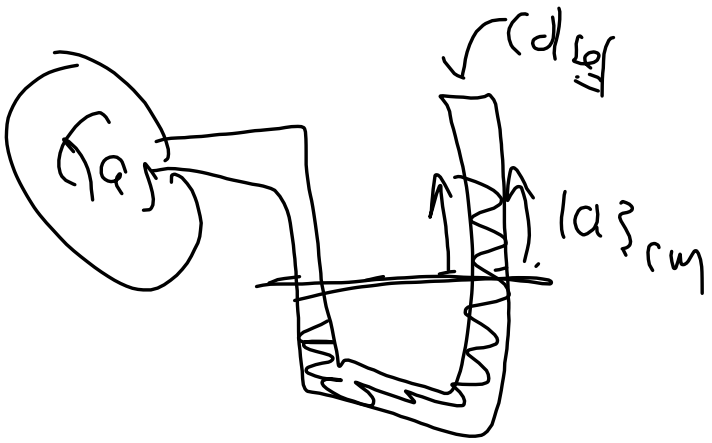
1023 iii

10.3 cm Hg 103 mm Hg

$$\frac{103\ mm\ Hg}{760\ mm\ Hg} \times 1\ atm = 0.136\ atm$$

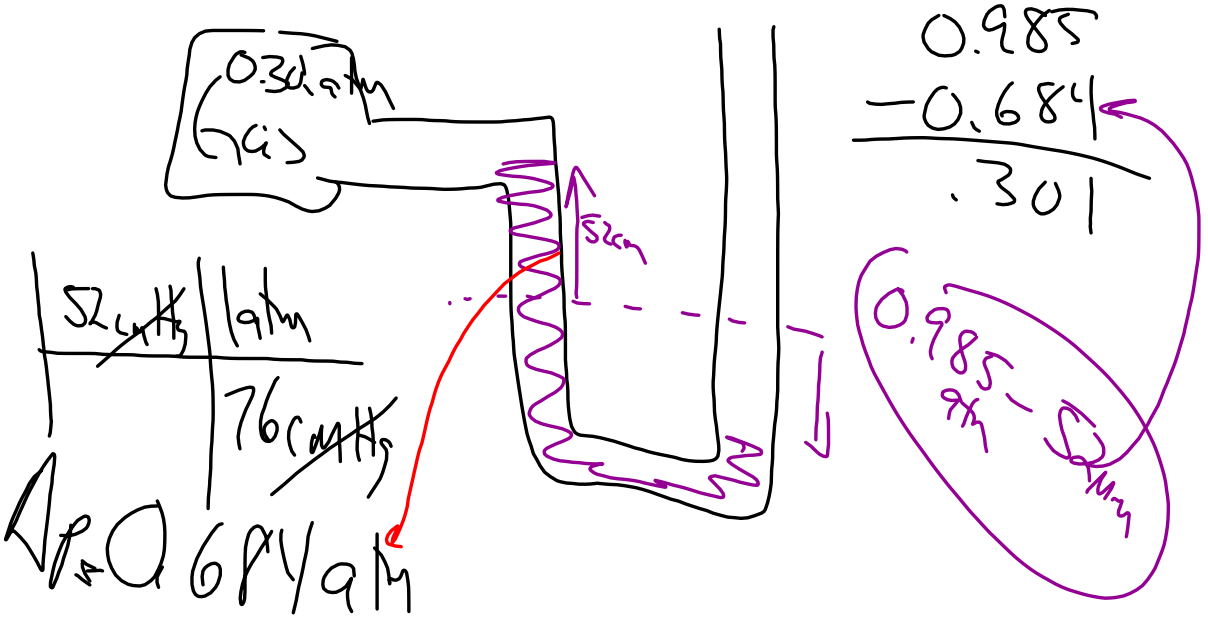
Closed



Dec 6-8:05 AM

1) open

$P_{atm} = 0.985\ atm$



$$\frac{52\ cm\ Hg}{76\ cm\ Hg} \times 1\ atm$$

$P_{gas} = 0.684\ atm$

$$0.985 - 52\ cm$$

$$0.985 - 0.684 = 0.301$$

Dec 6-8:16 AM

ii) 67mm more

0.985 atm + 0.088atm 67mm = 1.07 atm

67mm | 1atm / 760mm = 0.088atm

Dec 6-8:20 AM

Combined Gas Law

$\frac{PV}{T} = \text{CONSTANT}$

$\frac{P_1V_1}{T_1} = \frac{P_2V_2}{T_2}$

① T is Constant Boyles Law

If P ↑ Then V ↓

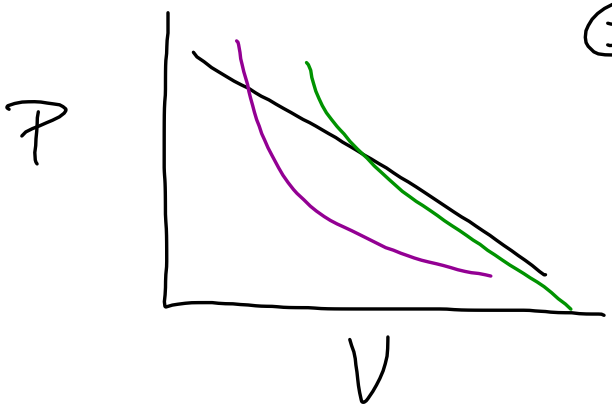
P * V = constant

mV/T ⇒ Inverse Relationship

*2 (5 * 20 = 100 / 10 * 10 ½ = 100)

Dec 6-8:24 AM

Boyles Law



⊖ Slope

IMF

Dec 6-8:27 AM

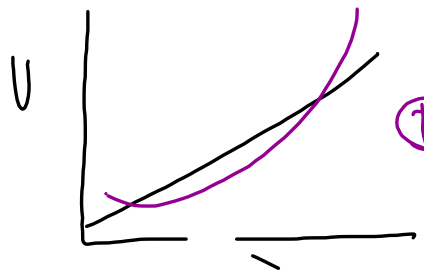
$\frac{PV}{T}$ = constant

P remains constant.

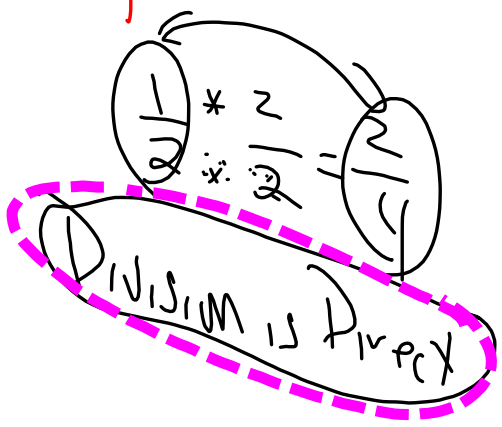
② Charles Law

$\frac{V_1}{T_1} = \frac{V_2}{T_2}$

$\frac{V}{T}$ = constant



⊕ Slope



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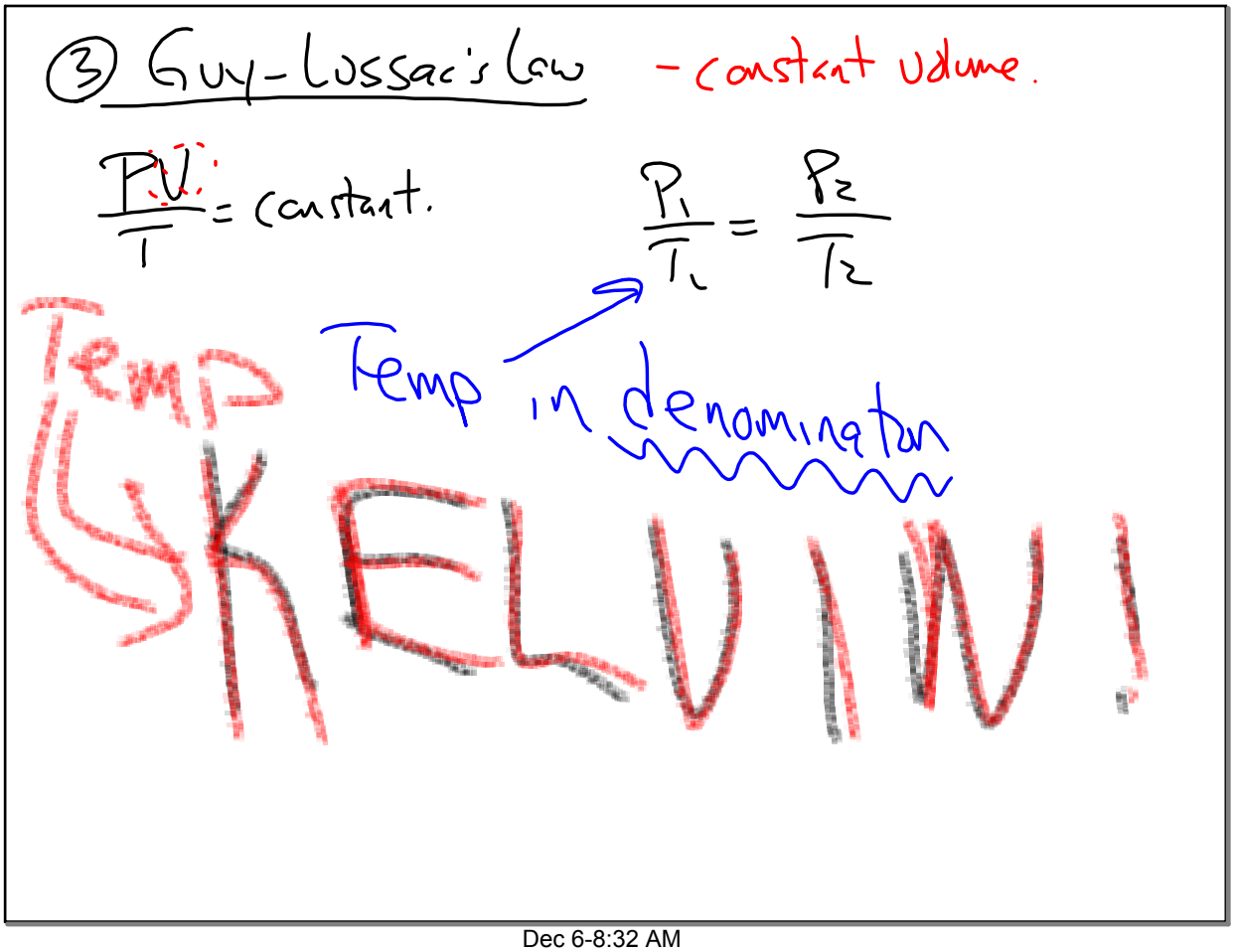

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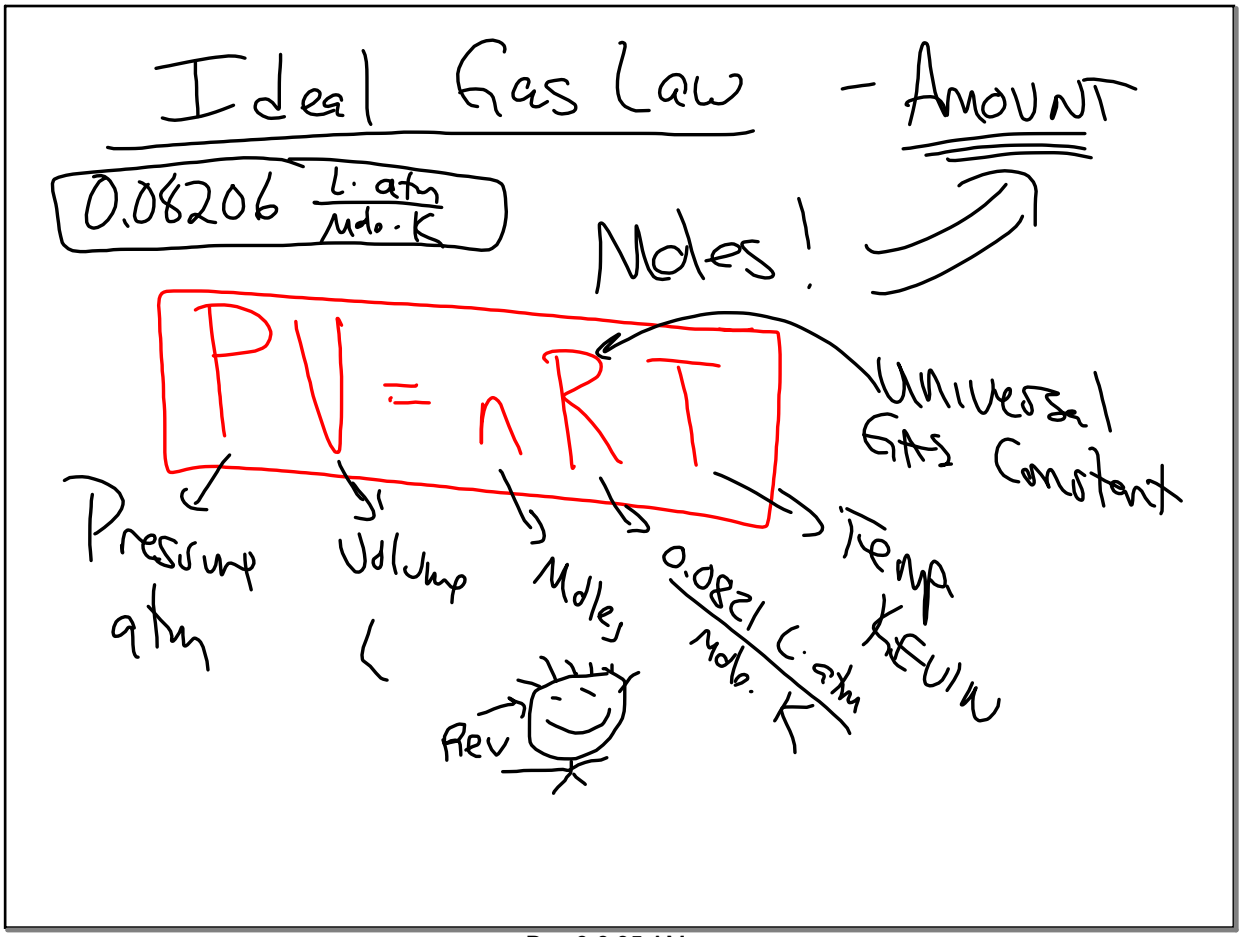

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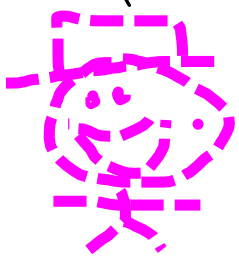
HW prelab p 3.4.5

10/34 a+b PV=nRT

R=0.08206 L·atm / mol·K

P: ATM T: K

V: L



Dec 6-8:43 AM