

10/34 b Find T, 3.33×10^{-3} mole, 325ml, 750 torr $\frac{750}{760} =$

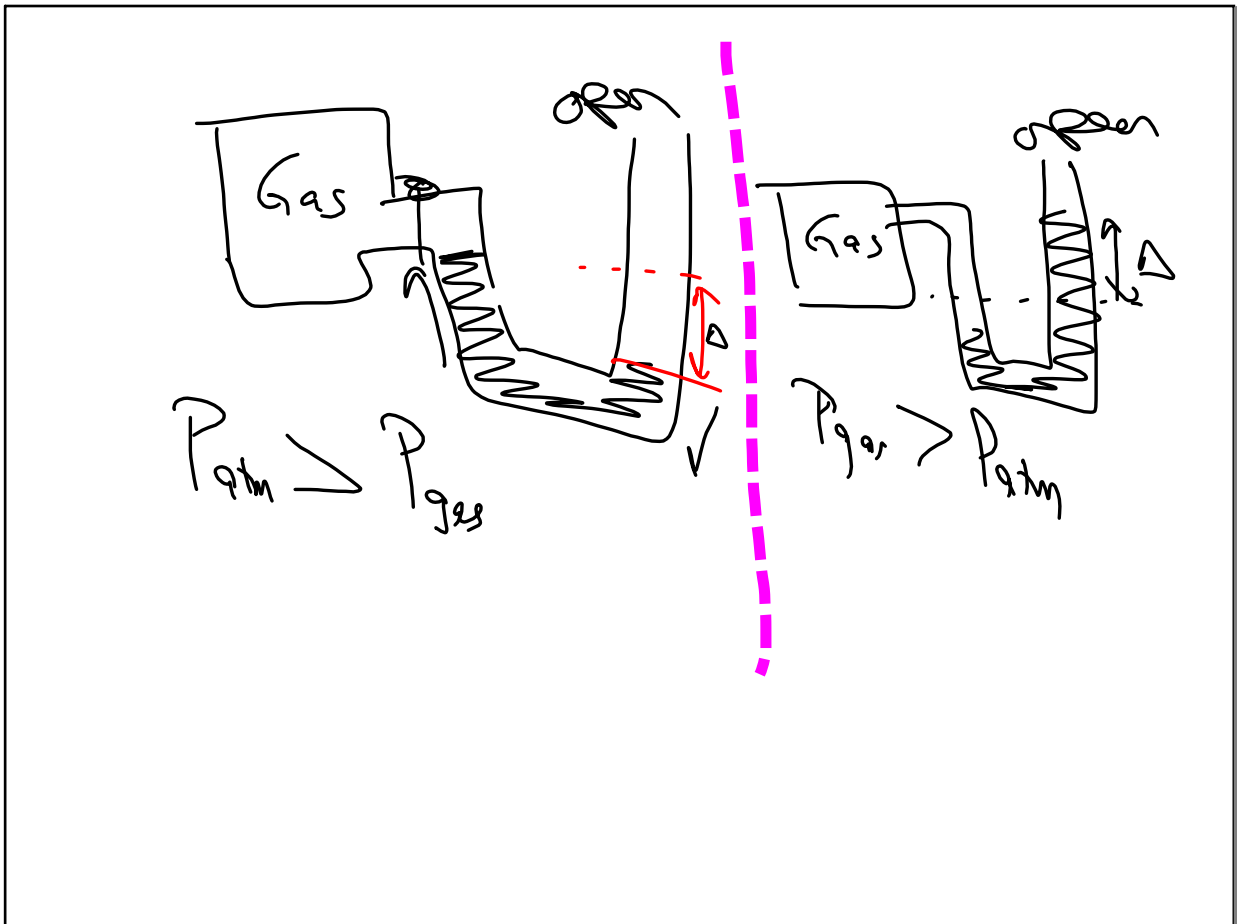
$$PV = nRT$$

$$T = \frac{PV}{nR} = \frac{(0.987 \text{ atm})(325 \times 10^{-3} \text{ L})}{(3.33 \times 10^{-3} \text{ mole})(0.08206 \frac{\text{L}\cdot\text{atm}}{\text{mole}\cdot\text{K}})}$$

$$\frac{0.08206 \text{ L}\cdot\text{atm}}{\text{mole}\cdot\text{K}}$$

mole · K		0.325 L	0.987 atm
0.08206 L·atm	3.33×10^{-3} mole		

Dec 5-8:11 AM



Dec 5-8:22 AM

Find density $\text{CCl}_4(g)$ vapor at 714 torr and 125°C

$$D = \frac{P(MW)}{RT} = \frac{(.939)(153.81)}{(.08206)(398)} = 4.42 \text{ g/l}$$

Handwritten notes:
 - A red arrow points from the D in the equation to P in $PV=nRT$.
 - $PV=nRT$ is written above $P = \frac{nRT}{V}$.
 - In $P = \frac{nRT}{V}$, n is circled in red, and MW is written below it.
 - A box around $714/760$ in the numerator of the equation.
 - A small asterisk is below the denominator of the equation.

Dec 5-8:25 AM

$2 \text{NaN}_3(s) \rightarrow 2 \text{Na}(s) + 3 \text{N}_2(g)$

— 5 When in doubt convert to moles

1.7 mole N_2	2 mole NaN_3	65.5 NaN_3
	3 mole N_2	1 mole NaN_3

72g NaN_3

Handwritten notes:
 - $V = 36\text{L}$
 - $P = 1.15 \text{ atm}$
 - $T = 26^\circ\text{C}$
 - $PV = nRT$
 - $n = \frac{PV}{RT} = \frac{(1.15)(36)}{(0.08206)(299)}$
 - 1.7 mole N_2

Dec 5-8:39 AM

10/40, 50, 54

Paramag Lab Due Now

Dec 5-8:46 AM