2.1 The accounting equation and elements

Name: _____ Class: _____ Date: _____ **Total: 21 marks**

KEY WORDS asset • liability • equity

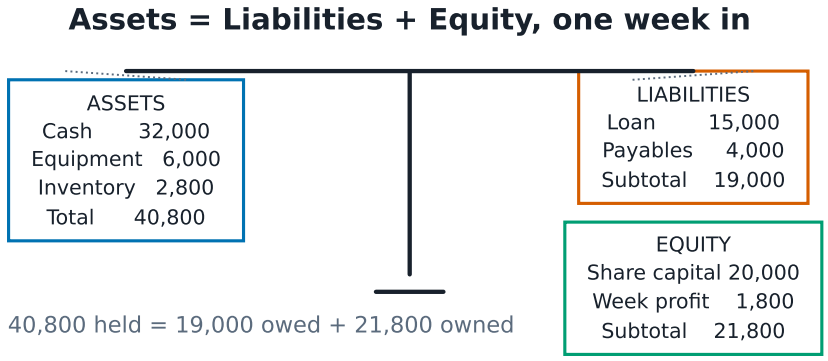
Objective

Define the five elements precisely, apply the accounting equation to a set of transactions, and trace each transaction's double effect to a closing balance sheet that ties.

1 Key knowledge and worked examples

■ The five elements, defined

An **asset** is a present economic resource controlled through past events. A **liability** is a present obligation to transfer a resource. **Equity** is the residual: assets minus liabilities. Income grows equity; an expense shrinks it. The invariant $A = L + E$ survives every transaction because each is recorded as a **double effect**.



The scale always tips level: holdings equal claims

■ Worked example. Nimbus's first week

Shares 20,000 for cash; loan 15,000; oven 6,000 cash; flour 4,000 on credit; bread sold 3,000 cash using 1,200 of flour. Closing: cash 32,000 + equipment 6,000 + inventory 2,800 = 40,800 = loan 15,000 + payables 4,000 + capital 20,000 + profit 1,800 ✓ – the equation ties by construction.

2 Practice

2.1 For each item, name the element (asset, liability, equity, income or expense) with the defining phrase that justifies it: (a) the oven; (b) the bank loan; (c) the founders' £20,000; (d) the week's £3,000 of bread sales; (e) the £1,200 of flour used. [5]

2.2 Nimbus receives a £900 café deposit for bread to be delivered next month. State the double effect on the equation and why the £900 is not income yet. [3]

2.3 From the worked example's closing position, post: buy a delivery van £8,000 paying £5,000 cash and £3,000 on credit. Compute the new totals of A, L and E and show the tie. [4]

3 Exam-style questions

3.1 Kirra sets up a studio: she places £12,000 of savings in the business bank account, had already paid £600 for materials before opening (of which £400 is consumed in the first jobs and £200 remains), buys equipment £7,000 on credit, and completes £2,500 of client work (£2,000 received, £500 invoiced). Build the closing balance sheet and verify it ties. [6]

3.2 Explain, with one invented transaction, why a balance sheet can never go out of balance through a correctly specified double effect – and what that implies about where errors must live. [3]

Solutions

2.1

- (a) Asset: controlled resource from a past event.
- (b) Liability: present obligation to transfer resources.
- (c) Equity: the funders' residual claim – not income.
- (d) Income: earned increase in economic benefit.
- (e) Expense: cost of sales consumed to earn the revenue.

2.2

- Cash +900 (asset) and a £900 obligation to deliver (liability).
- Income requires the work to be earned; delivery is next month.
- The deposit is deferred income – a liability until delivery.

2.3

- Equipment +8,000, cash −5,000, payables +3,000.
- A: cash 27,000 + equipment 14,000 + inventory 2,800 = 43,800.
- L = 19,000 + 3,000 = 22,000; E = 21,800 unchanged.
- Tie: 22,000 + 21,800 = 43,800 ✓.

3.1

- Assets: cash 14,000 + receivables 500 + equipment 7,000 + materials 200 = 21,700.
- Liabilities: equipment payable 7,000.
- Profit = 2,500 − 400 = 2,100; equity = 12,600 contributed (12,000 cash + 600 materials paid pre-opening) + 2,100 = 14,700.
- Tie: 7,000 + 14,700 = 21,700 ✓.
- The trap: the £600 belongs in equity as a contribution and in assets at its unused £200 – expensing the whole 600 while also holding the 200 breaks the tie by exactly 200.

3.2

- A double effect moves two or more elements by amounts that preserve the equation, so both sides stay level by construction.
- Errors must therefore be specification or posting errors: a wrong element, a one-sided posting, a missing entry.
- Hence the trial balance and reconciliations – not the balance sheet – are the error-detection layer.