

0 • How to Use This

READ FIRST

★ No final exam. You're graded by **two timed online class tests** on iLearn (25% + 25%) plus weekly assignments (15%), participation (15%) & an Excel assignment (20%). **Test I = Wks 1-7** (this side); **Test II = Wks 8-12** (flip over).

This unit is **formula- & procedure-driven**: marks come from setting the calculation up correctly. So this sheet is a **formula + worked-template bank** — recognise the question type, grab the right formula, lay out the schedule.

SIA → *Tests are timed & randomised on iLearn* — **speed of recognition beats breadth. Drill the templates until the layout is automatic; confirm the current rules in your Unit Guide.**

1 • Cost Concepts

WK1 · CH1-3

Management vs financial accounting: internal decisions / future-oriented / no GAAP / flexible — vs external / past / regulated.

CLASSIFY EVERY COST

- **By traceability:** direct (traced) vs indirect (allocated)
- **By function:** product (DM + DL + MOH) vs period (selling & admin)
- **By behaviour:** variable · fixed · mixed (step)
- **Combos:** prime = DM + DL · conversion = DL + MOH

Product cost flows: DM + DL + MOH → WIP → finished goods → COGS (only at sale). **Relevant range** · the activity band where fixed/variable behaviour holds.

1b • Cost Flows & Behaviour

THE PLUMBING

MANUFACTURING COST FLOW

DM purchased → Raw Materials → (used) WIP
 + DL + applied MOH → WIP
 → completed → Finished Goods
 → sold → COGS (expense)

COGM = beg WIP + DM used + DL + MOH applied - end WIP. **COGS** = beg FG + COGM - end FG.

Split a mixed cost — high-low: VC/unit = (cost_{high} - cost_{low}) / (units_{high} - units_{low}); then FC = total cost - VC × units. **Per-unit fixed cost falls as volume rises** — never unitise fixed costs for decisions.

WORKED • HIGH-LOW

Highest month: 9,000 units cost \$74,000. Lowest: 4,000 units cost \$44,000. VC/unit = (74,000-44,000)/(9,000-4,000) = **\$6/unit**. FC = 74,000 - 6×9,000 = \$20,000. So cost equation y = 20,000 + 6x; at 6,500 units ⇒ \$59,000. **Trap:** use the highest & lowest activity rows, not the highest/lowest cost rows. High-low uses only two points, so it ignores the middle data — regression is more accurate.

2 • CVP Analysis

WK2 · CH18

How profit responds to volume, price & cost. Built on the **contribution margin**.

CORE CVP FORMULAS

CM/unit = Price - VC/unit
 CM ratio = CM / Sales
 BEP units = FC / CM per unit
 BEP \$ = FC / CM ratio
 Target-profit units = (FC + profit) / CM unit
 Margin of safety = actual sales - BEP sales

WORKED • BREAK-EVEN

Price \$50, VC \$30, FC \$80,000. CM/unit = \$20 ⇒ **BEP = 80,000/20 = 4,000 units** (\$200,000). For \$40k profit: (80,000+40,000)/20 = 6,000 units.

Operating leverage = CM / profit — high leverage ⇒ profit swings hard with sales. **Assumptions:** linear costs, constant mix, units made = sold.

MARGIN OF SAFETY

MoS \$ = actual sales - BEP sales
 MoS % = MoS / actual sales

The buffer before you slip into loss. Above: 6,000 vs 4,000 BEP ⇒ MoS = 2,000 units (33%).

MULTI-PRODUCT CVP

Use the **weighted-average CM** at the sales mix: w-CM = Σ(CM/unit × mix%). BEP units = FC / w-CM, then split back by the mix. **A shift toward low-CM products raises break-even.**

CVP GRAPH

Total-revenue & total-cost lines cross at break-even, the widening wedge above = profit, below = loss. A profit-volume chart plots profit directly against units.

WORKED • TARGET PROFIT + WHAT-IF

Same data (P \$50, VC \$30, FC \$80k). Target profit \$50,000 ⇒ units = (80,000+50,000)/20 = **6,500 units** (\$325,000 sales). *What-if* FC rise \$10,000 & price cut to \$48: new CM/unit = 18 ⇒ new BEP = 90,000/18 = 5,000 units. Profit at 6,500 = 6,500×18 - 90,000 = \$27,000.

CM INCOME STATEMENT

Sales (6,500×\$50)	325,000
- Variable (6,500×\$30)	(195,000)
Contribution margin	130,000
- Fixed costs	(80,000)
Operating profit	50,000

After-tax target: gross up first — required pre-tax profit = after-tax profit ÷ (1 - tax rate), then use the normal target formula. E.g. want \$42k after 30% tax ⇒ pre-tax = 42,000/0.70 = \$60,000.

SIA → *A CVP question is solved the instant you isolate CM/unit. Compute it first, then every sub-part (BEP, target, MoS) is one division away.*

3 • Job Costing

WK3 · CH4

For **custom / distinct jobs** (each batch unique). Costs accumulate on a **job cost card**: DM + DL traced directly; MOH *applied* via a rate.

OVERHEAD APPLICATION

POHR = est. total MOH / est. total driver
 Applied MOH = POHR × actual driver used
 Over/under-applied = Applied - Actual MOH

Disposition: over-applied (applied > actual) ⇒ credit/reduce COGS; under-applied ⇒ add to COGS (or prorate across WIP/FG/COGS if material).

WORKED

Est MOH \$200k, est 10,000 DLH ⇒ POHR = **\$20/DLH**. Job uses 120 DLH ⇒ applied = \$2,400.

COST-FLOW JOURNALS

DM used Dr WIP / Cr Raw Materials · DL Dr WIP / Cr Wages · apply MOH Dr WIP / Cr MOH Applied · finish Dr FG / Cr WIP · sell Dr COGS / Cr FG.

Normal costing = actual DM + actual DL + *applied* MOH (predetermined rate, available immediately).

Actual costing waits for real MOH at period-end — too late for pricing/quotes.

WORKED • JOB COST BUILD-UP

Job 207: DM \$3,200; DL 120 DLH @ \$25 = \$3,000; MOH applied = 120 × \$20 = \$2,400 ⇒ **total job cost \$8,600**. Output 200 units ⇒ \$43/unit. Mark-up 40% ⇒ price \$60.20/unit.

WORKED • OVER/UNDER-APPLIED

Actual MOH for year \$208,000; applied (10,400 DLH × \$20) = \$208,000? — say applied = \$205,000. Then **under-applied \$3,000** (applied < actual) ⇒ **Dr COGS / Cr MOH \$3,000**. If applied had exceeded actual, it would be over-applied ⇒ credit COGS (income up). Prorate across WIP/FG/COGS only if the amount is material.

READ THE SIGN

- **Under-applied** = applied < actual ⇒ costs were under-estimated ⇒ *add* to COGS (debit)
- **Over-applied** = applied > actual ⇒ costs overstated ⇒ *subtract* from COGS (credit)
- Material balance ⇒ prorate by the MOH in ending WIP, FG & COGS
- The rate (POHR) never changes mid-year — only the disposition adjusts

SIA → *POHR is set before the year on estimates, so some misapplication is normal. The disposition entry is the year-end clean-up — never re-cost individual jobs. Closing to COGS is the simple, exam-default treatment.*

4 • Process Costing

WK4 · CH4-5

For **mass, identical units** flowing through processes.

Cost per unit = total process cost / **equivalent units** (EU).

EQUIVALENT UNITS

Weighted-avg EU = units completed + (ending WIP × % complete)
 FIFO EU = beg WIP × % to finish + started & completed + ending WIP × %
 Cost/EU = cost ÷ EU (WA: incl. beg; FIFO: this period only)

5-STEP REPORT

1. Physical flow of units
2. Equivalent units (split DM vs conversion)
3. Cost per equivalent unit
4. Assign cost to completed + ending WIP
5. Reconcile costs (in = out)

DM & conversion often have different % complete — compute EU separately for each.

WORKED • WEIGHTED-AVERAGE

Completed 8,000; ending WIP 2,000 @ 50% conversion (100% materials). EU_{mat} = 10,000; EU_{conv} = 8,000 + 1,000 = 9,000. Conversion cost \$90,000 ⇒ **\$10/EU**; ending-WIP conversion = 1,000 × \$10 = \$10,000.

FIFO vs WA: FIFO counts *only this period's* work — it strips out beginning-WIP work done last period, giving a purer current-period unit cost (WA blends the two).

WORKED • COST RECONCILIATION (WA)

Above: EU_{mat} 10,000, EU_{conv} 9,000. Materials cost \$50,000 ⇒ **\$5/EU**; conversion \$90,000 ⇒ \$10/EU ⇒ **total \$15/EU**.

COST ASSIGNED	\$
Completed 8,000 × \$15	120,000
End WIP mat 2,000 × \$5	10,000
End WIP conv 1,000 × \$10	10,000
Total costs to account	140,000

Reconciles to costs in: \$50,000 + \$90,000 = \$140,000. **Step 5 must balance** — if "in" ≠ "out", an EU or cost figure is wrong.

WORKED • FIFO EQUIVALENT UNITS

Beg WIP 1,500 @ 40% conversion done; started 8,500; completed 8,000; end WIP 2,000 @ 50%. FIFO conversion EU = beg to finish (1,500×60%) + started&completed (8,000-1,500=6,500) + end (2,000×50%) = 900 + 6,500 + 1,000 = **8,400 EU**. (WA would add back the 600 done last period.)

SIA → *Materials are usually 100% complete at the start (added up front) while conversion accrues evenly — so the two EU figures differ. Compute, label, and cost them separately — never blend into one EU figure, or every assigned cost will be wrong.*

5 • Overhead Costs

WK5 · CH7

Indirect costs can't be traced — they're **allocated** via a base/driver.

- **Plantwide rate** — one rate, one base (simple, can distort)
- **Departmental rates** — a rate per department (more accurate)
- **Two-stage:** costs → cost pools/departments → products

Choose a **cost driver** that actually causes the cost (labour hrs, machine hrs). Bad base = **cost distortion** (over/under-costing products).

WORKED • PLANTWIDE VS DEPT

MOH \$600k. *Plantwide:* 30,000 DLH ⇒ \$20/DLH. *Departmental:* Machining \$400k ÷ 20,000 MH = \$20/MH; Assembly \$200k ÷ 25,000 DLH = \$8/DLH. A machine-heavy job now picks up cost via MH, not DLH ⇒ **departmental rates stop labour-light jobs being under-costed**. Two-stage: overhead → cost pools/departments → products via each pool's own driver. The base must move *with* the cost it carries, or products are over/under-costed.

6 • Activity-Based Costing

WK6 · CH8

Assigns overhead through **multiple activities**, each with its own driver — fixes the distortion of one plantwide rate.

ABC STEPS

- 1 identify activities & cost pools
- 2 activity rate = pool cost / driver volume
- 3 product cost = Σ(rate × driver used) + DM + DL

ABC only beats volume costing when there are several real drivers & products use them unevenly. One dominant driver ⇒ traditional wins (ABC's cost > benefit).

WORKED • ACTIVITY RATE

Setup pool \$120,000 ÷ 600 setups = **\$200/setup**. Product A needs 50 setups ⇒ \$10,000 assigned; repeat for machining & inspection pools, then ÷ units for per-unit overhead.

HIERARCHY OF ACTIVITIES

- **Unit-level** — per unit made (machining, power)
- **Batch-level** — per batch (setups, inspections)
- **Product-level** — per product line (design)
- **Facility-level** — plant-sustaining (rent) — not driver-traced

SIA → *The single tested line: "ABC can't be used with only one cost driver" — with one driver ABC collapses back to a plantwide rate, so the extra machinery buys nothing — the benefit must exceed the cost.*

6b • ABC vs Volume

CLASSIC COMPARE

	VOLUME-BASED	ABC
Drivers	1 (e.g. DLH)	many activities
Accuracy	lower; distorts	higher
Cost to run	cheap	expensive
Best when	1 driver dominates	diverse products

Distortion pattern: traditional costing *over-costs* high-volume simple products & *under-costs* low-volume complex ones.

Symptom in practice: **healthy reported margins on low-volume specials, yet falling overall profit** — a classic sign that a single volume base is under-costing the complex line.

6c • Why ABC Shifts Cost

THE INTUITION

Low-volume, complex products trigger many setups/inspections but a plantwide labour rate spreads overhead by *volume* — so they look cheap. ABC charges them for the activities they actually cause ⇒ their cost **rises**; simple high-volume products fall.

WORKED • COST SHIFT, 2 PRODUCTS

MOH \$300k; Hi (high-vol, 9,000 u, 6,000 DLH, 20 setups), Lo (low-vol, 1,000 u, 2,000 DLH, 80 setups). *Plantwide* \$300k/8,000 DLH = \$37.50/DLH ⇒ Hi gets \$225k (\$25/u), Lo \$75k (\$75/u). ABC: setups 100 ⇒ \$3,000/setup ⇒ Hi \$60k (\$6.67/u), Lo \$240k (\$240/u). **Lo's cost jumps \$75 → \$240/u** — it was being massively under-costed.

Job vs Process

PICK THE SYSTEM

JOB	PROCESS
distinct jobs	identical mass units
cost per job	cost per equivalent unit
job cost card	production cost report
builder, audit	chemicals, drinks

Hybrid (operation) costing suits products with common processing but custom finishes (cars, clothing) — process-cost the conversion, job-cost the materials.

Formula Belt

TEST I

CM/unit = P - VC · CM ratio = CM/Sales
 BEP units = FC/CM unit · BEP\$ = FC/CM ratio
 Target units = (FC+profit)/CM unit
 MoS = sales - BEP · op leverage = CM/profit
 High-Low VC = ΔCost/ΔUnits
 POHR = est MOH/est driver
 Applied = POHR × actual driver
 Over/under = applied - actual
 EU(WA) = done + endWIP×% · Cost/EU = cost/EU
 ABC rate = pool / driver volume
 COGM = begWIP + DM + DL + MOH - endWIP

SIDE 2/2 · TEST II
variances

Wk 8-12 · Absorption vs variable · Relevant costs / make-or-buy · Product mix (LP) · Budgeting · Standard costing &

TEST II · WKS 8-12

Compiled by AskSia · mapped to the ACCG2000 syllabus · asksia.ai/cheatsheet/macquarie-accg2000

7 · Absorption vs Variable

WK8 · CH6-7

The only difference: where fixed manufacturing overhead goes.

	ABSORPTION	VARIABLE
Fixed MOH	product cost	period cost
Unit cost	DM+DL+VMOH+FMOH	DM+DL+VMOH
Format	gross profit	contribution margin
External use	required (GAAP)	internal only

INCOME DIFFERENCE

Abs - Var income = ΔInventory units × FMOH/unit
 Prod > Sales (inv ↑) ⇒ Absorption higher
 Prod < Sales (inv ↓) ⇒ Variable higher

Why: absorption defers fixed MOH in unsold inventory; variable expenses it all now. **Danger:** absorption lets managers overproduce to bury fixed cost in inventory and inflate reported profit; variable costing removes that incentive.

WORKED · RECONCILE

Produce 10,000, sell 8,000; FMOH \$50,000 ⇒ \$5/unit. Inventory rises 2,000 units, so absorption defers 2,000 × \$5 = \$10,000 ⇒ Absorption income = Variable income + \$10,000.

WORKED · FULL RECONCILIATION

Same firm: P \$40, DM+DL+VMOH \$18/u, FMOH \$50k (⇒ \$5/u at 10,000 made), fixed S&A \$20k. Sold 8,000.

	ABS	VAR
Sales 8,000×40	320,000	320,000
Less COGS	(184,000)	(144,000)
Less FMOH (period)	—	(50,000)
Less fixed S&A	(20,000)	(20,000)
Profit	116,000	106,000

Abs COGS = 8,000×\$23; Var COGS = 8,000×\$18. Gap = \$10,000 = 2,000 inv units × \$5 FMOH deferred. ✓

SERVICE COSTING

Professional firms (audit, consulting): trace labour to clients/jobs; allocate support overhead — client/job profitability analysis.

Variable costing's **CM format** is what feeds CVP & relevant-cost decisions — that's why managers prefer it internally even though GAAP reporting needs absorption. Over the long run (steady inventory) the two methods report the same cumulative profit — timing only.

SIA → Memorise the direction: **inventory ↑ ⇒ absorption higher**. When production = sales (no inventory change), both methods give the same profit.

8 · Relevant Costs

WK9 · CH19

Relevant cost = future + differs between options.

Ignore sunk costs & unavoidable allocated overhead.

- Sunk** — already spent (equipment depreciation) ⇒ irrelevant
- Opportunity cost** — value of the forgone alternative ⇒ relevant
- Avoidable** fixed cost ⇒ relevant; unavoidable ⇒ not

MAKE-OR-BUY TEMPLATE

COMPARE PER UNIT

Cost to MAKE (avoidable only):
 DM + DL + variable MOH + avoidable FMOH
 + opportunity cost of freed capacity
 vs Cost to BUY = supplier price
 ⇒ choose the lower

WORKED · MAKE-OR-BUY

Make/unit: DM \$6 + DL \$4 + VMOH \$2 + avoidable FMOH \$3 = \$15 (allocated general OH \$4 is unavoidable — ignore). Supplier \$16 ⇒ **make (\$15) < buy (\$16)** — unless freed capacity earns > \$1/unit elsewhere.

OTHER DECISIONS

- Special order:** accept if price > relevant variable cost & there's spare capacity (ignore fixed)
- Keep / drop a segment:** drop only if its lost CM < the fixed costs actually saved
- Sell or process further:** process only if extra revenue > extra cost (joint costs to split-off are sunk)
- Add / drop product:** compare CM gained/lost vs avoidable fixed costs
- Constrained resource:** rank by CM per scarce unit

WORKED · SPECIAL ORDER

Spare capacity. Normal price \$40; one-off order 1,000 units at \$25. Variable cost \$18/u; fixed unchanged. Relevant: \$25 - \$18 = \$7/u × 1,000 = \$7,000 extra profit ⇒ accept. Fixed cost & normal price are irrelevant (capacity is idle).

WORKED · KEEP / DROP

Segment CM \$60,000; allocated fixed \$80,000 of which only \$45,000 is avoidable. Drop test: lose CM \$60,000, save \$45,000 ⇒ **profit falls \$15,000 ⇒ keep**. The \$35,000 unavoidable fixed just reallocates to other segments.

SIA → The trap: **depreciation on special equipment is sunk, and allocated general overhead is usually only partly avoidable**. Build the avoidable-cost column line by line, then add any opportunity cost.

9 · Product Mix · LP

WK10 · CH20

With a **constrained resource** (machine hrs, labour), maximise profit by ranking on **CM per unit of the scarce resource** — not CM per unit.

RANKING RULE

CM per constraint = CM per unit / resource per unit
 ⇒ make the highest first until the constraint runs out

LINEAR PROGRAMMING

- Objective function** — maximise total CM
- Constraints** — resource limits (inequalities)
- Binding constraint** — the one fully used at the optimum
- Shadow price** — extra CM from one more unit of a binding constraint

Two products + two constraints ⇒ graph the feasible region; the optimum sits at a **corner point**.

WORKED · SCARCE RESOURCE

X: CM \$30, 3 machine-hrs ⇒ \$10/hr. Y: CM \$24, 2 hrs ⇒ \$12/hr. Though X has the higher CM/unit, **Y earns more per scarce machine-hour** ⇒ make Y first. Always rank by CM per constraint, not CM per unit.

WORKED · TWO-CONSTRAINT CORNERS

Max 30X + 24Y s.t. machine 3X + 2Y ≤ 1,200; labour 1X + 2Y ≤ 800; X, Y ≥ 0. Solve corners:

CORNER (X,Y)	TOTAL CM
(400, 0)	12,000
(0, 400)	9,600
(200, 300)	13,200

Intersection of both binding constraints: 3X + 2Y = 1,200 & X + 2Y = 800 ⇒ X = 200, Y = 300 ⇒ **CM \$13,200** = optimum. The best mix is always at a corner of the feasible region.

LP SOLUTION STEPS

- Define variables (X, Y = units)
- Write the objective: max Σ(CM×units)
- Write each constraint as ≤ (incl. ≥0)
- Graph; shade the feasible region
- Find every corner point; evaluate the objective at each
- Pick the corner with the highest total CM

Shadow price = the extra CM from relaxing a binding constraint by one unit — the most you'd pay for one more machine-hour. A non-binding constraint has a **shadow price of zero** (slack remains, so more of it adds nothing).

SIA → Single constraint ⇒ rank by CM per constraint. **Two constraints ⇒ test the corners** — you can't just rank, because the binding constraint can switch between products.

10 · Budgeting

WK11 · CH9, 11

The **master budget** = a linked chain; each budget feeds the next. **Start with sales** — everything follows.

THE CHAIN

Sales budget
 → Production (units = sales + desired end FG - beg FG)
 → DM purchases (= used + end - beg)
 · DL · MOH
 → ending inventory · COGS
 → Cash budget
 → Budgeted income statement & balance sheet

Production units ≠ sales units whenever finished-goods inventory changes. **DM purchases** ≠ DM used whenever raw-material inventory changes — both use the same +desired-ending -beginning logic.

Cash budget = opening cash + receipts - disbursements ± financing; watch the collection/payment lags.

WORKED · PRODUCTION & MATERIALS

Sales 10,000; want ending FG 1,500; beginning FG 1,000 ⇒ **produce 10,000 + 1,500 - 1,000 = 10,500**. DM at 2 kg/unit, want end RM 800 kg, beg 500 kg ⇒ purchase = (10,500×2) + 800 - 500 = 21,300 kg.

WORKED · CASH COLLECTIONS (LAG)

Credit sales: 60% collected in month of sale, 40% next month. Sales Apr \$100k, May \$120k. May receipts = **(0.60×120,000) + (0.40×100,000) = \$112,000**.

CASH BUDGET (MAY)	\$
Opening cash	15,000
+ Collections	112,000
- Disbursements	(98,000)
= Closing cash	29,000

If closing falls below the minimum, the budget triggers **financing** (borrow); surplus ⇒ repay/invest.

WHY BUDGET · BEHAVIOUR

- Plan** — force the numbers before the period
- Coordinate** — link sales, ops & finance
- Communicate** & authorise spending
- Control** — benchmark for variance analysis
- Motivate** — targets drive behaviour

Participative (bottom-up) budgeting raises buy-in but risks **budgetary slack** (padding); top-down is fast but can demotivate. **Zero-based** rebuilds each line from scratch vs incremental. A **rolling (continuous)** budget always adds a new month as one drops off.

SIA → The two "desired-ending -beginning" lines (production & purchases) are the most-tested budget steps. **Cash ≠ profit**: depreciation isn't a disbursement; collections lag the sale; loan principal hits cash but not the income statement.

11 · Standard Costing

WK12 · CH10-11

Set **standard** costs, compare to actual, split the gap into **price & quantity variances**. Always label F (favourable) / U (unfavourable).

MATERIALS

Price = (AP - SP) × AQ purchased
 Usage = (AQ used - SQ allowed) × SP

LABOUR

Rate = (AR - SR) × AH
 Efficiency = (AH - SH allowed) × SR

OVERHEAD

VOH spending = actual VOH - (SR × AH)
 VOH efficiency = (AH - SH) × SR
 FOH budget = actual FOH - budgeted FOH
 FOH volume = budgeted FOH - applied FOH

For a cost, **actual < standard** ⇒ Favourable, SQ/SH "allowed" = standard per unit × actual output.

WORKED · MATERIAL VARIANCES

Std 2 kg @ \$5 = \$10/unit; made 1,000 units (SQ = 2,000 kg). Actual: 2,200 kg @ \$4.80. Price = (4.80 - 5.00) × 2,200 = **\$440 F**; Usage = (2,200 - 2,000) × 5 = \$1,000 U ⇒ net \$560 U (cheaper price, but over-used).

WORKED · OVERHEAD VARIANCES

VOH std rate \$3/DLH; made 1,000 (SH 500). Actual \$40 DLH, actual VOH \$1,700. Spending = 1,700 - (3×540) = **\$80 U**; Efficiency = (540 - 500) × 3 = \$120 U.
 FOH: budgeted \$6,000; applied \$5/DLH × 500 SH = \$2,500; actual \$6,200. Budget = 6,200 - 6,000 = \$200 U; Volume = 6,000 - 2,500 = **\$3,500 U** (under-utilised capacity — applied less than budget).

SIA → Quick check: **price/rate variances split off the \$ per unit of input; quantity/efficiency split off the input per unit of output**. Sum the two and they reconcile to the total flexible-budget variance.

CAUSES — WHO OWNS IT

VARIANCE	LIKELY CAUSE
Mat price	purchasing — supplier, bulk deal, quality
Mat usage	production — waste, scrap, poor inputs
Labour rate	HR — wage mix, overtime
Labour efficiency	production — skill, machine downtime

Interdependence: a favourable material-price variance from cheap inputs can cause an unfavourable usage variance (more waste) — read variances together, not in isolation. Investigate by exception: chase only large or persistent variances, not every small one.

11b · Static vs Flexible

BUDGET CONTROL

STATIC	FLEXIBLE
one volume (planned)	flexed to actual volume
unfair if volume differs	like-for-like control

Flexible-budget variance isolates **efficiency/price** effects from the **volume effect** — the fair way to judge performance.

WORKED · STATIC VS FLEXIBLE

Static plan 1,000 u: revenue \$50k, VC \$30k, FC \$12k ⇒ profit \$8k. Actual sold 1,100 u: revenue \$53k, VC \$34k, FC \$12k ⇒ profit \$7k. Flex budget @1,100: rev \$55k, VC \$33k, FC \$12k ⇒ profit \$10k. **Flexible-budget variance = 7k - 10k = \$3k U**; activity (volume) variance = 10k - 8k = \$2k F. The U is real performance; the F is just selling more.

11c · Worked · Labour

RATE & EFFICIENCY

Std 0.5 hr @ \$20 = \$10/unit; made 1,000 (SH = 500 hr). Actual 540 hr @ \$21. Rate = (21 - 20) × 540 = **\$540 U**; Efficiency = (540 - 500) × 20 = \$800 U. Both unfavourable — investigate wage rates & productivity.

12 · Test Discipline

DON'T LOSE MARKS

- Label every variance F or U** — the sign is half the mark
- Make-or-buy: list **avoidable** costs only; flag sunk
- Process costing: pick **WA or FIFO** & commit
- Budgets: production ≠ sales when inventory changes
- Absorption vs variable: difference = ΔInv × FMOH/unit
- LP: two constraints ⇒ test corner points, don't just rank
- Show the **schedule** — method marks survive a slip

SIA → On a timed iLearn test, set the template up first (labels & formula), then plug numbers. A clean layout earns method marks even if one figure is off.

Formula Belt

TEST II

Abs-Var = ΔInv × FMOH/unit
 Mat price (AP-SP)AQ · usage (AQ-SQ)SP
 Lab rate (AR-SR)AH · eff (AH-SH)SR
 VOH spend = actVOH - SR×AH · eff (AH-SH)SR
 FOH budget = actFOH - budFOH
 FOH volume = budFOH - applied
 Prod = sales + endFG - begFG
 Purch = used + endRM - begRM
 CM per constraint = CM/unit ÷ resource/unit
 Cash = open + receipts - payments ± fin
 SQ/SH allowed = std per unit × actual output