

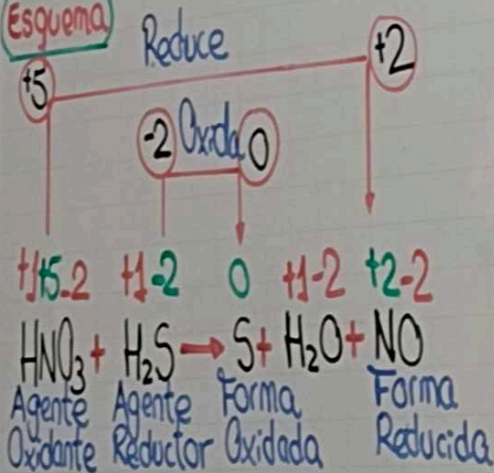
Reacciones Redox

Son aquellas reacciones en la cual existen elementos que varían de E.O. debido a una transferencia de e^- , dando lugar a los procesos:

Simultánea

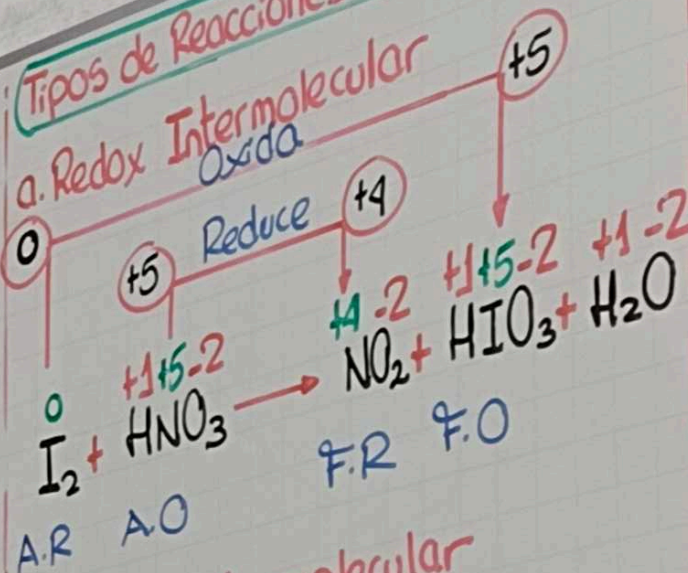
Oxidación (+E.O.)	Reducción (-E.O.)
Pérdida de e^-	Ganancia de e^-
Especie o Forma Oxidada (Productos)	Especie o Forma Reducida (Productos)
Agente Reductor [Reactante]	Agente Oxidante [Reactantes]

Esquema

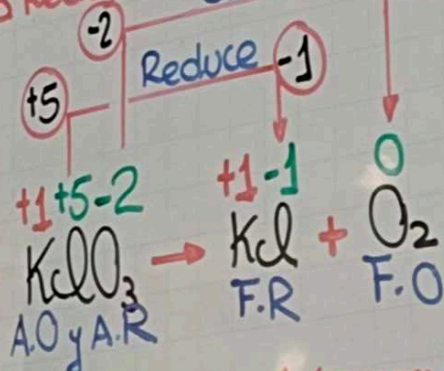


Tipos de Reacciones Redox

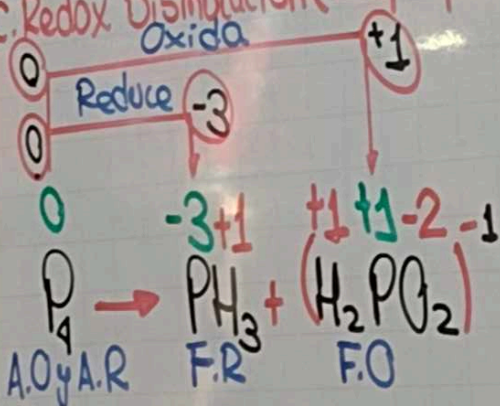
a. Redox Intermolecular



b Redox Intramolecular

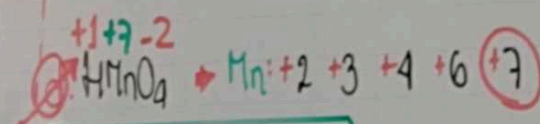
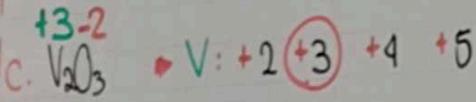
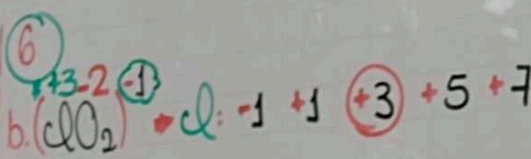
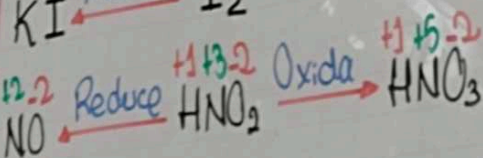
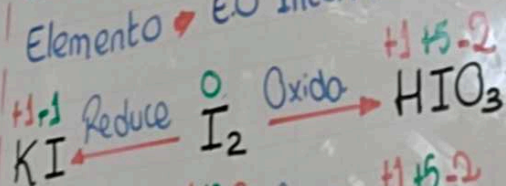


c. Redox Dismutación (Desproporción)



Dualidad Oxidante-Reductora

Elemento \rightarrow E.O Intermedio



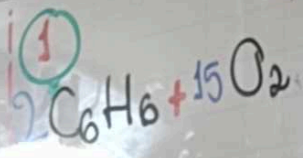
Balace de Ecuaciones

Ley de la Conservación de la Masa
 \rightarrow A. Lavoisier

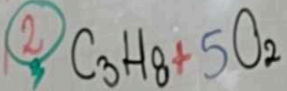
a. Método de Simple Inspección (Tanteo)

Orden de Balace \rightarrow

Metal	No Metal	H	O
1º	2º	3º	4º

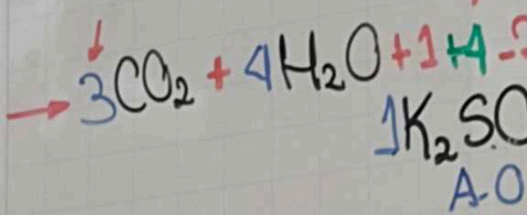
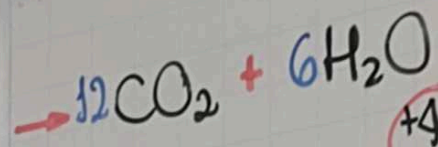
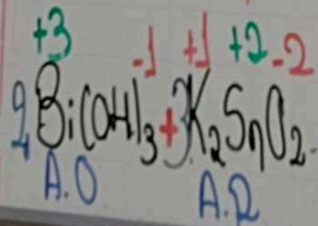
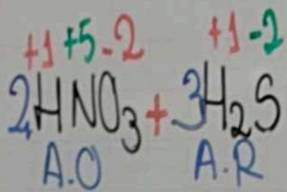


Rpta: 35

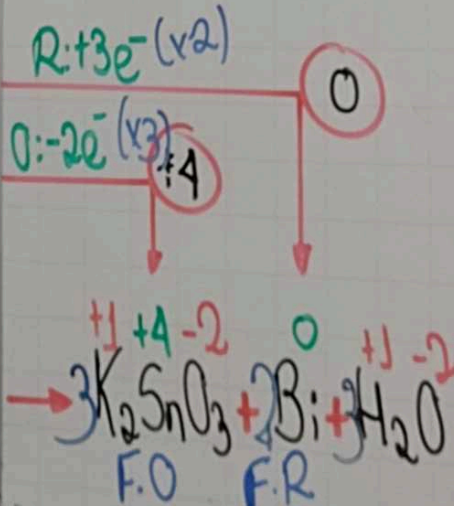
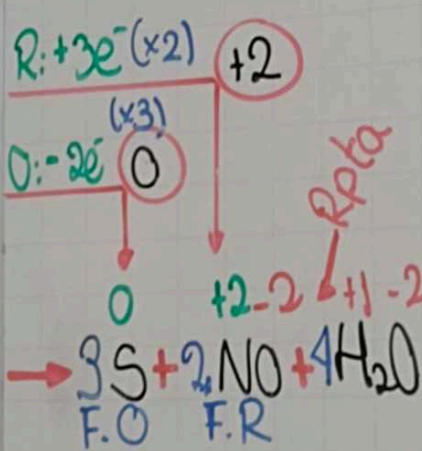


Rpta: 3

b. Método Redox

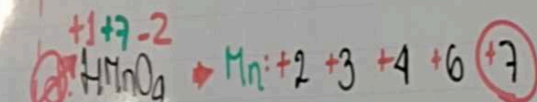
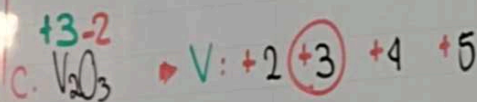
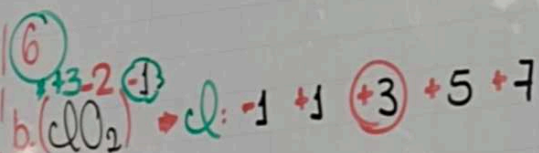
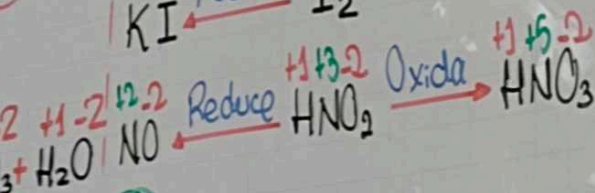
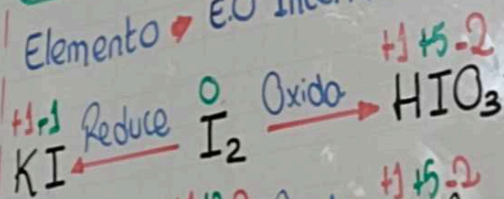


(Nº Oxidación)



Dualidad Oxidante-Reductora

Elemento \rightarrow E.O Intermedio



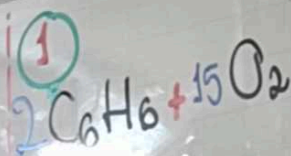
Balance de Ecuaciones

Ley de la Conservación de la Masa
 \rightarrow A. Lavoisier

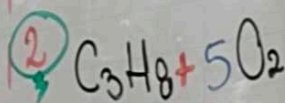
a. Método de Simple Inspección (Tanteo)

Orden de Balance

Metal	No Metal	H	O
1º	2º	3º	4º

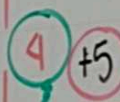


Rpta: 35

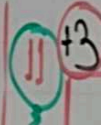
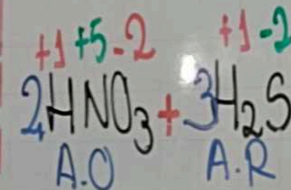


Rpta: 3

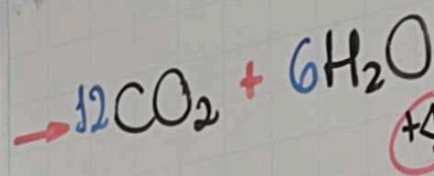
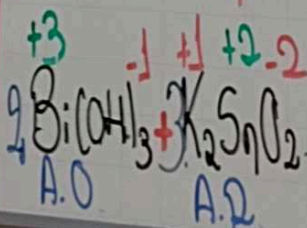
b. Método Redox



-2

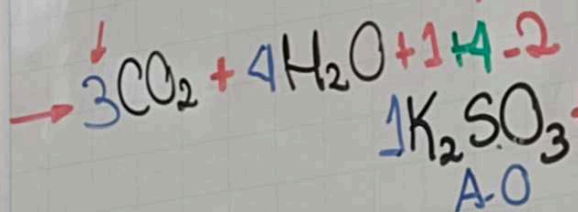


+2

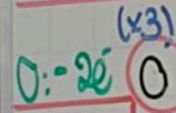
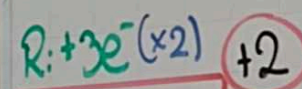


+4

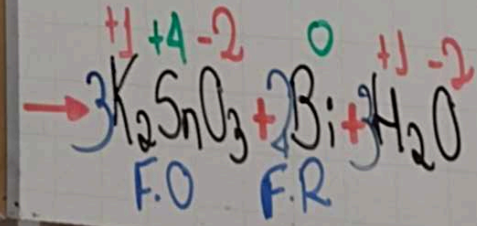
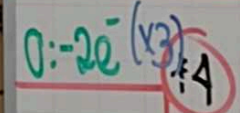
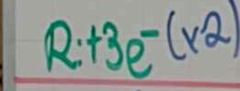
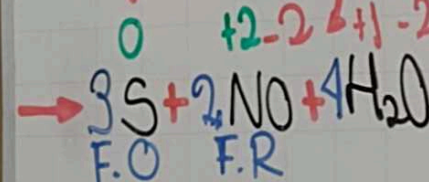
13



(Nº Oxidación)

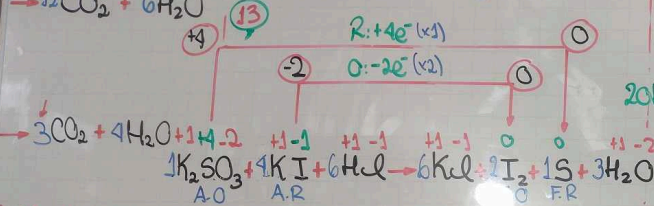


Rpta



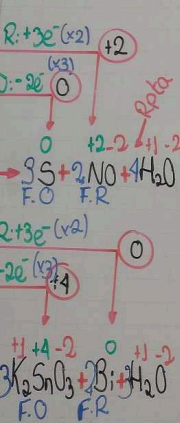
15

24



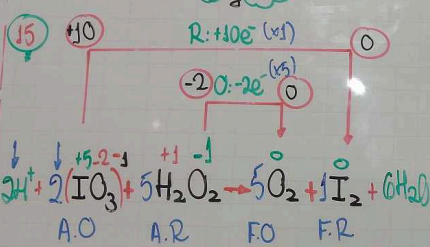
$$X = \frac{2}{6} = \frac{1}{3}$$

(Nº Oxidación)



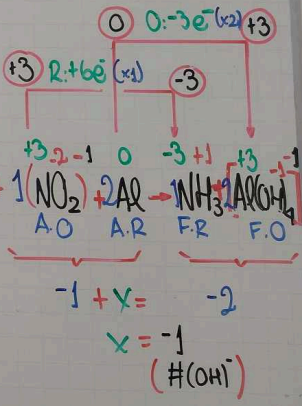
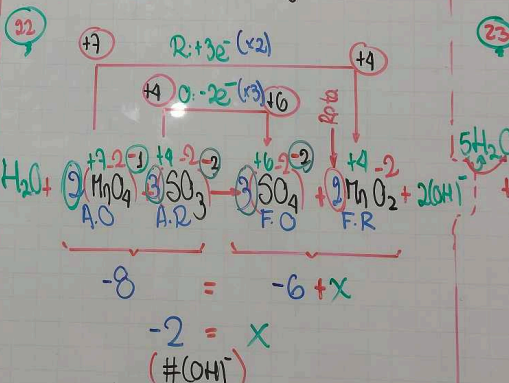
C. Método del Ion Electrón

C.1 Medio Ácido $\rightarrow \text{H}^+$ y H_2O



$$\text{Rpta: } 2 + 2 = 4$$

C.2 Medio Básico (Alcalino) $\rightarrow \text{OH}^-$ y H_2O



MACIA: 444

4/2/2014