

(23) $900\text{ml}, 100\text{mmHg}, \frac{1}{T_1} \left\{ \frac{?}{P_2}, 300\text{ml}, \frac{2}{T_2} \right.$

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

$$\frac{2}{300} \frac{(100)(900)}{1} = \frac{P_2(300)}{2} \frac{2}{300}$$

600mmHg

Dec 12-8:02 AM

(23) — g NO_2 , 4.32L, 48°C , 1062 torr

$\frac{1062}{760} = 1.39\text{ atm}$

$n = \frac{g}{\text{MW}}$ $PV = nRT$

$$\frac{PV}{1} = \frac{gRT}{\text{MW}}$$

$$\frac{2}{1} = \frac{PV(\text{MW})}{RT} = \frac{(1.39)(4.32)(46)}{(0.08206)(321)}$$

Dec 12-8:30 AM

②⑥

$$P_A = X_A P_T$$

$$= \frac{n_{\text{des A}}}{n_{\text{des A}} + n_{\text{des B}}} P_T$$

$$= \frac{2}{2+5} (2.6)$$

$$P_A = 0.743 \text{ atm}$$

Dec 12-8:34 AM

②⑧ 2L, 2g N₂, 95°C, P = ?

①

Mass

368K

$$\frac{2 \text{ g N}_2}{28 \text{ g/mol}} = 0.0714 \text{ mol N}_2$$

$$PV = nRT$$

$$P = \frac{nRT}{V} = \frac{(0.07)(0.08206)(368)}{2}$$

Dec 12-8:36 AM

23.880
 $1 \text{ NH}_4\text{NO}_2(\text{s}) \rightarrow 1 \text{ N}_2(\text{g}) + 2 \text{ H}_2\text{O}(\text{g})$ TOTAL
 (35g) 525C 1.5atm T P (mole 1 + 2 mole = 3 mole)
 $23.88 \times 3 = 71.64$

$35 \text{ g NH}_4\text{NO}_2 \mid 1 \text{ mole NH}_4\text{NO}_2$
 $64 \text{ g NH}_4\text{NO}_2 \mid 0.547 \text{ mole NH}_4\text{NO}_2$

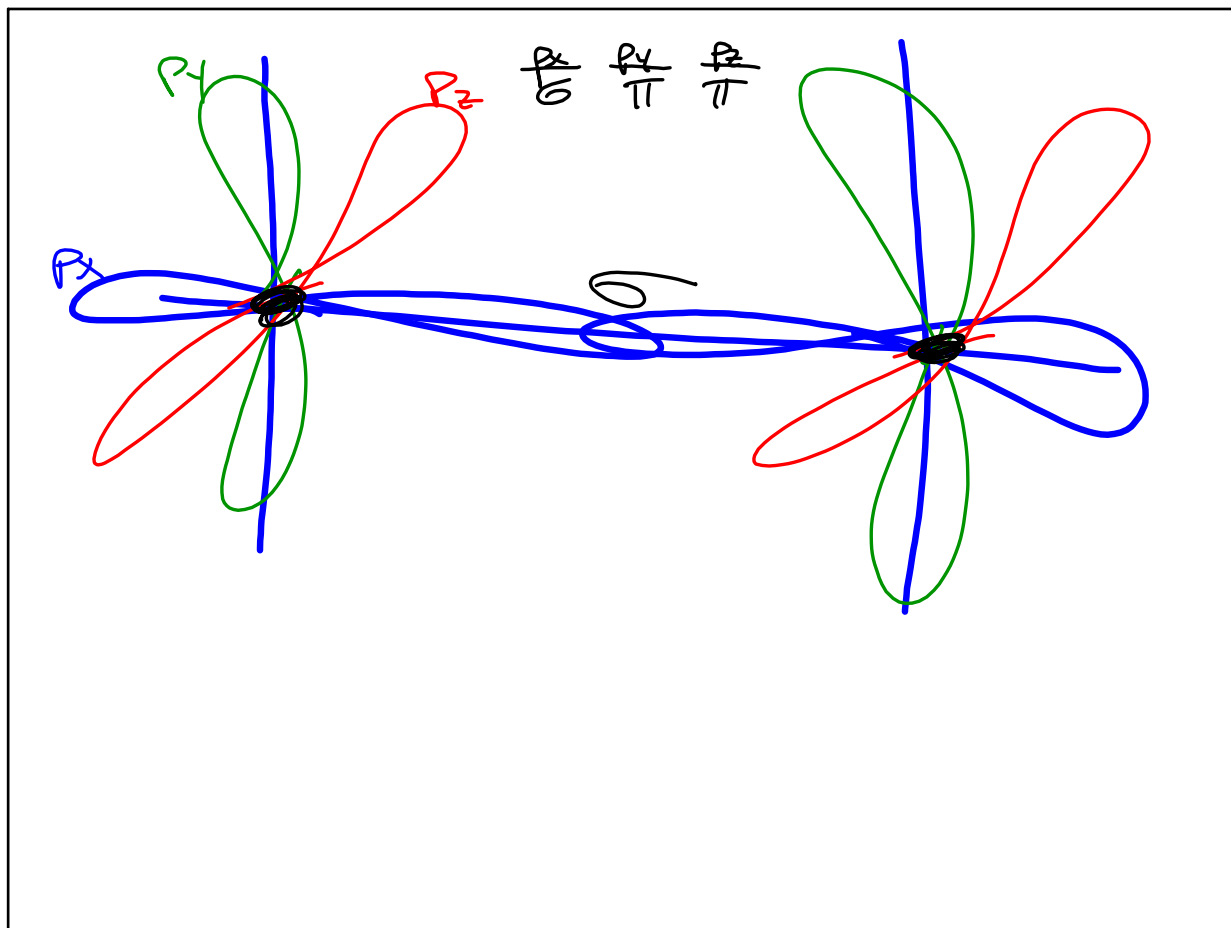
$PV = nRT$
 $\frac{V}{1} = \frac{nRT}{P} = \frac{(0.547)(0.08206)(798)}{1.5} = 23.88$

Dec 12-8:39 AM

MO $2s = \frac{1}{2}(b - ab) = \frac{1}{2}(8 - 2) = 3$

$\sigma_{1s}^2 \sigma_{1s}^{*2} \sigma_{2s}^2 \sigma_{2s}^{*2} \pi_{2p}^4 \sigma_{2p}^2$

Dec 12-8:51 AM



Dec 12-9:00 AM