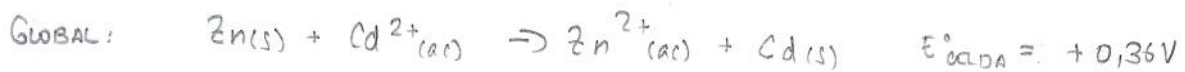
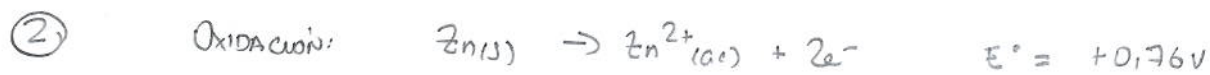
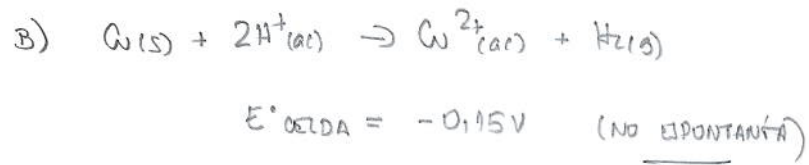
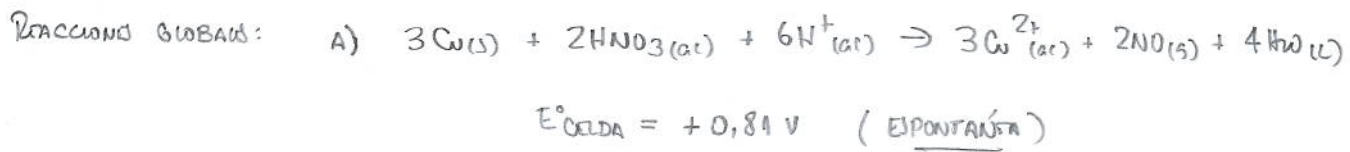
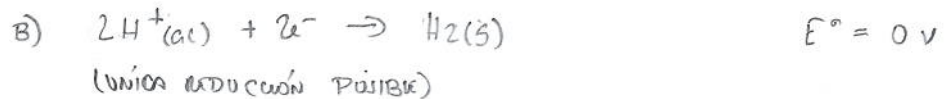
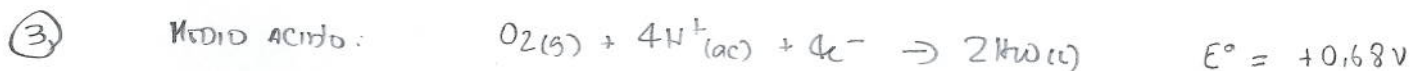


EXERCICIOS DE REPASO - UNIDAD 4

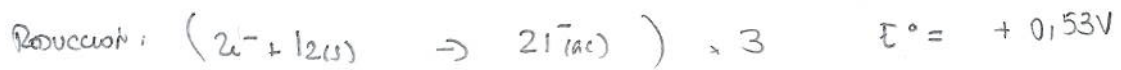


$$\Delta G^\circ = -nFE^\circ_{\text{CELDA}} = -(2 \text{ mol}) \left(\frac{96500 \text{ J}}{\text{mol V}} \right) (+0,36 \text{ V})$$

$$= -69480 \text{ J} = \underline{\underline{-69,48 \text{ kJ}}}$$



COMO EN MEDIO ACIDO EL E° ES MAS POSITIVO, EL O_2 EN MEDIO ACIDO ES UN MEJOR OXIDANTE.



$$Q = \frac{[Al^{3+}]^2 [I^-]^6}{1} = (0,1)^2 (0,01)^6 = 10^{-14}$$

$$E = E^\circ - \frac{0,0257}{n} \ln Q = 2,19V - \left(\frac{0,0257}{6}\right) \ln 10^{-14} = \underline{\underline{2,33V}}$$



$$0,25g Ag(s) \left(\frac{1 \text{ mol}}{107,9g}\right) = 2,32 \times 10^{-3} \text{ mol } Ag(s) = 2,32 \times 10^{-3} \text{ mol } e^-$$

(CORRIENTE EN TOTAL)



$$2,32 \times 10^{-3} \text{ mol } e^- \left(\frac{1 \text{ mol } H_2}{2 \text{ mol } e^-}\right) = 1,16 \times 10^{-3} \text{ mol } H_2$$

$$V = \frac{nRT}{P} = \frac{(1,16 \times 10^{-3} \text{ mol})(0,082)(293K)}{1 \text{ atm}} = 0,0278 L = \underline{\underline{27,8 mL}}$$