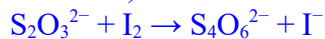
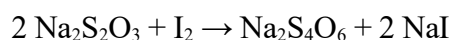
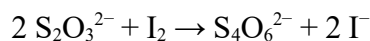
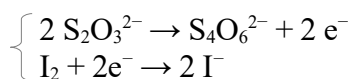
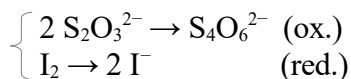
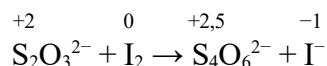


EXEMPLO 5: Cando  $25,0\text{cm}^3$  dunha disolución de tiosulfato de sodio,  $\text{Na}_2\text{S}_2\text{O}_3$ , valóranse cunha disolución  $0,050\text{M}$  de  $\text{I}_2$ , necesítanse  $17,8\text{cm}^3$  desta. A ecuación sen axustar para esta reacción é:



Axusta a reacción e calcula a concentración da disolución de  $\text{Na}_2\text{S}_2\text{O}_3$ .



$$\frac{[\text{Na}_2\text{S}_2\text{O}_3] \cdot V(\text{Na}_2\text{S}_2\text{O}_3)}{2} = \frac{[\text{I}_2] \cdot V(\text{I}_2)}{1}$$

$$[\text{Na}_2\text{S}_2\text{O}_3] = \frac{2 \cdot [\text{I}_2] \cdot V(\text{I}_2)}{V(\text{Na}_2\text{S}_2\text{O}_3)}$$

$$[\text{Na}_2\text{S}_2\text{O}_3] = \frac{2 \cdot 0,05 \text{ M} \cdot 17,8 \text{ cm}^3}{25,0 \text{ cm}^3} = 0,071 \text{ M}$$

Ou tamén:

$$n(\text{I}_2) = [\text{I}_2] \cdot V(\text{I}_2) = 0,050 \text{ M} \cdot 0,0178 \text{ L} = 8,9 \cdot 10^{-4} \text{ mol}$$

$$8,9 \cdot 10^{-4} \text{ mol I}_2 \cdot \frac{2 \text{ mol Na}_2\text{S}_2\text{O}_3}{1 \text{ mol I}_2} = 1,78 \cdot 10^{-3} \text{ mol Na}_2\text{S}_2\text{O}_3$$

$$[\text{Na}_2\text{S}_2\text{O}_3] = \frac{n(\text{Na}_2\text{S}_2\text{O}_3)}{V(\text{Na}_2\text{S}_2\text{O}_3)} = \frac{1,78 \cdot 10^{-3} \text{ mol}}{0,025 \text{ L}} = 0,071 \text{ M}$$