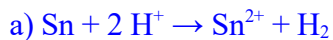
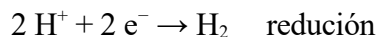
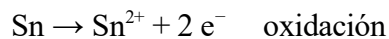
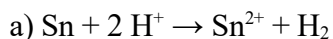


EXEMPLO 8: Calcula E° para as reaccións seguintes:

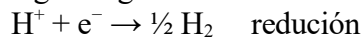
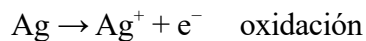
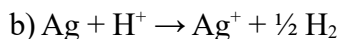


Disólvese algún dos metais anteriores, Sn ou Ag, en disolución ácida?



$$E^{\circ}_{\text{pila}} = E^{\circ}_{\text{cat}} - E^{\circ}_{\text{án}} = E^{\circ}_{\text{H}^{+}/\text{H}_2} - E^{\circ}_{\text{Sn}^{2+}/\text{Sn}} = 0,00 - (-0,14) = +0,14\text{V}$$

Como $E^{\circ}_{\text{pila}} > 0$ e dado que $\Delta G^{\circ} = -n \cdot F \cdot E^{\circ}_{\text{pila}}$ a reacción será espontánea, pois $\Delta G^{\circ} < 0$, polo que o Sn disólvese en medio ácido.



$$E^{\circ}_{\text{pila}} = E^{\circ}_{\text{cat}} - E^{\circ}_{\text{án}} = E^{\circ}_{\text{H}^{+}/\text{H}_2} - E^{\circ}_{\text{Ag}^{+}/\text{Ag}} = 0,00 - (+0,80) = -0,80\text{V}$$

Como $E^{\circ}_{\text{pila}} < 0$ e dado que $\Delta G^{\circ} = -n \cdot F \cdot E^{\circ}_{\text{pila}}$ a reacción non será espontánea, pois $\Delta G^{\circ} > 0$, polo que a Ag non se dissolve en medio ácido.