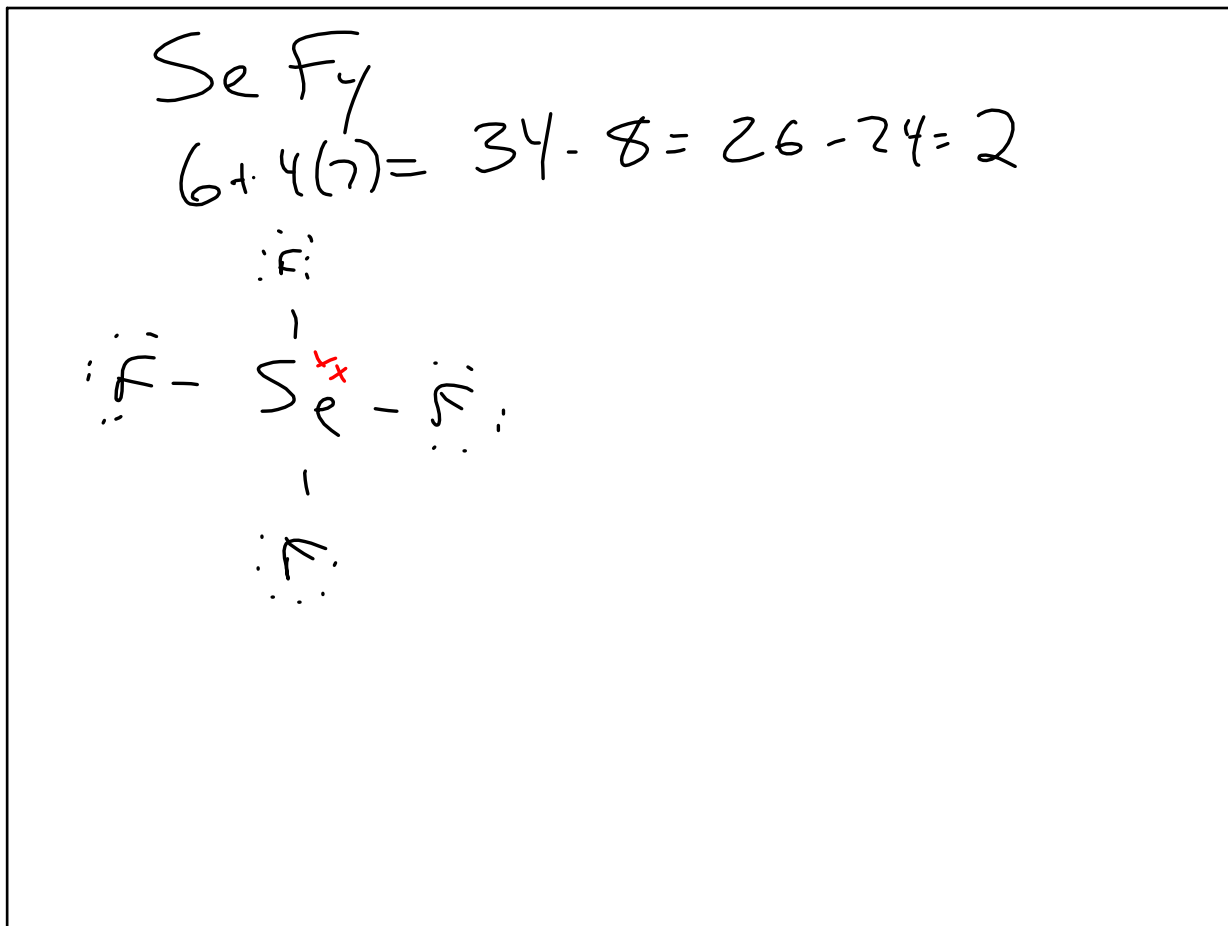
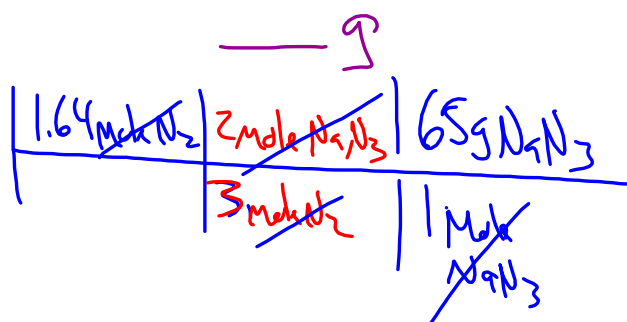
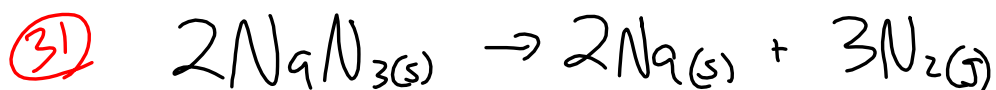


Jan 18-7:34 AM



Jan 18-8:02 AM



$$V = 40 \text{ L}$$

$$T = 25^\circ\text{C}$$

$$P = 763 \text{ mmHg}$$

$$PV = nRT$$

$$n = \frac{PV}{RT} = \frac{\left(\frac{763}{760}\right)(40)}{(0.08206)(298)}$$

$$1.64 \text{ mole } \text{N}_2$$

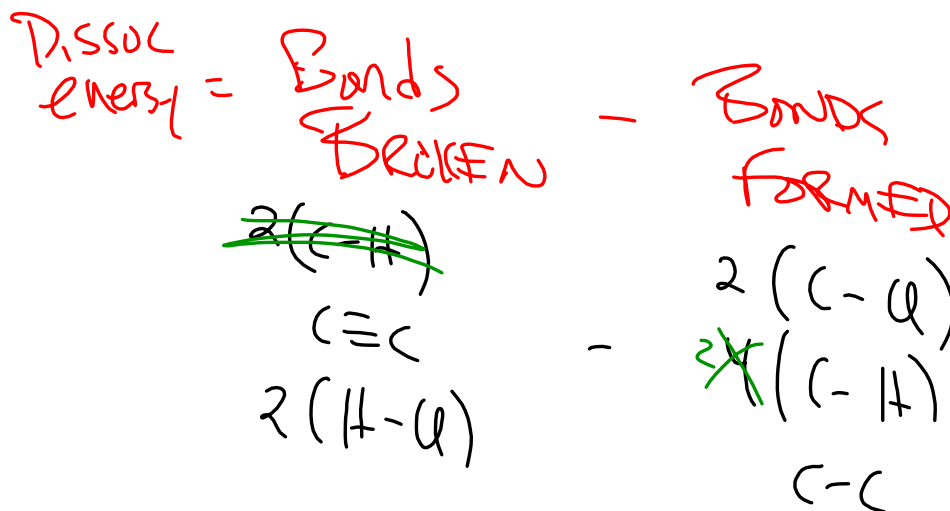
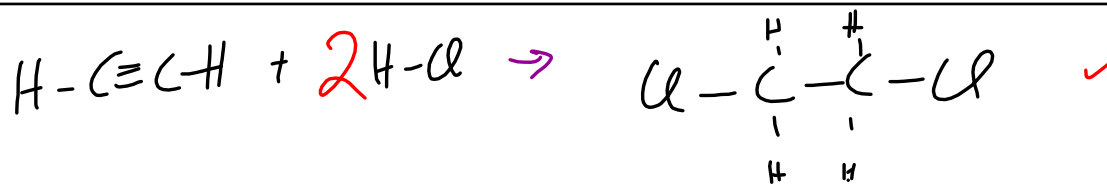
Jan 18-8:10 AM

(35) $\Delta T = (\cancel{E} \times m) c$

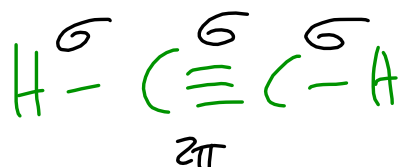
(36) $P_1 V_1 = P_2 V_2$

$$(37.5)(2.34) = (11.7)(V_2)$$

Jan 18-8:17 AM



Jan 18-8:21 AM



Jan 18-8:27 AM

(ES) 400ml 0.0525M Ba(OH)₂ Ba²⁺
OH⁻

→ 50ml (2) M HCl H⁺
Cl⁻

450ml

Find (con) → Soln

Moles A = Moles B

$n_A \times M_A \times l_A = n_B \times M_B \times l_B$

(1) $M_A (50ml) = (2)(0.0525)(400)$

$M_A = 0.84M \text{ HCl}$

Jan 18-8:36 AM

400ml 0.0525M Ba(OH)₂ HAVE

50ml 0.84M HCl

Soln = 450ml

$\frac{M}{l} = \frac{\text{Moles}}{l}$

$\boxed{\text{Moles} = M \times l}$

Ba(OH)₂

$(0.0525)(0.4) = \frac{0.021 \text{ mole Ba(OH)}_2}{0.450l} = \boxed{0.047M \text{ Ba(OH)}_2}$

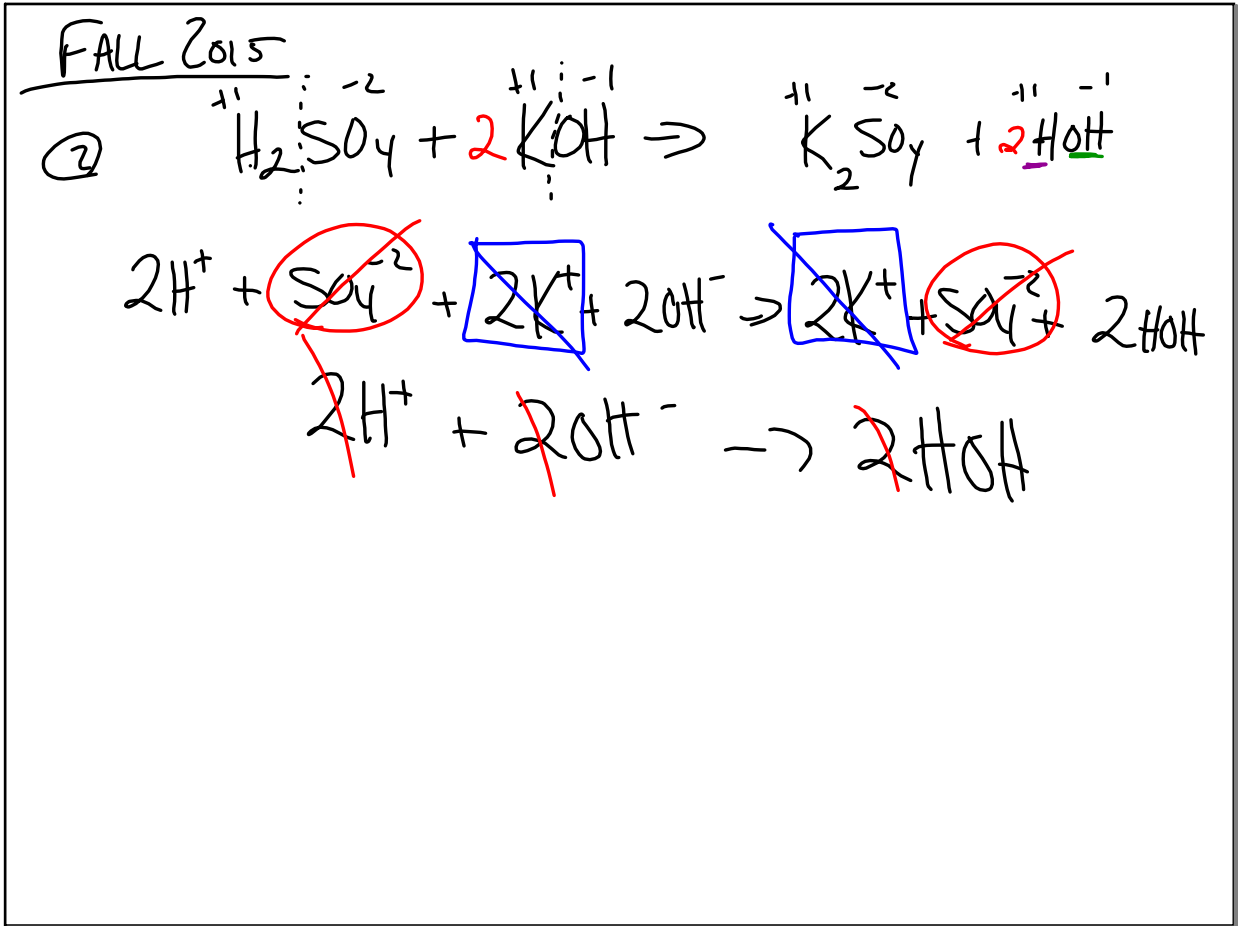
0.094M Ba²⁺, 0.188M OH⁻

HCl

$(0.84)(0.05) = \frac{0.042 \text{ mole}}{0.450l} = \boxed{0.093M \text{ HCl}}$

0.093M H⁺, 0.093M Cl⁻

Jan 18-8:42 AM



Jan 18-8:53 AM

⑫

2.74g Al₂(SO₄)₃	1 mole Al₂(SO₄)₃	2 moles O	6 × 10²³ atoms O
	342g Al ₂ (SO ₄) ₃	1 mole Al ₂ (SO ₄) ₃	1 mole O

⑬

11.7g CH₃OH	1 mole CH ₃ OH	= 1.59 M
0.230 l	32g CH₃OH	

Jan 18-9:10 AM