

METODE BILOKS

Setarakan reaksi redoks di bawah ini dengan metode biloks .

Ikuti Petunjuk Pengisian !

1. Isi kotak yang tersedia dengan memilih jawaban yang tepat.
2. Pengisian kotak dimulai berdasarkan langkah penyetaraan metode biloks

Suasana Asam

Diagram illustrating the balancing process for the reaction:

$$\text{MnO}_4^- + \text{C}_2\text{O}_4^{2-} \rightarrow \text{MnO}_2 + \text{CO}_2$$

The diagram shows the reaction with empty boxes for coefficients and a central 'x' box for the multiplier. The reaction is shown in two stages, with the final balanced equation at the bottom:

$$\boxed{} \text{MnO}_4^- + \boxed{} \text{C}_2\text{O}_4^{2-} + \boxed{} \text{H}^+ \rightarrow \boxed{} \text{MnO}_2 + \boxed{} \text{CO}_2 + \boxed{} \text{H}_2\text{O}$$

Suasana Basa

Diagram illustrating the half-reaction method for balancing the redox reaction:

Reduction Half-Reaction:

$$\text{MnO}_4^- + \text{C}_2\text{O}_4^{2-} \rightarrow \text{MnO}_2 + \text{CO}_2$$

Oxidation Half-Reaction:

$$\text{C}_2\text{O}_4^{2-} \rightarrow \text{CO}_2$$

The diagram shows the separation of the overall reaction into these two half-reactions, with blue boxes indicating the addition of electrons to balance the charge.

Suasana Asam

Diagram illustrating the balancing process for the reaction:

$$\text{Cu} + \text{NO}_3^- \rightarrow \text{Cu}^{2+} + \text{NO}$$

The diagram shows the reaction with coefficients in boxes. The oxidation half-reaction is indicated by a line connecting the Cu and Cu²⁺ terms, and the reduction half-reaction is indicated by a line connecting the NO₃⁻ and NO terms. The oxidation half-reaction is shown as:

$$\text{Cu} \rightarrow \text{Cu}^{2+} + 2\text{e}^-$$

The reduction half-reaction is shown as:

$$\text{NO}_3^- + 4\text{H}^+ + 3\text{e}^- \rightarrow \text{NO} + 2\text{H}_2\text{O}$$

The final balanced equation is shown at the bottom:

$$3\text{Cu} + 2\text{NO}_3^- + 8\text{H}^+ \rightarrow 3\text{Cu}^{2+} + 2\text{NO} + 4\text{H}_2\text{O}$$