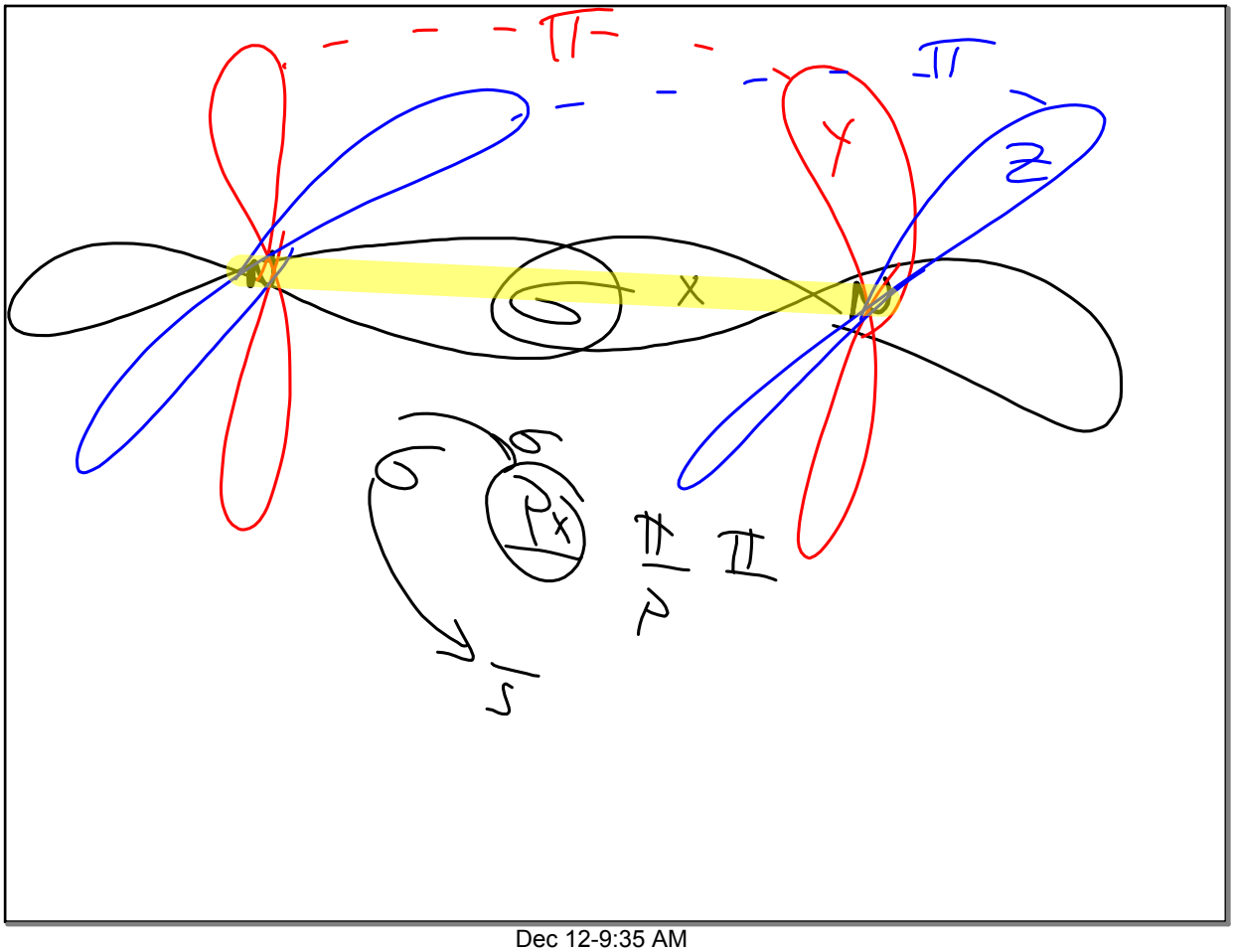
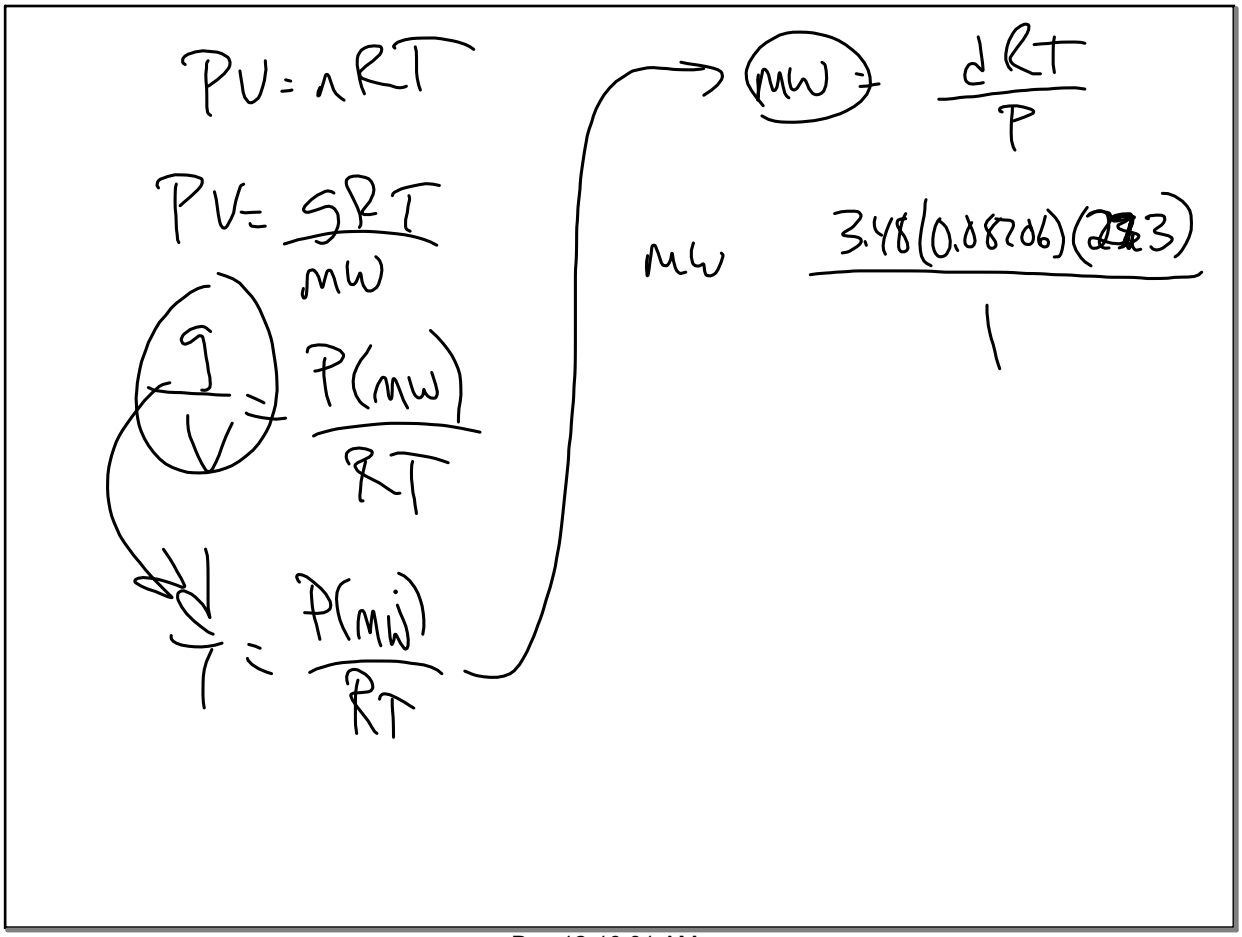


Dec 12-9:35 AM



Dec 12-10:01 AM

(22) $\frac{P_1V_1}{T_1} = \frac{P_2V_2}{T_2}$

$\frac{303}{3} \frac{(750)(4)}{333} = \frac{P_2(3)}{303} \frac{303}{3}$

Dec 12-10:03 AM

(23) $\frac{P_1V_1}{T_1} = \frac{P_2V_2}{T_2}$

$\frac{303}{1} * \frac{1(200)}{296} = \frac{1(V)}{303} * \frac{303}{1}$

Dec 12-10:08 AM

(24) 20 L CO_2 = 0, T = 23°C → 296K

P = 1 atm

→ 0.5 atm → # mols in tank.

$PV = nRT$

$0.5(20) = n\,(0.08206)(296)$

Dec 12-10:10 AM

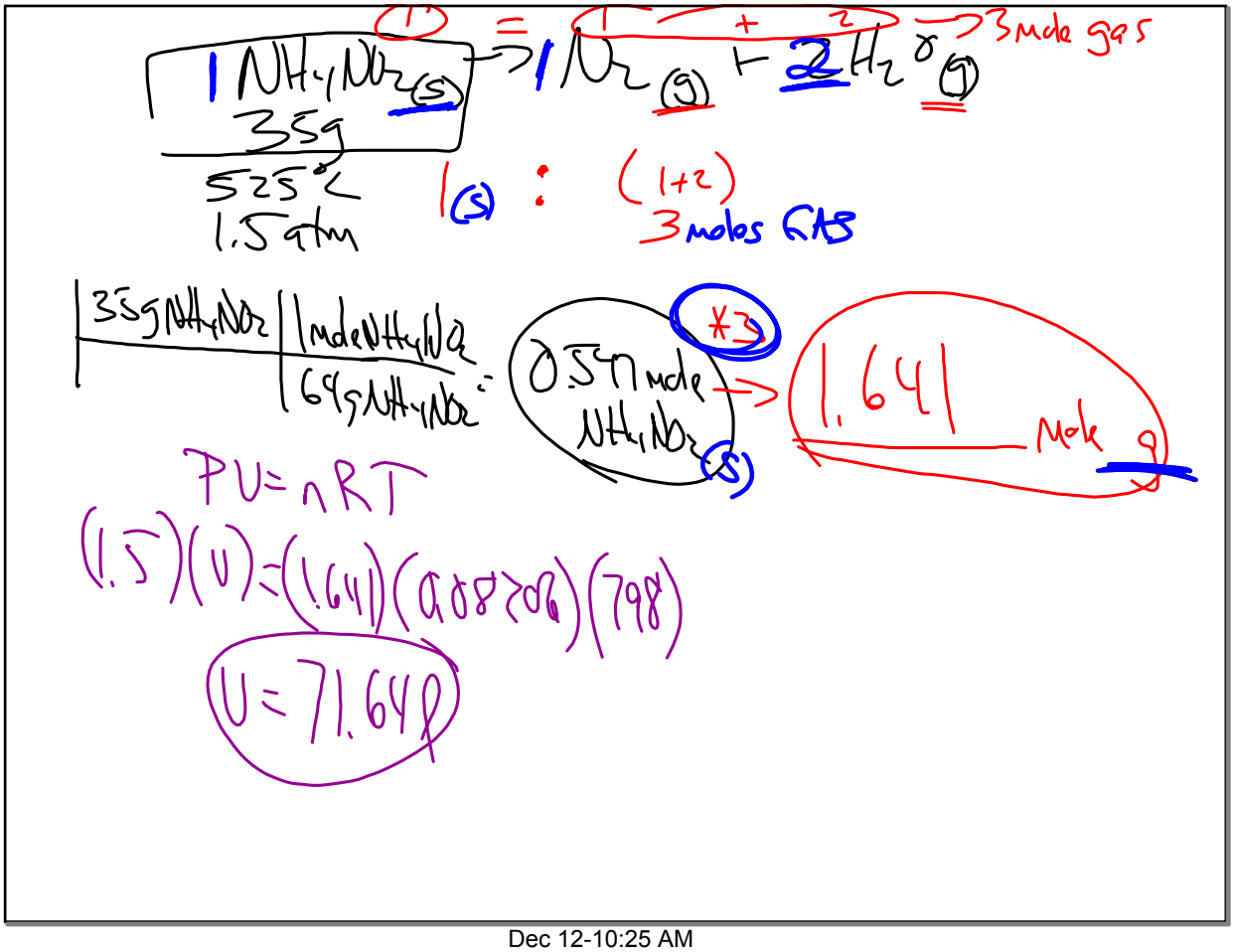
(27) $\frac{PV}{T} = \frac{PV}{T}$

$\frac{(100)(900)}{1} = \frac{P\,(300)}{2}$

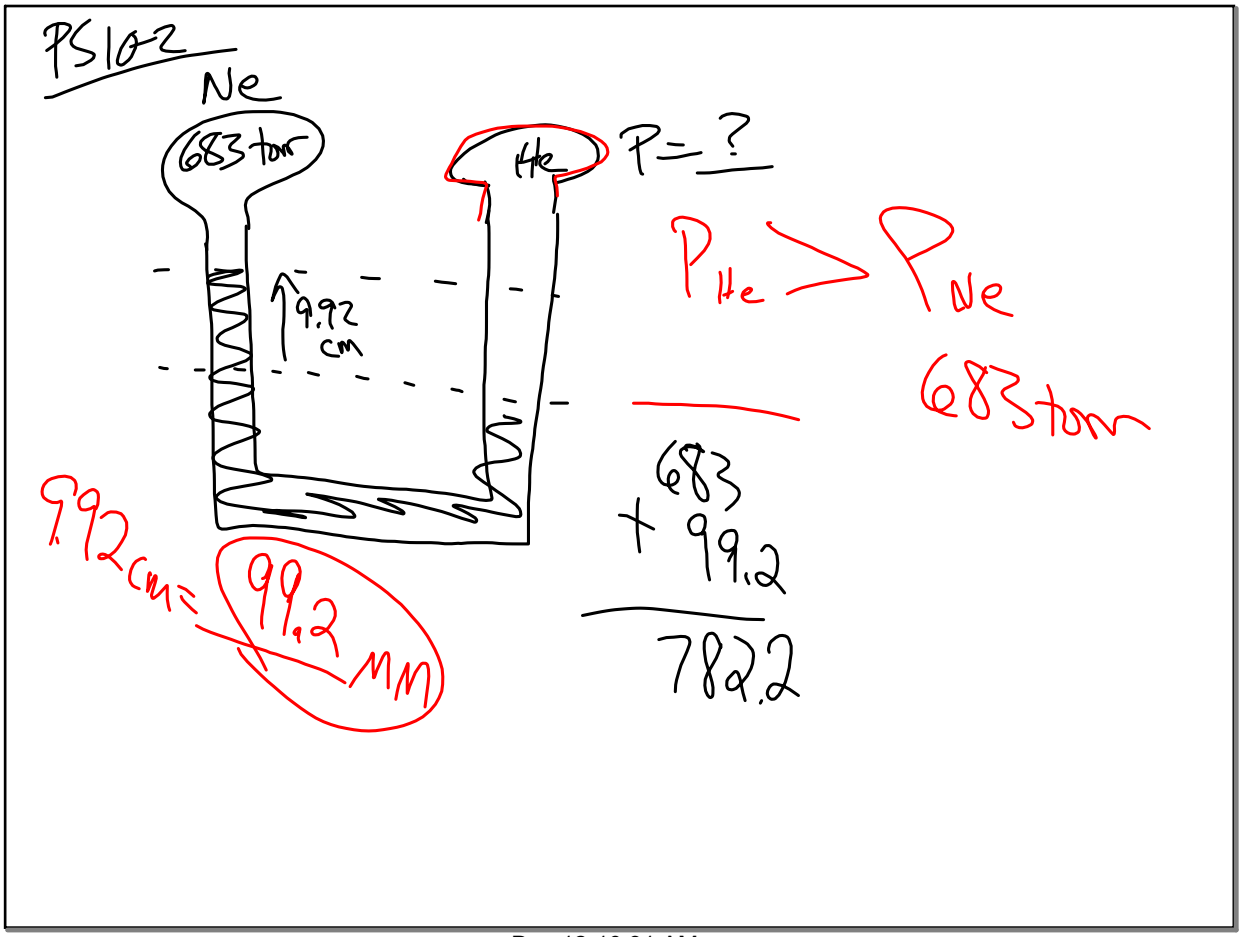
P = 600

$\frac{2}{300}\,\frac{(100)(900)}{1} = \frac{P(300)}{300}$

Dec 12-10:20 AM



Dec 12-10:25 AM



Dec 12-10:31 AM

② $\frac{30.51\ \text{in Hg}}{1\ \text{in}} \left| \frac{25\text{cm}}{76\text{cm}} \right| \frac{101.35\ \text{kPa}}{} =$

$101.35\ \text{kPa} = 760\ \text{mm Hg}$

$76\ \text{cm Hg}$

Dec 12-10:37 AM

④ $d_{liquid} = \frac{0.791\ \text{g}}{\text{ml}}$

$d_{Hg} = \frac{13.6\ \text{g}}{\text{ml}}$

height Δ 43.4cm

Patm = 755 mm Hg

− 25.2

729.8 mm Hg

0.96 atm

$\frac{l_{liquid}}{Hg} = \frac{0.791}{13.6} \times \frac{43.4\ \text{cm}}{} = 2.52\text{cm} = 25.2\text{mm}$

Conversion factor

Dec 12-10:40 AM

$$\frac{P_1 V_1}{T_1} = \frac{P_2 V_2}{T_2}$$

Dec 12-10:45 AM