1. Manufacturing Costs = DM + DL + MOH
2. Prime Costs = DM + DL
3. Conversion Costs = DL + MOH
4. Consumption DM = purchases + DM stock op. – DM stock cl.

(Can be used w/ units or €: CONSISTENCY)

5. Δ FG = (FG cl – FG op)
6. Δ WIP = (WIP cl- WIP op)
7. COGM = DM + DL + MOH - Δ WIP
8. COGS = COGM/unit * units sold
9. COGS = COGM - Δ FG
10. Sales = production + FG op – FG cl

(Can be used w/ units or €: CONSISTENCY)

11. Δ (∏FA - ∏MA) = (TSC – RSC) * Base Wages
12. $\text{SOR} = \frac{\text{Total Overheads}}{\text{Total Allocation Base}}$
13. $\text{Budgeted Overhead Rate} = \frac{\text{Estimated Annual OH}}{\text{Estimated Annual Allocation Base}}$
14.

	COGM	UROH
VC	MVC	MFC
TFC	MVC + MFC	0
FCPC	MVC + MFC * $\frac{real\ production}{practical\ capacity}$	MFC * $(1 - \frac{real\ production}{practical\ capacity})$
FCBA	MVC + MFC * $\frac{real\ production}{budgeted\ activity}$	MFC * $(1 - \frac{real\ production}{budgeted\ activity})$

15. Differences in profit (MFC that go to the P&L)

Disregarding MVC, and focusing only on MFC, since MFC are the cause of the differences in profits

	VC	TFC	FCPC	FCBA
COGM	0	MFC	$MFC * \frac{real\ prod}{practical\ cap}$	$MFC * \frac{real\ prod}{budgeted\ activity}$
COGS	0	$\frac{MFC}{production} * sales$	$\frac{(MFC * \frac{real\ prod}{practical\ cap})}{prod} * sales$	$\frac{(MFC * \frac{real\ prod}{budg\ activity})}{prod} * sales$
UROH	MFC	0	$MFC * (1 - \frac{real\ prod}{practical\ cap})$	$MFC * (1 - \frac{real\ prod}{budgeted\ activity})$+ (Actual MFC - Budgeted MFC)
TOTAL	MFC	$\frac{MFC}{production} * sales$	MFC in COGS + MFC in UROH	MFC in COGS + MFC in UROH

16. CM un = $SP_{unit} – VC_{unit} = SP_{unit} – (\frac{MVC}{production} + \frac{non\ MVC}{sales})$
17. $CM_{\%} = \frac{CM}{Total\ Revenues} = \frac{CMun}{SPun}$
18. $BEP_{units} = \frac{FC}{CMun}$
19. $BEP_{€} = BEP_{units} * SP = \frac{FC}{CM} * Sales\ Revenues = \frac{FC}{\text{CM\%}}$
20. BEP with more than 1 product: $BEP_{units} = \frac{FC}{weighted\ average\ CMun} = \frac{FC}{weighted\ average\ SP – weighted\ average\ VC}$
21. ∏ = (Exp. Sales units - BEP_{units}) * CM_{unit}

∏ = (Exp. Sales Revenues - $BEP_{€}$) * $CM_{\%}$

∏ = Sales Revenues * $CM_{\%}$ - FC

22. Margin of Safety 1 = $\frac{Exp.Sales-BEP}{BEP}$ → Sales are MS1 % above BEP

23. Margin of Safety 2 = $\frac{Exp.Sales-BEP}{Exp.Sales}$ → Sales can decrease MS2 % until the company incurs in a loss

24. Degree of Operating Leverage = $\frac{Contribution\ Margin}{Operating\ Profit}$

25.

Sales Budget	
Volume Sales (units) Value Sales (units * Selling Price) VAT Charged (VAT Rate * Value Sales)	→Actual values that happened regardless of when it was paid

26.

Budgeted FG/DM Inventories (units/euros)	
(+) Opening Inventory (+) Production/Purchases (-) Sales/Consumption (-) Closing Inventory	→Closing inventory of one month will be the next period opening inventory

27.

Direct Material Purchases Budget	
Volume of purchases (units) Value of purchases (units * price) VAT Paid (VAT Rate * Value of purchases)	→Actual values that happened regardless of when it was paid

28.

Monthly Budget of COGM	**Depends on if we are using VC OR TFC**
(+) DM Consumption (value materials used) (+) Variable Manufacturing Costs (+) Fixed Manufacturing Costs (=) COGM Production COGM/unit	→What actually happened regardless of when it was paid

29.

Monthly Cash Budget	
1) RECEIPTS Sales collection TOTAL RECEIPTS	→Depends on collection/payment periods →Months when we actually received the cash →Depreciation is not included as it is not a cash
2) PAYMENTS Purchases (DM) VAT to state	transaction →Include VAT (!!)

Variable costs Fixed Costs TOTAL PAYMENTS **Cash Balance** (1-2)	

30.

Monthly Financial Budget	**(Sources = Uses)**
1) SOURCES OF FUNDS Opening Cash Balance Positive Cash Balance LT Loan ST Loan Interest Received on Financial Investment Sale Financial Investment TOTAL SOURCES	
2) USES OF FUNDS Closing Cash Balance Negative Cash Balance LT Loan Interest LT Loan Reimbursement ST Loan ST Loan Reimbursement Financial Investment Purchase of Equipment TOTAL USES	

31.

Budgeted Profit & Loss Account	
Sales -COGS (=) Gross Profit - Selling Costs -G&A Costs (=) Operating Profit -Financial Costs +Financial Revenues (=) Profit Before Taxes	→Without VAT →Financial Costs are the monthly interest of the total loan in that month →We care about the transaction that happened regardless of when it was paid

32. Budgeted Balance Sheet

➔ Assets

Equipment (discount depreciation)
Properties
Cash (Closing Balance)
Inventory DM
Inventory FG
Acc. Receivable Clients (what we still haven't received)
Financial Investment
Financial Investment Interest Receivable

➔ Equity

Equity N-1 + PBT N

➔ Liabilities

Acc. Payable Suppliers (DM purchases: what we still haven't paid)
Creditors (what we still haven't paid related with SG&A costs)
LT Loan
LT Loan Interest Payable
ST Loan
ST Loan Interest Payable
VAT to state (that we still haven't paid)

33. Flexible Budget: Actual quantities with Budgeted assumptions (budgeted price and efficiency)
34. Price Variance → (Price – Price) * Actual Quantity
35. Volume/Efficiency/Usage Variance → (Quantity- Quantity) * Price Budgeted
36. Sales related Variance → Actual - Budgeting
37. Cost related Variance → Budgeting – Actual
38. Fixed Costs Variance = Budgeted/Flexible Fixed Costs – Actual Fixed costs
39. Sales Margin Volume Variance = (Actual Quantity – Budgeted Quantity) * CM/unit Budgeted

Notes: **Cost Usage Variances** use **Quantity Budgeted needed to produce Actual Quantity** (flexible budget)

If > 0 → Favourable (F)

If < 0 → Unfavourable (U)