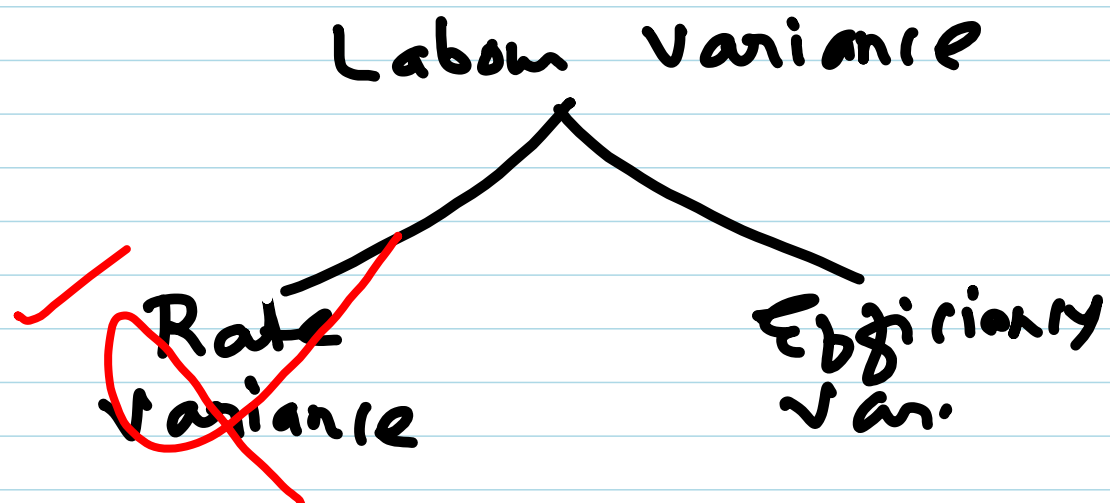
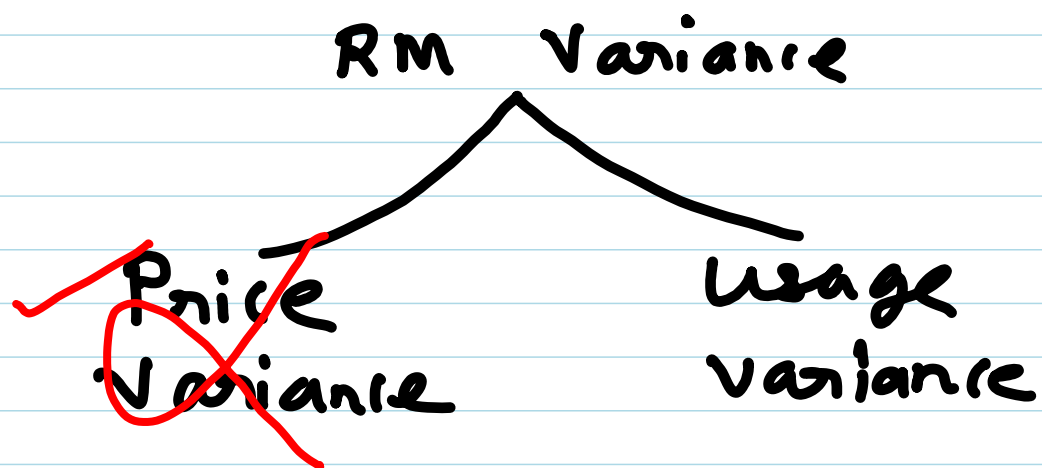


- 1) TSP $\therefore ₹ 100$
- 2) Volume $\therefore$ Not Required
- 3) TP $\therefore 100 \times 25\% = ₹ 25/-$
- 4) $\left\{ \begin{array}{l} TC \\ CC \end{array} \right.$ $\therefore 100 - 25 = 75$ $\left| \begin{array}{l} 100 - 25 - 15 \\ = 60 \\ \approx 63 \end{array} \right.$
- 5) $\therefore 78$
- 6) CG on CRT $\therefore 78 - 75 = 3$ $\textcircled{3}$

$19:27$
 to
 $19:37$

Break



Current Cost

RM	20,00,000
LC	10,00,000
Set up	1,50,000
Assembly	30,00,000
	61,50,000
÷	10,000
CC	₹ 615

$$\begin{aligned}\checkmark \text{Current Pt} &= 750 - 615 \\ &= ₹ 135 \text{ p.u.}\end{aligned}$$

$\frac{135}{750} \times 100 = 18\%$

- ① Target SP $\therefore 675$
- ② Target Volume
- ③ Target Profit $\therefore 135$ $675 \times 18\%$
121.5
- ④ Target Cost $\therefore 675 - 135$
 $= 540$
- ⑤ Current Cost $= 615$
- ⑥ Cost Gap $= 615 - 540$
 $= 75$

Learning Curve Rate = 90%

Time taken to produce 1st unit = 20 hrs.

Solⁿ

Units	Time	Total Time
1	20	20
2	18 (20 × 90%)	36
4	16.2 (18 × 90%)	64.8
8	14.58 (16.2 × 90%)	28.8

$$\begin{aligned}\text{Total time for 8 units} &= 14.58 \times 8 \\ &= 116.64\end{aligned}$$

Step

1 $\therefore$ Find out "Avg" time to produce 32 units

$$y = ax^b \rightarrow 32 \text{ units}$$

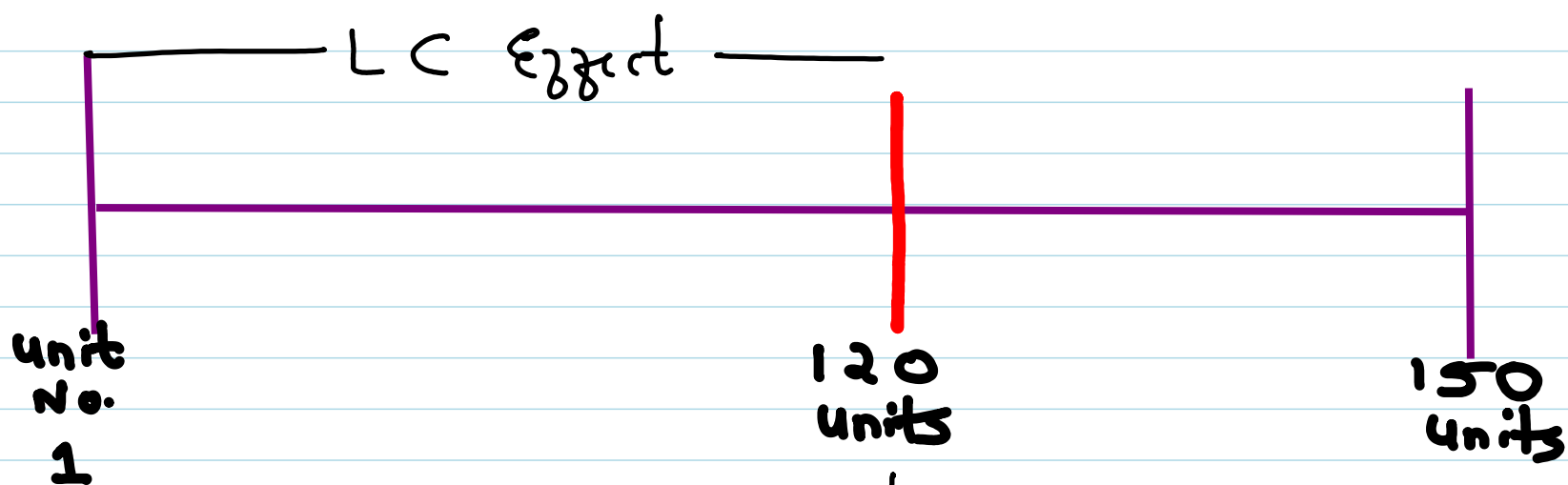
2 $\therefore$ Find out "Avg" time to produce 31 units

$$y = ax^b \rightarrow 31 \text{ units}$$

3 $\therefore$ Total time taken by 32 units
= Step 1 $\times$ 32

4 $\therefore$ Total time taken by 31 units
= Step 2 $\times$ 31

5 $\therefore$ Step 3 - Step 4



First Step
 γ for 120 units

Say, $\gamma = 14 \text{ Hrs.}$

Avg time to
 prod. 120 units

$$\begin{aligned} \text{Time taken for 150 units} &= \left(\text{Time taken for first 120 units} \right) + \left(\text{Time taken to produce units 121 to 150} \right) \\ &= (\gamma_{120} \times 120 \text{ units}) \end{aligned}$$

Time taken to produce 150 units

$$= \cdot \text{Time taken for first 120 units} \\ (\text{Avg. time of 120 units} \times 120 \text{ units})$$

Add: Time taken for units
 121 to 150
 (Time taken by unit No. 120 $\times$ 30 units)

Steps:

1) Y gun 250 units

2) Y gun 249 units

3) Total time for 250 units = Step 1 $\times$ 250

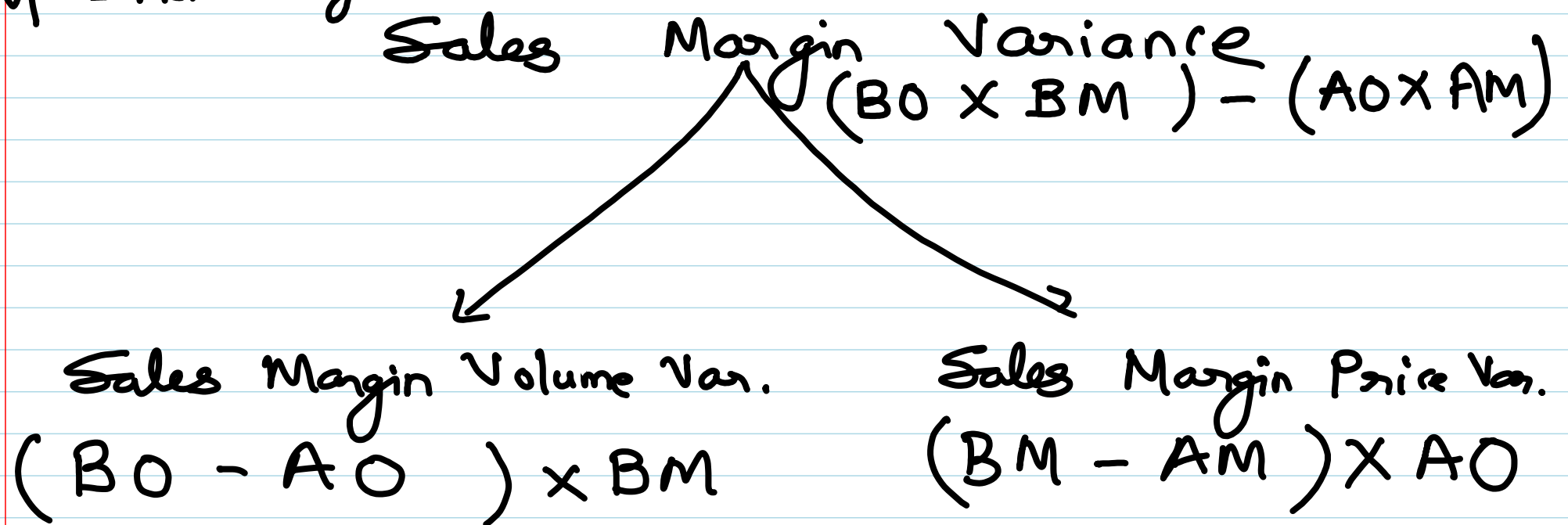
4) — " — 249 units = Step 2 $\times$ 249

5) Time take by unit no. 250 = Step 3 - 4

$$\left(\begin{array}{l} \text{Total time for} \\ 250 \text{ units} \end{array} \right) + \left(\begin{array}{l} \text{Step} \\ 5 \end{array} \times 750 \text{ unit} \right)$$

BM = Bud. Margin p.u. Margin Variance

AM = Actual Margin p.u.



	Budget	Actual
Sale Price	100	105
Cost	80	82

$\text{BM} = ? \text{ ₹ } 20$
 $\text{AM} = ? \text{ ₹ } 25$

~~$\frac{100 - 80}{100} = 20\%$
 $\frac{105 - 82}{105} = 21.9\%$~~

Turnover

Margin

A. $\text{SVV} = \text{SMVV}$
 $\text{₹ } 10,00,000 \text{ F} = \text{₹ } 1,00,000 \text{ F}$

B. $\text{SPV} = \text{SMPV}$
 $(5 - 5.5) \times 12 \text{ (an)} = (50000 - 1,00,000) \times 12 \text{ (an)}$
 $\text{₹ } 6 \text{ lacs F} = \text{₹ } 6 \text{ lacs F}$

	Bud.	Actual
Car./Week	10	12
SP	₹ 5,00,000	₹ 5,50,000
Cost	₹ 4,50,000	₹ 4,60,000

Marginal Costing

i)

Marginal Cost Statement

Sales

Less : VC^(A)

Contribution

Less : FC^(B)

Profit^(C)

A : Direct Cost + Var. Overheads
(DM + DL) (VFOH + VAOH + VSOH + VDOH)

B : Fixed Factory OH
+ Fixed Admin. OH
+ Fixed Selling OH
+ Fixed Dist. OH

C : Profit before tax

Concept. No. 2 : When PVR will change?

A. Change in FC TOTAL

☒ B. Change in VC p.u.

☒ C. Change in SP

D. Change in Volume

Concept. No. 3 : PVR + VCR = 100%

Concept. No. 4 :-

Extended Marginal Cost Statement

	BEP	MOS	Total Sales
Sales	✓	✓	✓
Less: VC	✓	✓	✓
Contribution	✓	✓	✓
Less: FC	✓ _{1,20,000}	NIL	✓
Profit	NIL	✓	✓

At BEP, Cont. = FC

At MOS, Cont. = Profit

Concept. No. 5 : BEP + MOS = 100%

Pricing based on Opportunity Cost ::

	viewpoint of	
	Seller Dept.	Buyer Dept.
1. Computation of TP	Minimum TP	Maximum TP
2. Meaning	✓	
3. Computation	$\left. \begin{array}{l} \text{VC to be incun.} \\ + \text{FC to be incun.} \\ + \text{Opportunity Cost} \end{array} \right\} \begin{array}{l} \text{Due} \\ \text{to} \\ \text{Transfer} \\ \text{NB} \end{array}$	$\begin{array}{l} \text{External Buy Price} \\ \pm \text{Adjustments} \end{array}$

Dept. A (Seller Dept.)

	Prod. A ₁	Prod. A ₂
SP	40	24
VC	30	12
LHs p.u.	2	4
	Cont. ≈ 10 p.u.	Cont. ≈ 12 p.u.
	Cont/LH ≈ 5	Cont/LH ≈ 3
External Demand	1,000 units	2,000 units.

Addit.

- 1) Dept. B requires 200 units of Prod. A₁.
- 2) Total LHs avail. in Dept. A is ~~8,500~~ 2,100.

Tell me Min. TP from viewpoint of (A)

Min. TP

VC to be inc. } Due to
 + FC — " — } Tran
 + OC — " — }

~~200 units~~ 2 (A1)

₹ 30

NIL

Most. Important
 (2 Hrs. X 3) = ₹ 6
36

I₁ No Transfer
 (Fulfilling only external demand)

I₂ Transfer.

Avail. of LHs 8,400

8,400

Demand of LHs 10,000

10,000 + 400
Internal

KF

No Idle hrs

$$(100 \times ₹ 3) + (300 \times ₹ 5)$$

$$= ₹ 1,800$$

$$\div 200 \text{ Transf.}$$

$$\underline{\underline{₹ 9}}$$

Learning Curve

- Formula Approach
- Doubling Approach

<u>units</u>	<u>Time taken</u> (LCR - 90%)
1	20 Hrs.
2	18 Hrs.*
4	
8	
16	

Break till 12:55

- 3) Budgeted time period and Actual time period must be same.

For

	Budget (2022-23)	Actual (1st April 22 to 31st Dec. 22)
Vol.	1,20,000 units	1,11,000 units

90,000 units

