10/31 b Find T, $3.33 * 10^{-3}$ mole, 325 mL, 750 torr

$\frac{750}{760} =$

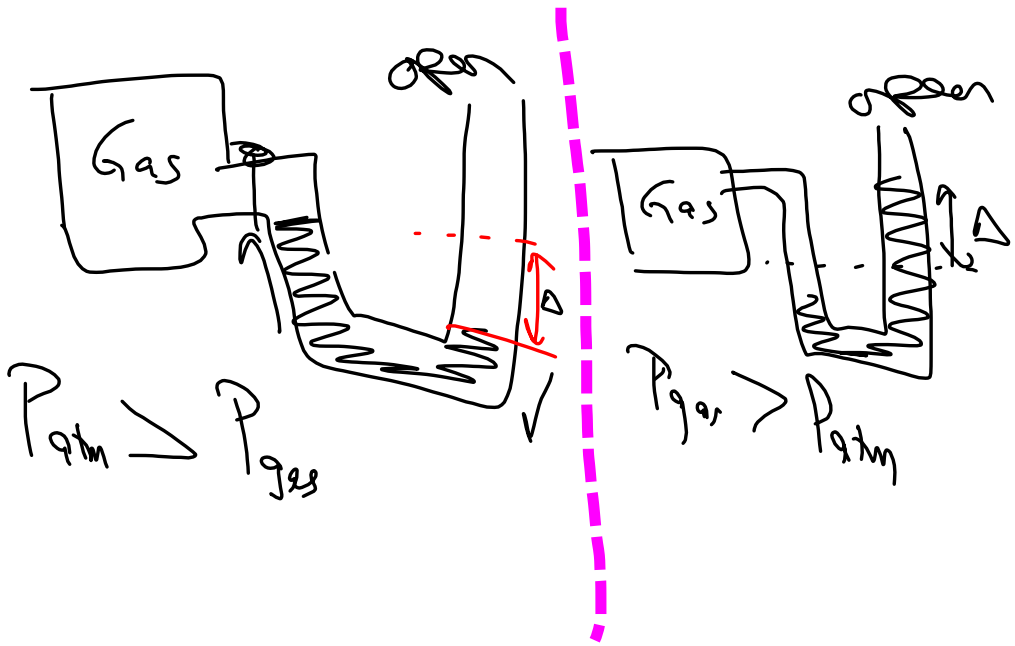
$PV = nRT$

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

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

$\frac{mole * K}{0.08206\ L \cdot atm} \quad \frac{0.325\ L}{3.33 * 10^{-3}\ mole} \quad \frac{0.987\ atm}{} =$

Dec 5-8:11 AM



Dec 5-8:22 AM

Find density $CCl_{4(g)}$ vapor at 714 torr and 125°C

$\frac{g}{v}$

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

714/760

$PV = nRT$

$PV = \frac{g}{MW}RT$

Dec 5-8:25 AM

$2NaN_{3(s)} \rightarrow 2Na_{(s)} + 3N_{2(g)}$

—— g

When in doubt convert to moles

$1.7\ mole\ N_2 \left| \frac{2\ mole\ NaN_3}{3\ mole\ N_2} \right| \frac{65\ g\ NaN_3}{1\ mole\ NaN_3}$

$72\ g\ NaN_3$

V 36 L

P 1.15 atm

T 26°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

Para Mag lab Due Mon

Dec 5-8:46 AM