

Silver Salt Method, Chloroplatinate Salt & Doubt Clearing Session

Course on Mole Concept for Class XI

189.6

M

47.1

142

M

25.25

C

74.75

7135.5

189.6

$\times 100 = 74.75$

$$\frac{16}{\underline{\hspace{1cm}}}$$

$$\begin{array}{r} \text{AgBr} \\ \hline 188 \\ \hline \end{array}$$

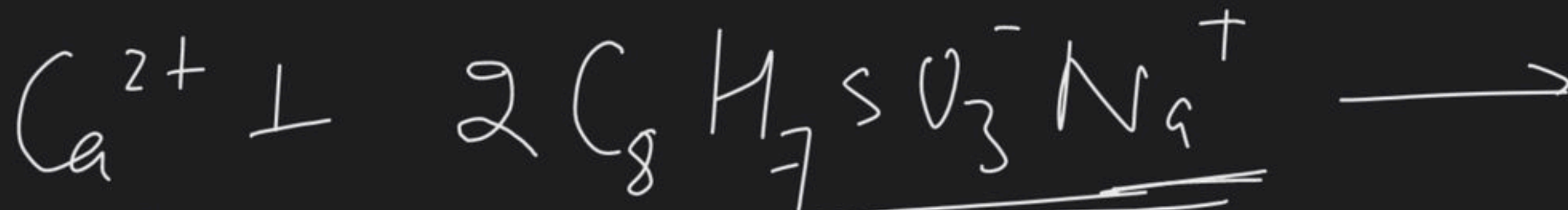
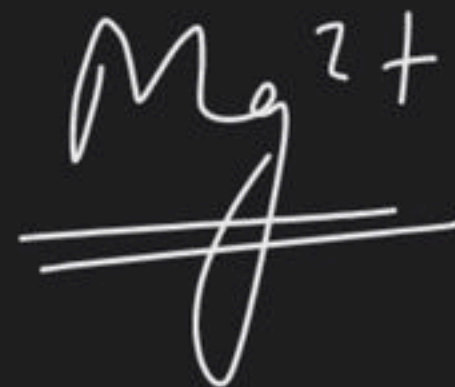
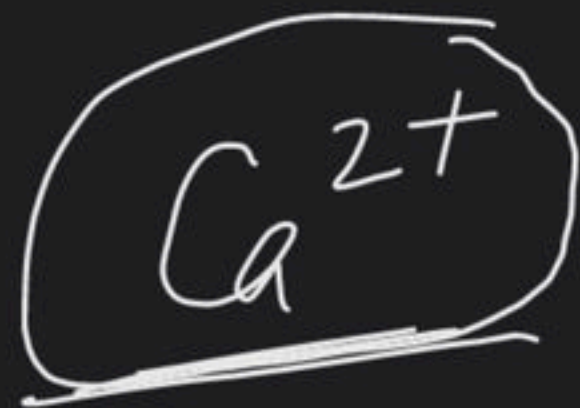
$$\longrightarrow 80$$

$$141$$

$$\longrightarrow$$

$$\begin{array}{r} 80 \\ \hline 188 \end{array} \times 141$$

$$\frac{9}{\underline{\hspace{1cm}}}$$



$$\frac{1}{2} \times \frac{1}{200} \text{ mol}$$

$$\frac{1 \text{ gm}}{206}$$



C

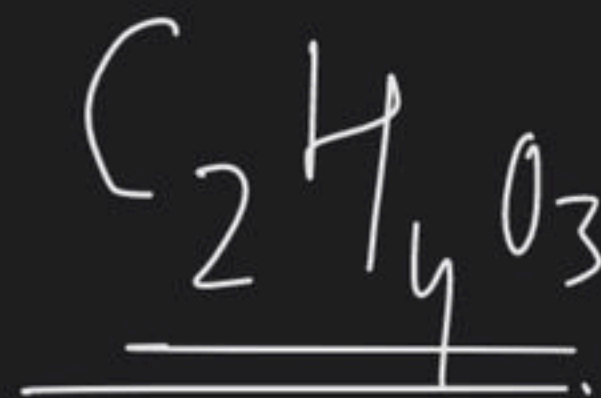
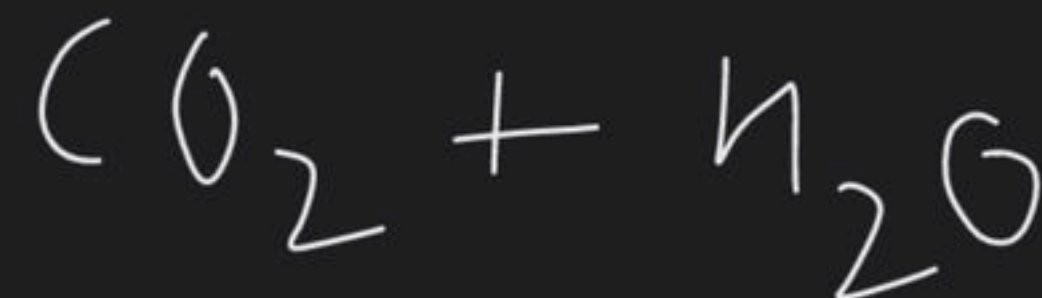
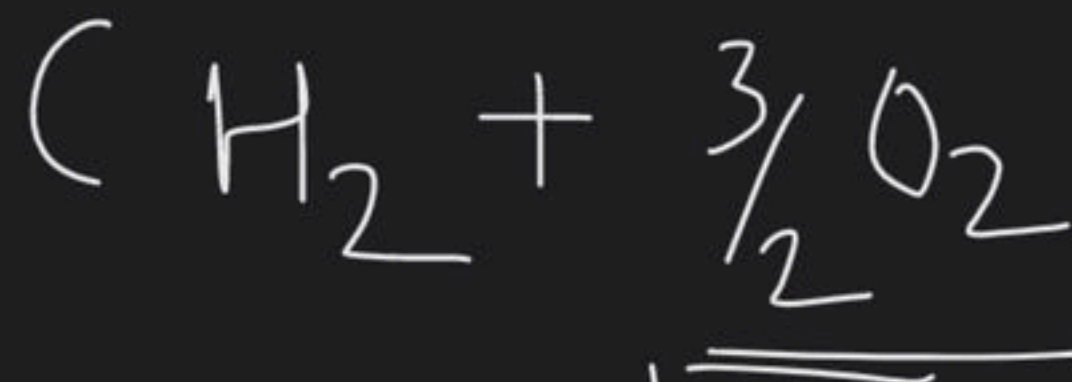
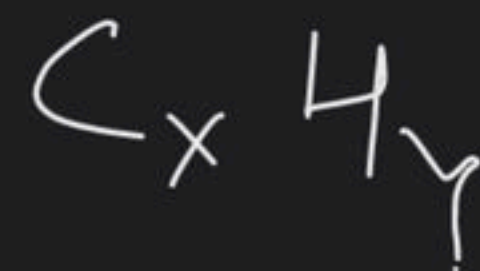
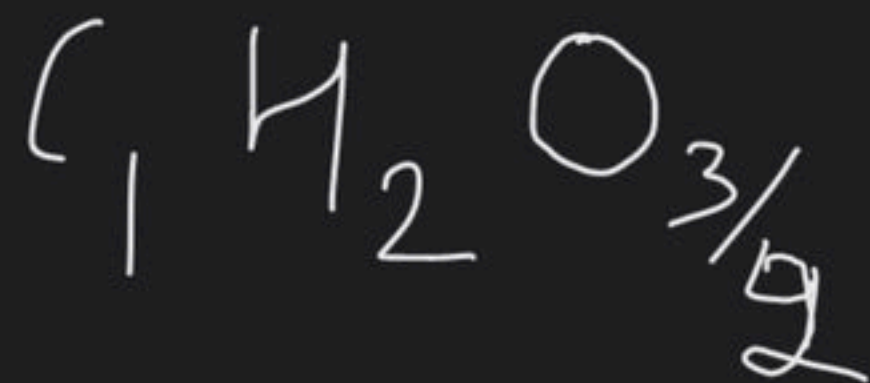
H

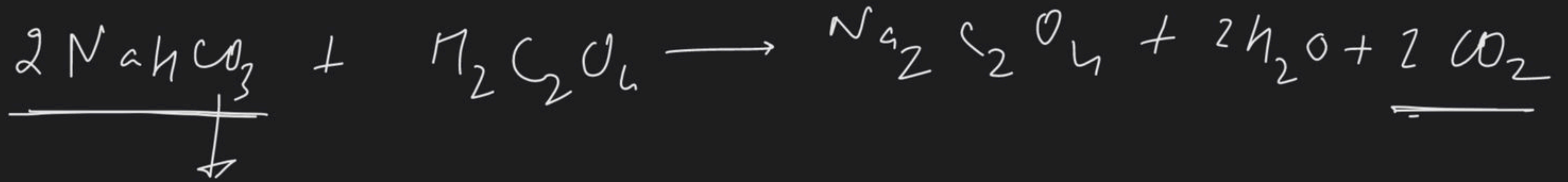
$\frac{6}{12}$

$\frac{1}{1}$

1

2 mol





Duma's

→

→ 3

⇒

$$\underline{\underline{M_{ang}}} = 2 \times \underline{\underline{V.D}}$$

#

Q. find EF of an organic compound of 112 gm
of it on complete rxn with Oxygen

given 352 gm CO_2 & 144 gm H_2O
8 mol 8 mol

only.

(A) C_4H_2

(B) CH

(C) CH_2O

(D) None

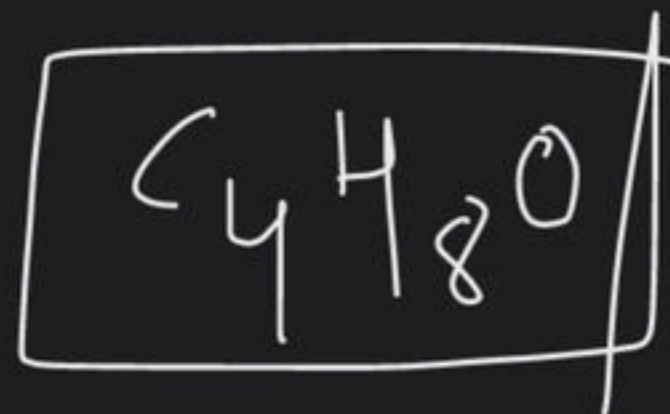
C H
8 16

CH_2

find EF of Organic compound of 144 gm
comp of complete burn with oxygen

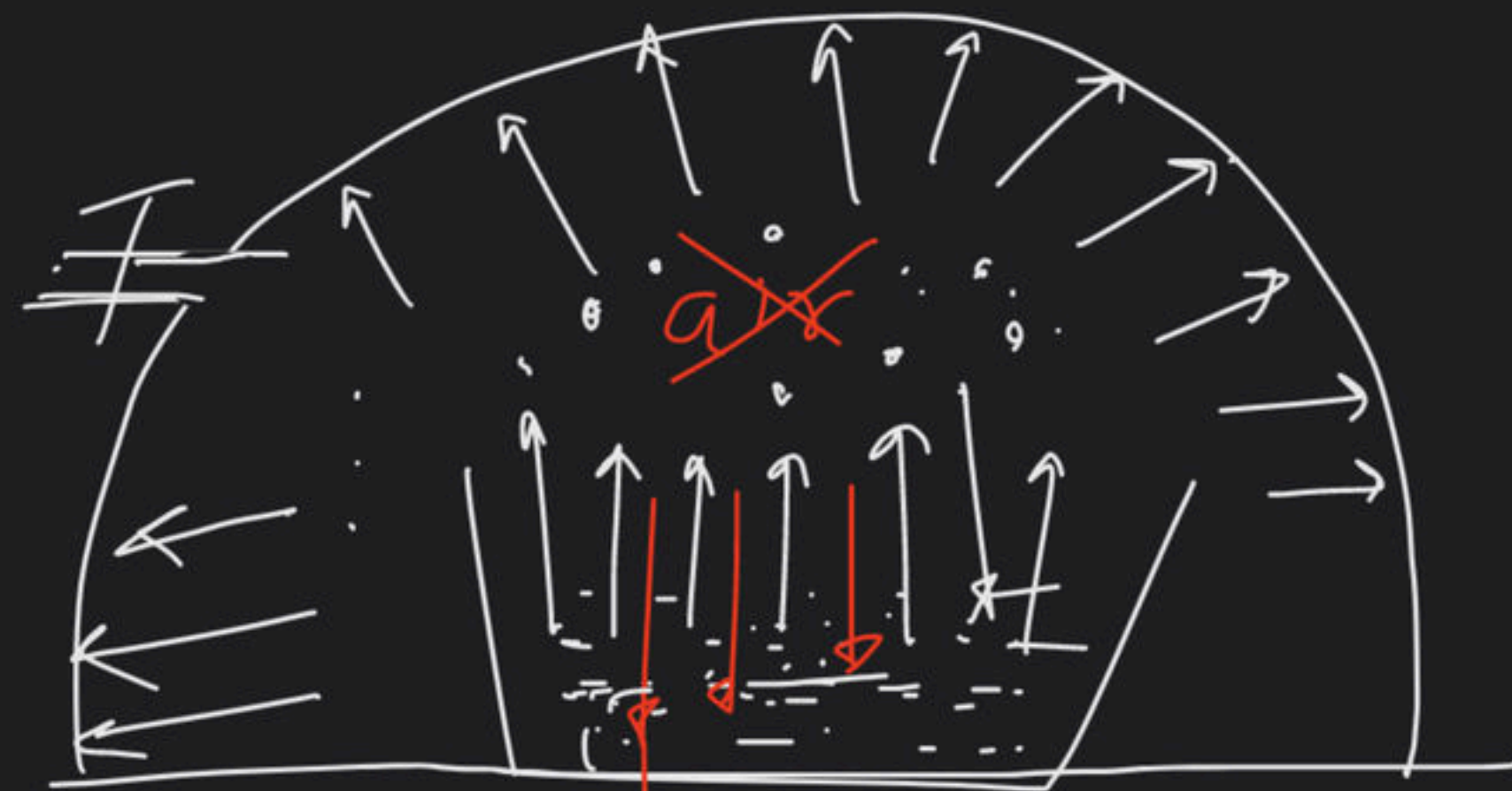
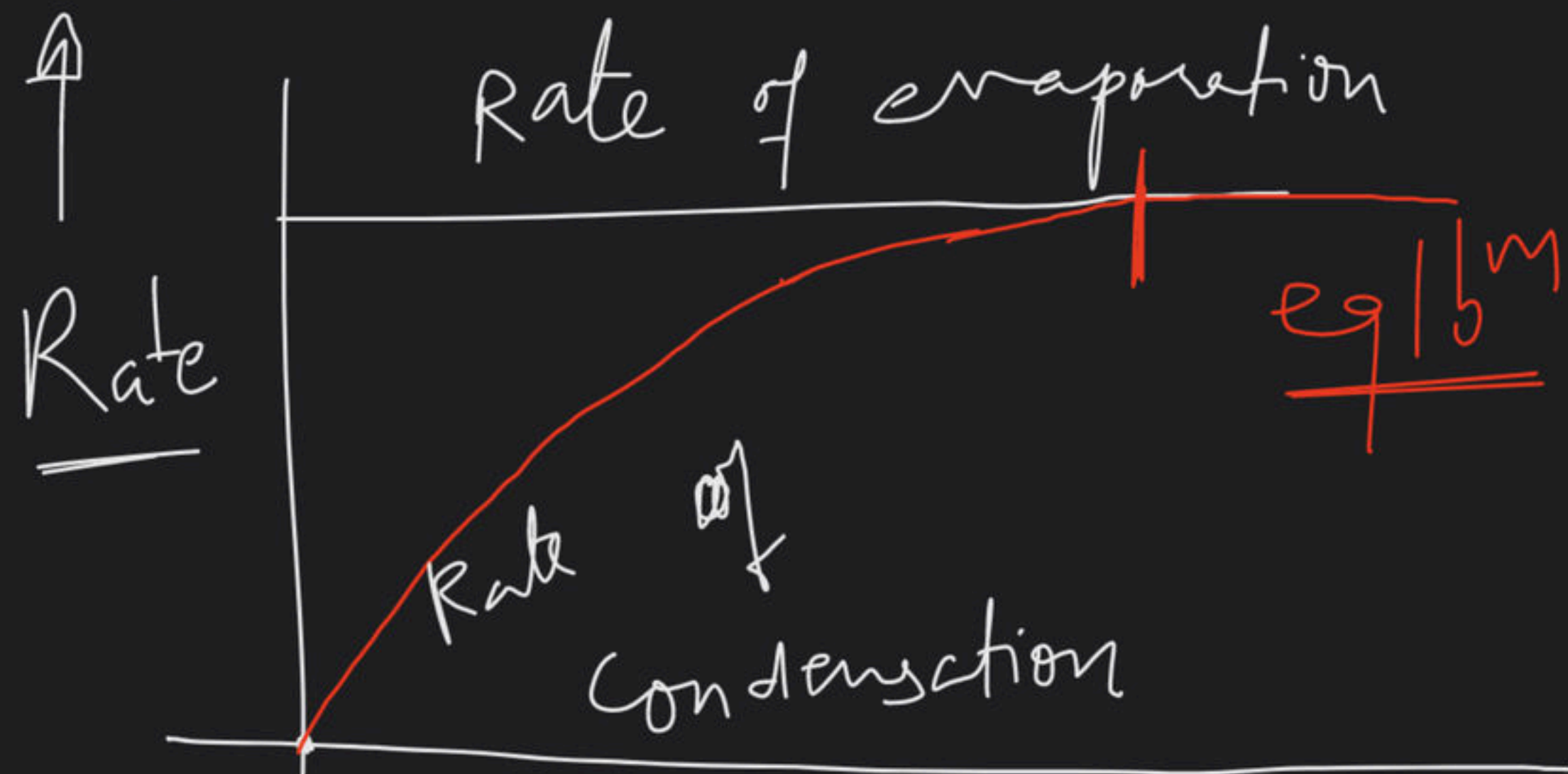
given H_2O only 352 gm CO_2 & 144 gm

C	H	O
8	16	2
4	8	1



- (A) $\text{C}_4\text{H}_8\text{O}$
(B) $\text{C}_4\text{H}_2\text{O}$
(C) None.

Vapour pressure : \rightarrow



Condensation

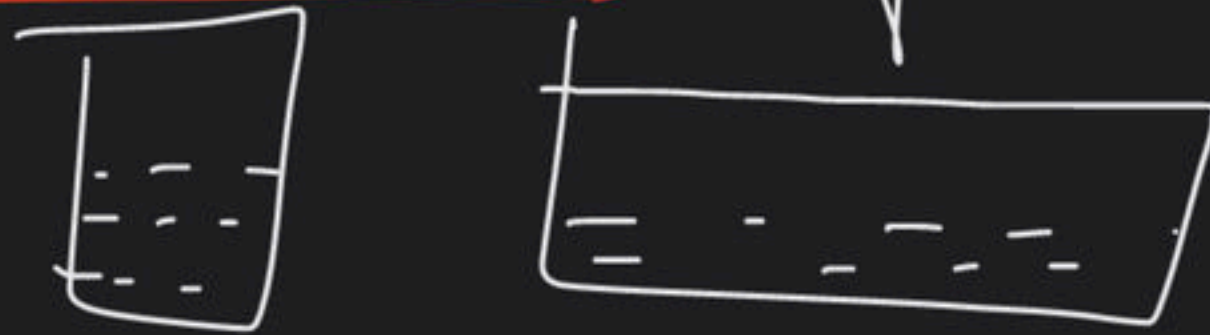
Rate = no. of molecules vapourised
of vapourisation per sec.

pressure exerted by the vapours in eqbm with its liquid state.

vapour pressure of a liquid depends only on temp.

It is independent of amount of liq.

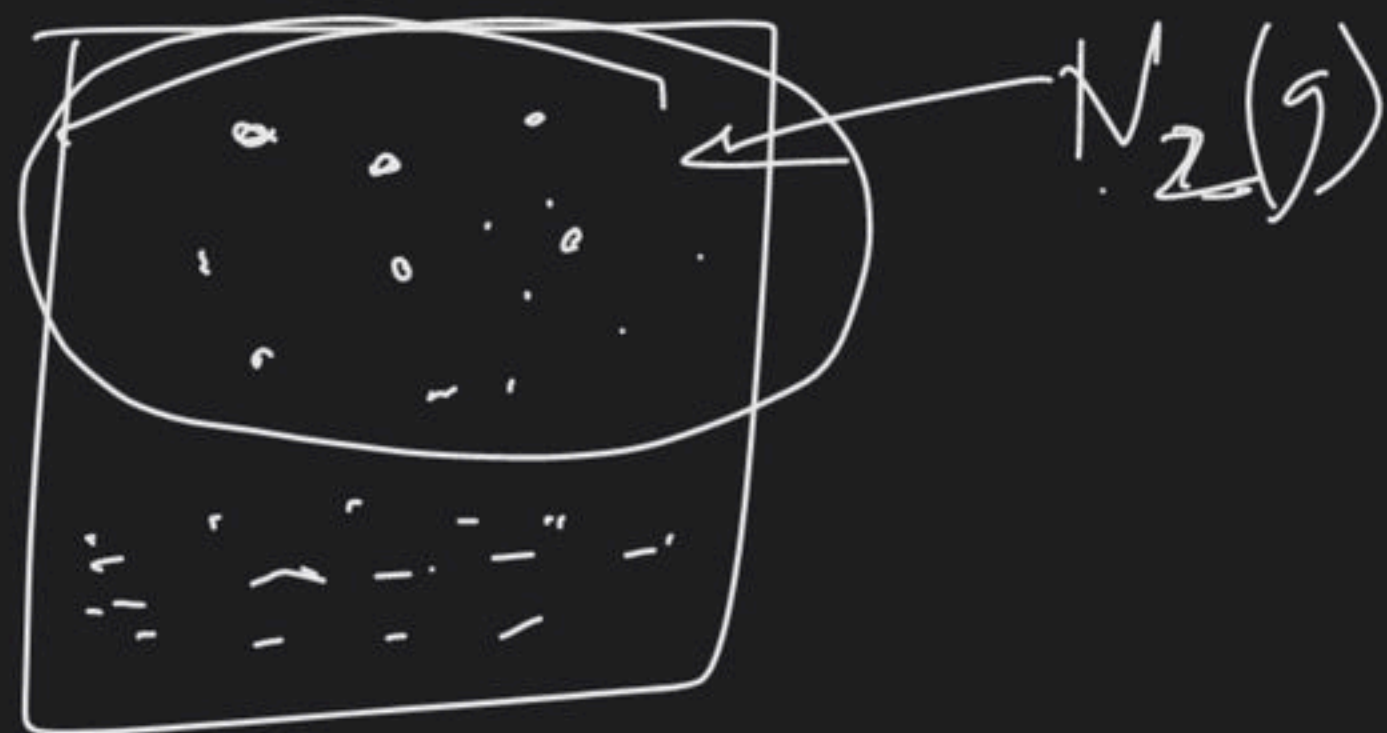
and surface area of liquid.



In case of H_2O

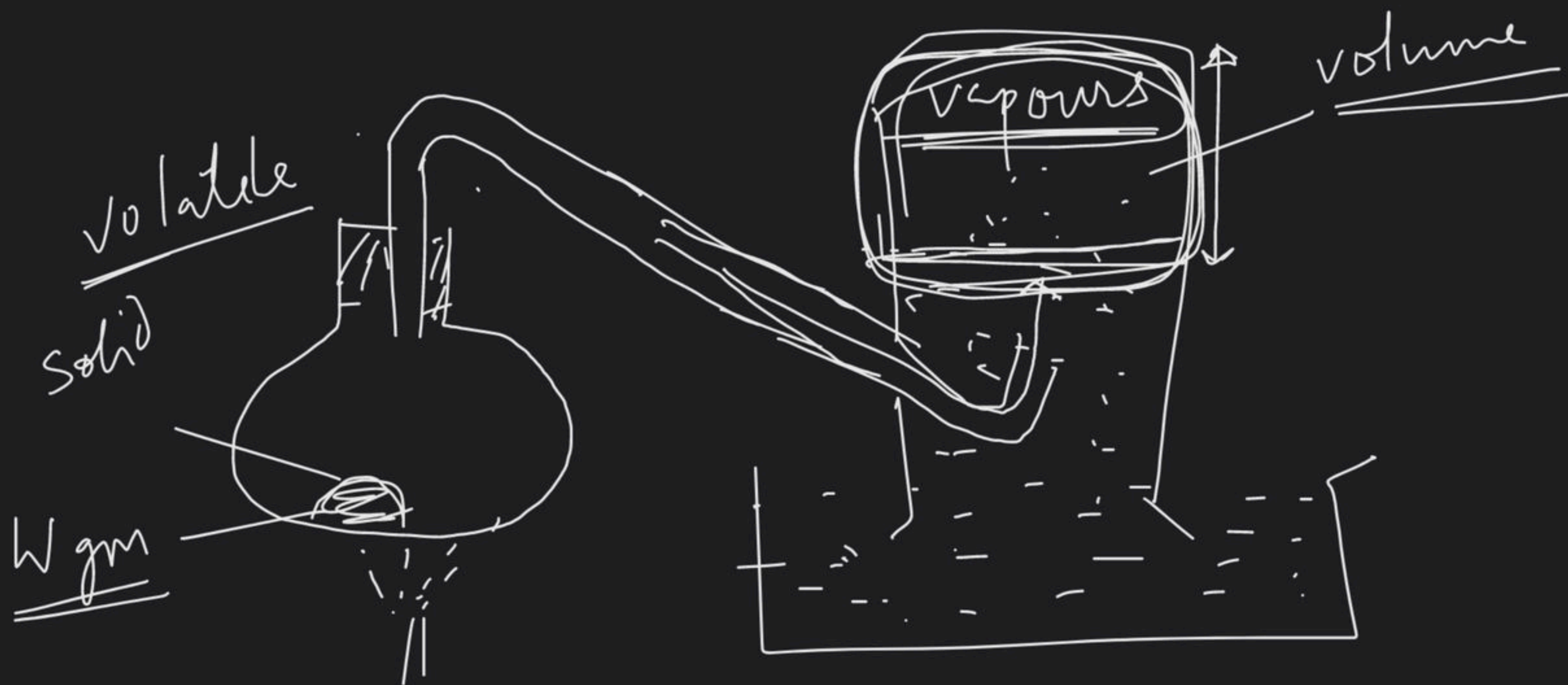
Vapour pressure is also known as

Aqueous tension



Exp determination of Molecular mass \rightarrow

① Victor Mayer's Method



$$\underline{\underline{P}} \underline{\underline{V}} = \frac{W}{M} R \underline{\underline{T}}$$

Total pressure was found to be = P
 aqueous ension = P'

Pressure of gas = $P - P'$

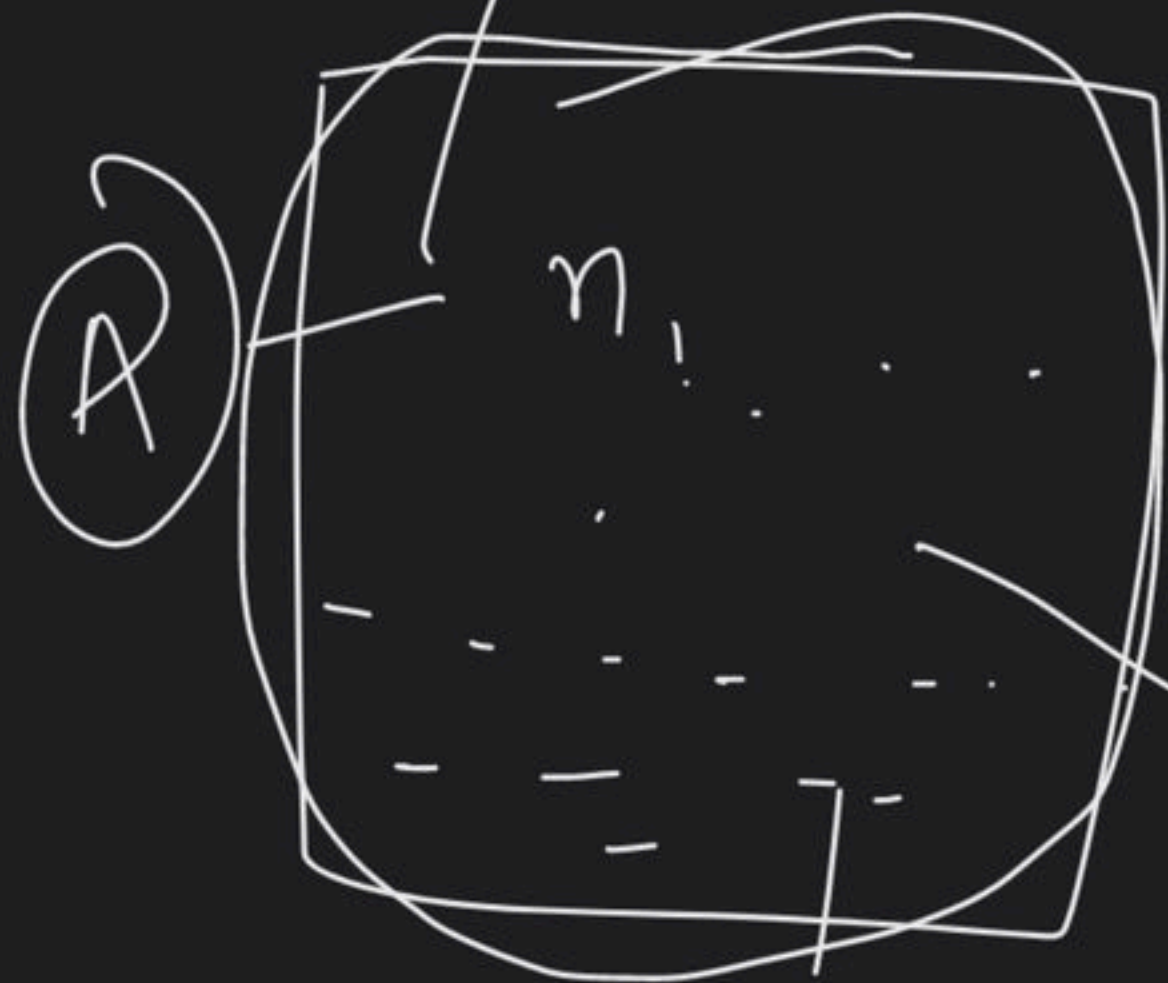
$$P_{N_2} = 860 - 24 = 836 = \underline{\underline{1.1 \text{ atm}}}$$

9. In the quantitative determination of nitrogen, N_2 gas liberated from 0.42 gm of a sample of organic compound was collected over water. If the volume of N_2 gas collected was $\frac{100}{11}$ ml at total pressure 860 mm Hg at 250 K, % by mass of nitrogen in the organic compound is [Aq. tension at 250 K is 24 mm Hg and $R = 0.08 \text{ L atm mol}^{-1} \text{ K}^{-1}$]

- ✓ (A) $\frac{10}{3}\%$ (B) $\frac{5}{3}\%$ (C) $\frac{20}{3}\%$ (D) $\frac{100}{3}\%$



$p = 50 \text{ torr}$



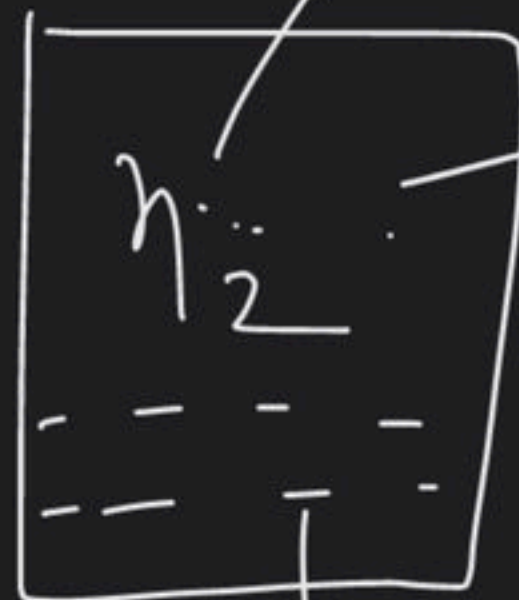
1 mol $H_2O(l)$

300K

50 torr

A

B



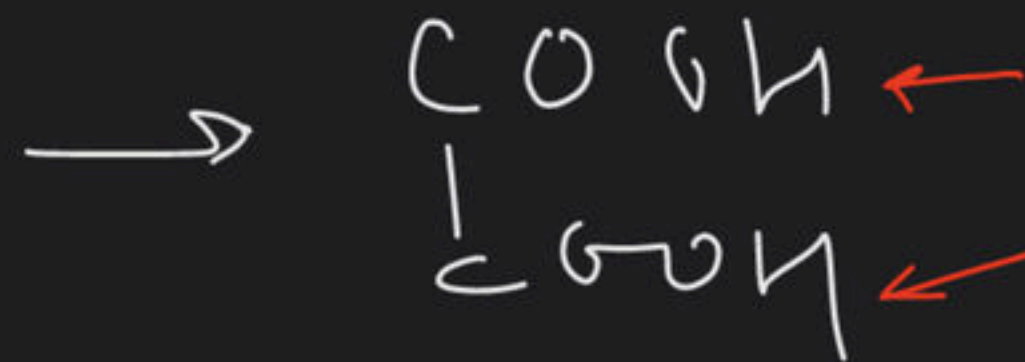
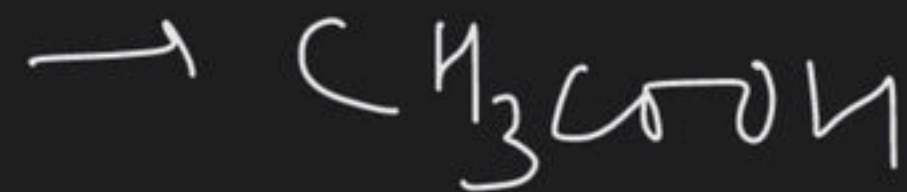
$p = ? = 50 \text{ torr}$

1 mol $H_2O(l)$

300K

Silver salt method \rightarrow

Used to determine Mol mass of
organic acid



CH₄



Silver salt

