# 6.3 Costing systems

Name: _____ Class: _____ Date: _____ **Total: 13 marks**

**KEY WORDS** overhead • job costing

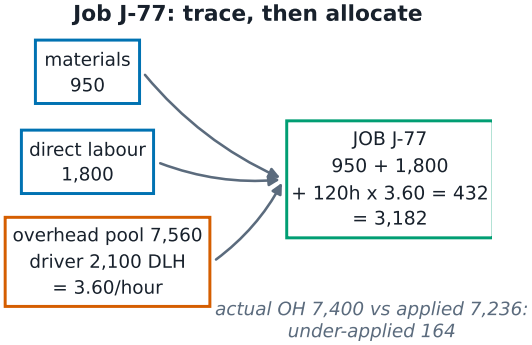
## Objective

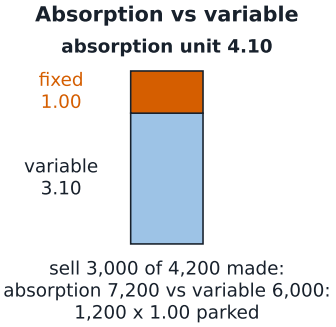
Compute job costs with an overhead rate; reconcile over/under-applied overhead; contrast absorption with variable costing income.

## 1 Key knowledge and worked examples

### ■ Trace, allocate, reconcile

Overhead pool ÷ driver = the rate; jobs take driver × rate. The over/under-applied gap reconciles on the costing statement. Absorption parks fixed cost in inventory; variable exposes it – production flatters absorption profit.




*Trace what you can, allocate what you must*

### ■ Worked example. Pool 7,560 over 2,100 DLH = 3.60/hr

J-77: 950 + 1,800 + 120 × 3.60 = 3,182 ✓. Actual 7,400 at 2,010 hrs → applied 7,236, under-applied 164 ✓. Make 4,200 sell 3,000: absorption 7,200 vs variable 6,000, gap = 1,200 × 1.00 ✓.

## 2 Practice

A print shop: budgeted overhead £54,000 over 6,000 machine hours; normal capacity 12,000 jobs at 0.5 hours each; fixed overhead in the pool is £30,000.

**2.1** Compute the overhead rate per machine hour. [2]

**2.2** Job P-9 uses 25 machine hours, materials £210, direct labour £340. Compute its full job cost. [2]

**2.3** The month's actual overhead is £55,100 at 5,900 actual machine hours. Compute applied overhead and state over- or under-applied. [3]

**2.4** In September the shop produces 12,000 jobs (normal capacity) and sells 10,000 at £22 with variable cost £12. Compute absorption and variable profit, and reconcile the gap. [4]

**2.5** In one line each: when do absorption and variable profit agree, and what management behaviour does absorption profit quietly reward? [2]

## Solutions

**2.1**

- Rate = 54,000/6,000.
- = £9.00 per machine hour.

**2.2**

- Overhead = $25 \times 9$ = £225.
- Job cost = $210 + 340 + 225$ = £775.

**2.3**

- Applied = $5{,}900 \times 9$ = £53,100.
- Actual £55,100 > applied → under-applied.
- By £2,000.

**2.4**

- Fixed OH per job = 30,000/12,000 = £2.50; absorption unit = $12 + 2.50$ = £14.50.
- Absorption profit = $10{,}000 \times (22 - 14.50)$ = £75,000.
- Variable profit = $10{,}000 \times 10 - 30{,}000$ = £70,000.
- Gap £5,000 = 2,000 unsold jobs × £2.50 parked in inventory.

**2.5**

- They agree when production = sales (no inventory movement).
- Absorption rewards PRODUCTION: making for inventory parks fixed cost and lifts reported profit without a sale.

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