

(13) I₂ BP 97°C 162 g/mol
~~LOF~~ + Dipole-Dipole

Br₂ BP 59°C 160 g/mol
~~LOF~~ → nP_{dbn}

Jan 19-8:32 AM

(21) 60g non-electrolyte $i = 1$ MW=?
 l, P = 57 torr 25°C

$$PV = nRT$$

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

$$\frac{MW}{l} = \frac{gRT}{PV} = \frac{60(0.08206)(298)}{0.075(1)} = 19563.1$$

Jan 19-8:45 AM

$\Delta T = (K_f \times m) i$
 $S = (1.86 \times m) i$
 $2.69_m = \frac{2.69 \text{ moles EG}}{1 \text{ Kg H}_2\text{O}}$

| | | | |
|--------------------------------|--------------------------------|----------------------|--------------|
| 2.69 mole EG | 1 Kg H₂O | 62g EG | = 166.78g EG |
| 1 Kg H₂O | | 1 mole EG | |

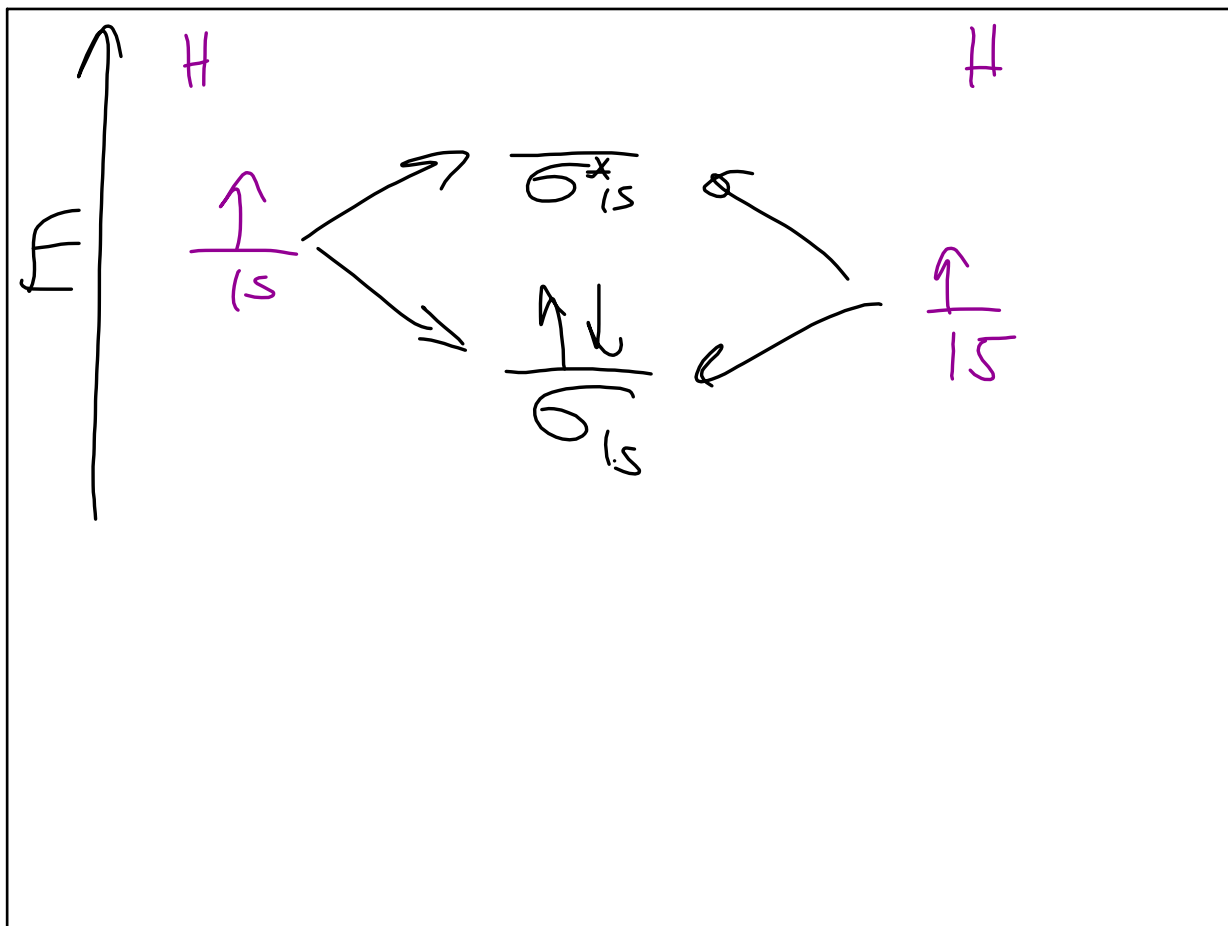
Jan 19-8:48 AM

$\frac{2220 \text{ kJ}}{\text{mole C}_3\text{H}_8}$, 2.5g C₃H₈ , $\Delta T = 7.7^\circ\text{C}$

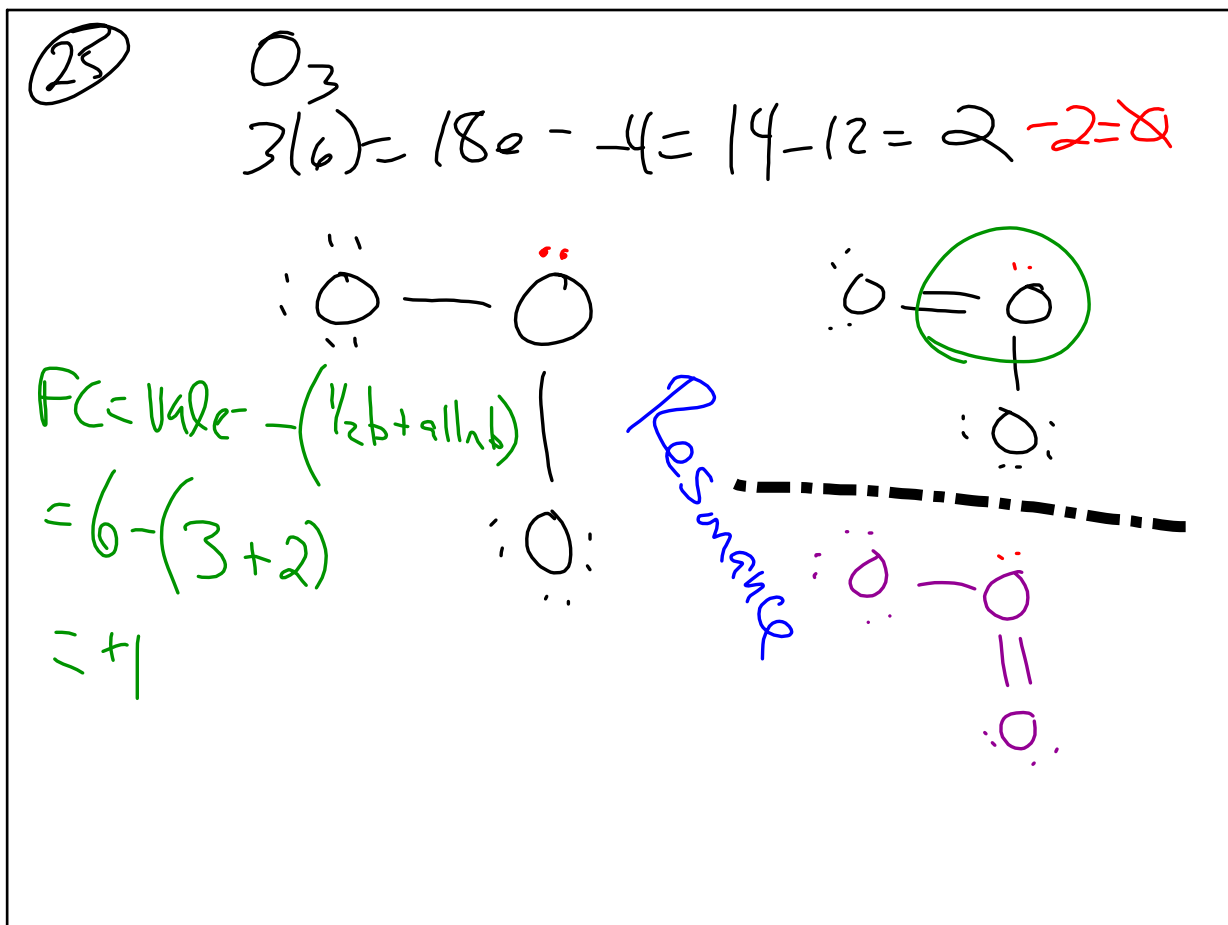
Find $\frac{\text{kJ}}{^\circ\text{C}}$

| | | | |
|----------------------|--------|--|--|
| 2220 kJ | | 1 mole C₃H₈ | 44 g C₃H₈ |
| 1 mole EG | 7.7 °C | | 2.5 g C ₃ H ₈ |

Jan 19-8:53 AM



Jan 19-8:58 AM



Jan 19-8:59 AM

(26) 4 mole Ne + 6 mole Kr $P_T = 1000 \text{ mmHg}$

$$P_{\text{Ne}} = X_{\text{Ne}} P_T$$

$$= \frac{4}{10} (1000) = 400 \text{ mmHg}$$

Jan 19-9:03 AM

(36) $\frac{0.924 \text{ g N}_2\text{O}}{44 \text{ g N}_2\text{O}} = 0.021 \text{ mole N}_2\text{O}$ $X = 0.433$

$\frac{0.825 \text{ g NO}}{30 \text{ g NO}} = 0.0275 \text{ mole NO}$ $X = 0.567$

$$P_{\text{N}_2\text{O}} = X_{\text{N}_2\text{O}} P_T$$

$$= 0.433 (1.32)$$

$$= 0.572 \text{ atm}$$

$$P_{\text{NO}} = X_{\text{NO}} P_T$$

$$= 0.567 (1.32)$$

$$= 0.7484 \text{ atm}$$

Jan 19-9:09 AM