000
New Equation	80,000	40,000	40,000				50,000	1,10,000
Comm recd in adv	7,000					7,000		
New Equation	87,000	40,000	40,000			7,000	50,000	1,10,000
Paid in full settlement	(49,000)						(50,000)	1,000
New Equation	38,000	40,000	40,000			7,000	-----	1,11,000
Sold goods	5,000	(20,000)		20,000				5,000
New Equation	43,000	20,000	40,000	20,000		7,000	-----	1,16,000
Dep on furniture			(1,000)					(1,000)
New Equation	43,000	20,000	39,000	20,000		7,000	-----	1,15,000
Prepaid insurance	(4,000)				4,000			
New Equation	39,000	20,000	39,000	20,000	4,000 =	7,000	-----	1,15,000

20 solution

Particulars	Cash	Stock	Bank	Shares		Ranjani	Capital
Started business	1,20,000		60,000				1,80,000
Rent Received	10,000						10,000
New Equation	1,30,000		60,000				1,90,000
Invested in shares			(50,000)	50,000			
New Equation	1,30,000		10,000	50,000			1,90,000
Received dividend			5,000				5,000
New Equation	1,30,000		15,000	50,000			1,95,000
Purchased goods		35,000				35,000	
New Equation	1,30,000	35,000	15,000	50,000		35,000	1,95,000
Drawings	(7,000)						(7,000)
New Equation	1,23,000	35,000	15,000	50,000		35,000	1,88,000
Sold goods	14,000	(10,000)					4,000
New Equation	1,37,000	25,000	15,000	50,000		35,000	1,92,000
Cash paid to cr	(35,000)					(35,000)	
New Equation	1,02,000	25,000	15,000	50,000		-----	1,92,000
Deposited into bank	(20,000)		20,000				
New Equation	82,000	25,000	35,000	50,000	=	-----	1,92,000