PS 16

@ 23°C water displacement. $P_{H_2O} = 21$ torr @23°C

$P_{atm} = 735$ torr $V = 568$ ml

Find V_2 after removal H_2O

$P_{gas} = P_{atm} + P_{H_2O} = 735 + 21 = 756$ torr P_1

With H_2O $P_1V_1 = P_2V_2$ Without H_2O

$(756)(568) = 735(V_2)$

Dec 10-8:04 AM

(21) $P_T = 4$ atm $n_T = 16$ moles $P_2 = 2.75$ atm

Find n_x

$P_x = P_T - P_2$

$= 4 - 2.75$

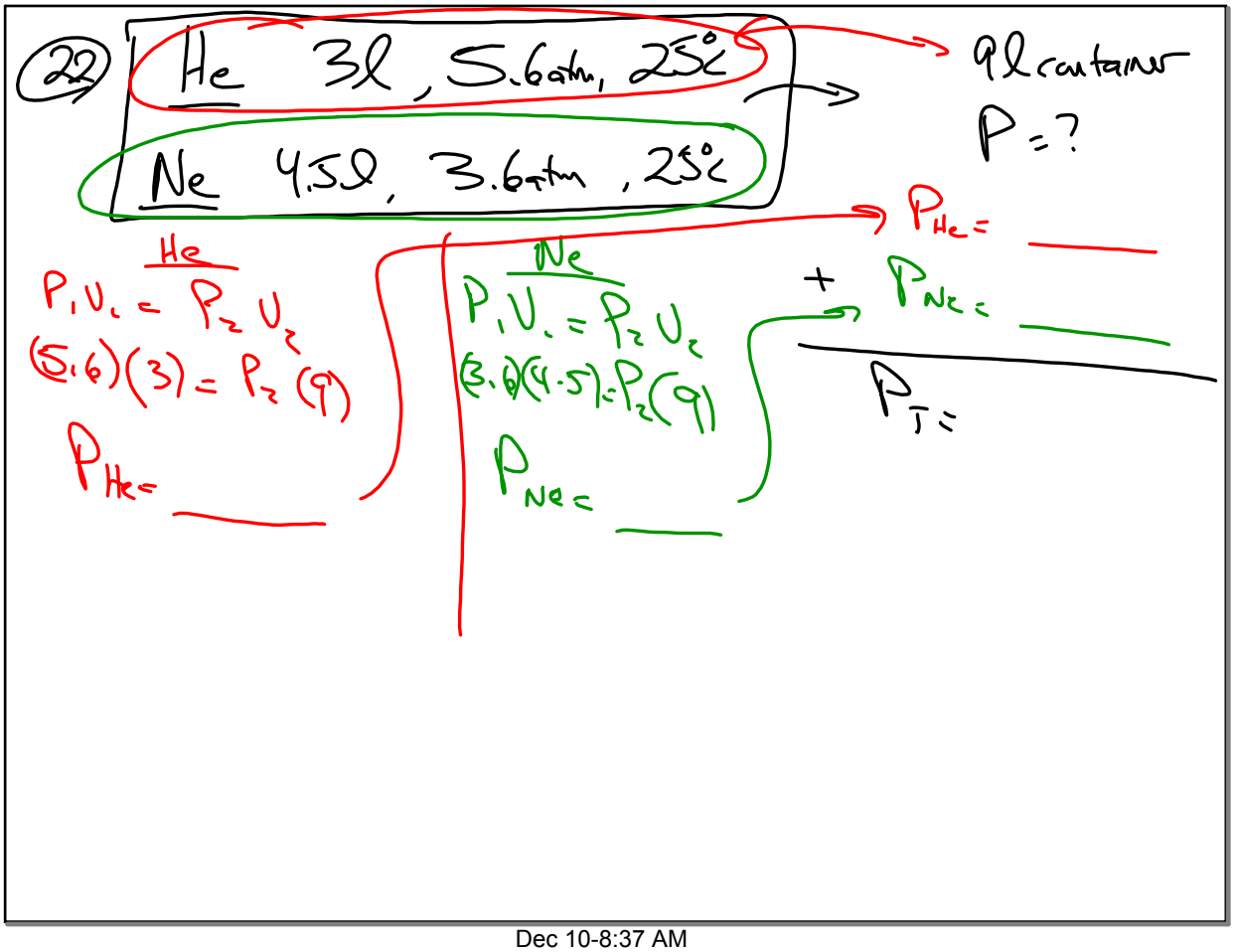
$P_x = 1.25$ atm

$P_x = X_x P_T$

$1.25 = X_x(4)$

$X_x = 0.3125 = \frac{\text{Mol } x}{16}$

Dec 10-8:27 AM



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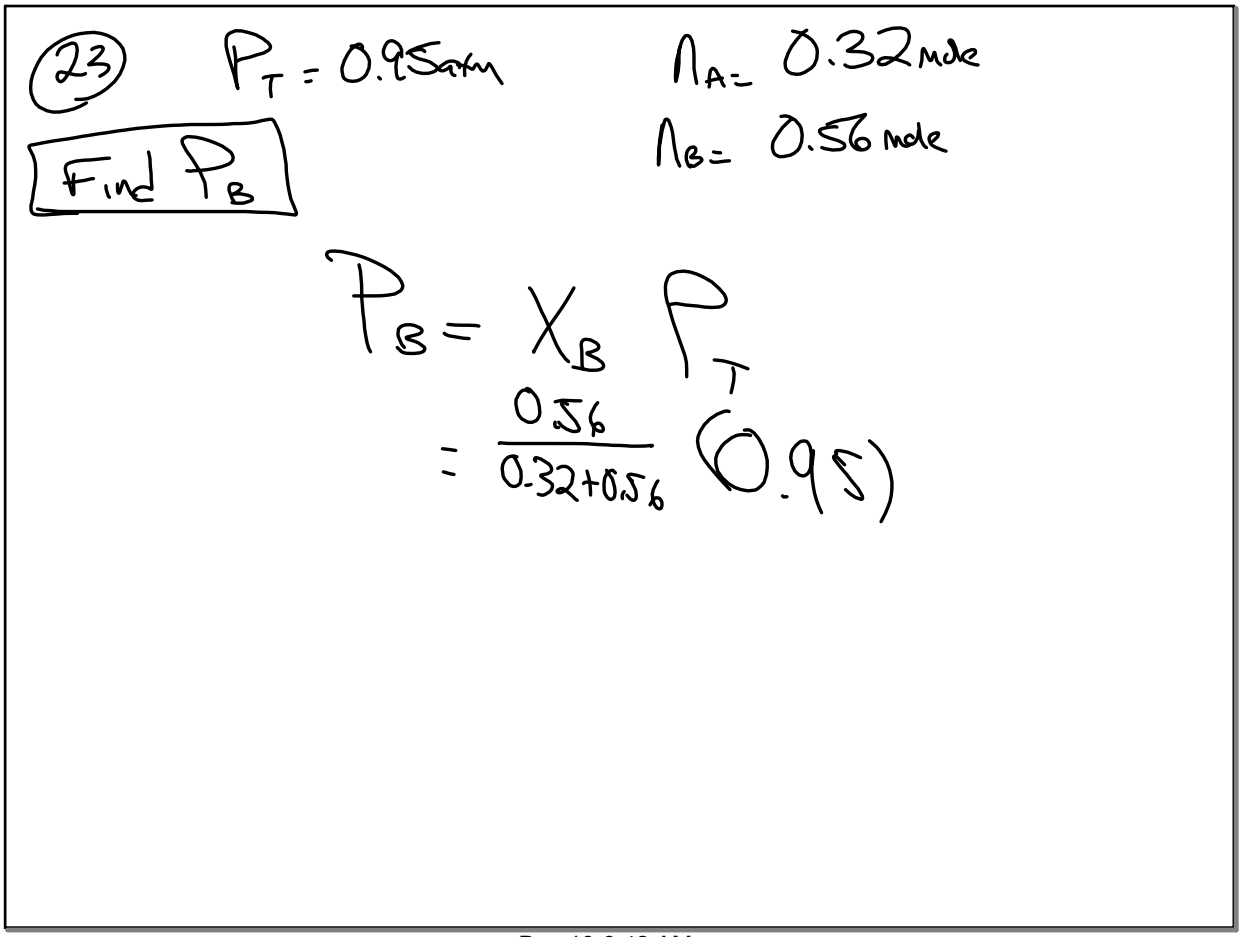


Dec 10-8:42 AM

(24) $2NaN_{3(s)} \rightarrow 2Na_{(s)} + 3N_{2(g)}$

V 40 ℓ
T 25°C
P 763 torr

g

Mole,

PV = nRT

NOT STP

Dec 10-8:46 AM

(26) $Mg_3N_{2(s)} + 6H_2O_{(g)} \rightarrow 3Mg(OH)_{2(aq)} + 2NH_{3(g)}$

$$\frac{7.5\,g\,NH_3}{} \left| \frac{1\,mole\,NH_3}{17\,g\,NH_3} \right| \frac{6\,mole\,H_2O}{2\,mole\,NH_3} \left| \frac{22.4\,\ell\,(g)}{1\,mole\,H_2O_{(g)}} \right| =$$

STP

Dec 10-8:52 AM

Exam 3 $POCl_3$ FC = #val e- − (ALL Non bond + ½ Bonding)

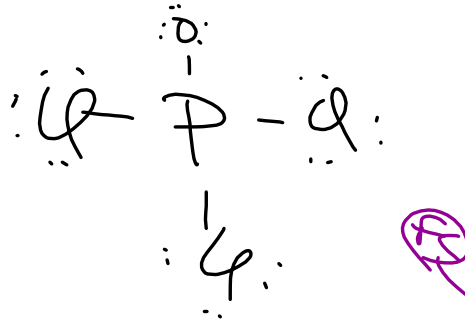
② 5 + 6 + 3(7) = 32e-

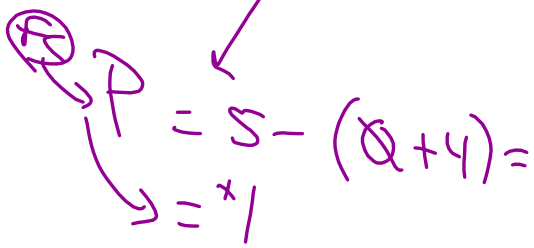
− 8

24e-

− 24

0





Dec 10-9:21 AM

② NO_2^-

5 + 2(6) + 1 = 18e-

− 4

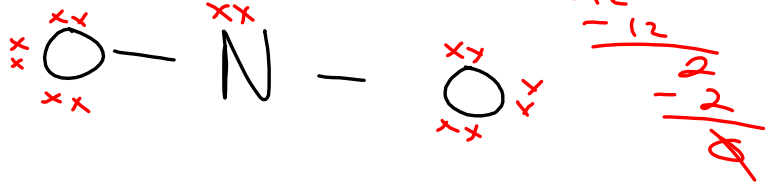
14e-

− 12

2

− 2

0



Dec 10-9:28 AM