



# General Chemistry

## Balancing Redox Equations using half equations

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# Using half equations to balance redox equations

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1. Ensure both equations have the same number of electrons.
2. Check which equation will be reversed
3. Combine the equations
4. Cancel species that appear on both sides.

Example 1 – Construct the equation for  $\text{MnO}_4^-$  reacting with  $\text{Fe}^{2+}$



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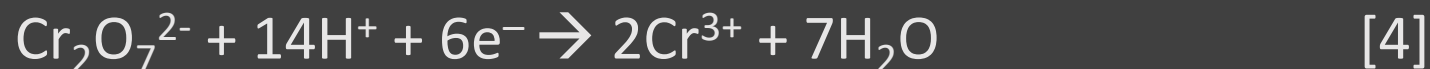
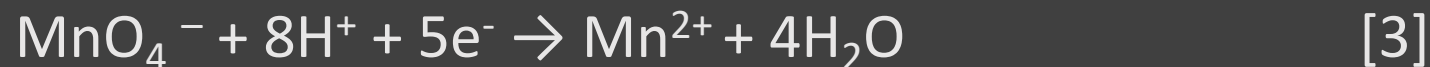




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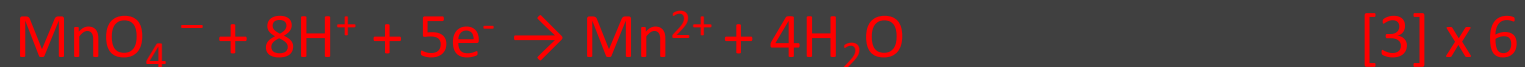
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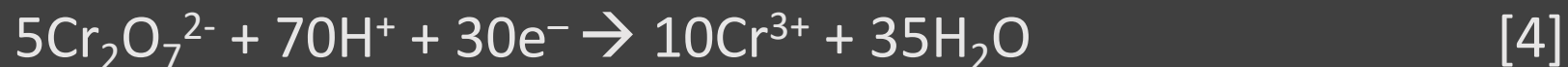
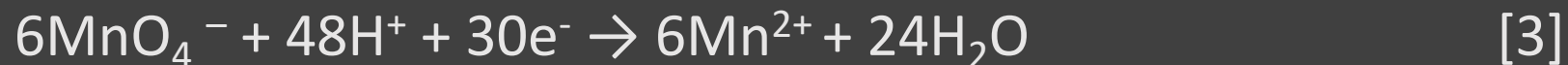
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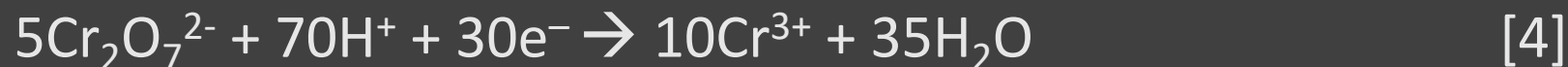
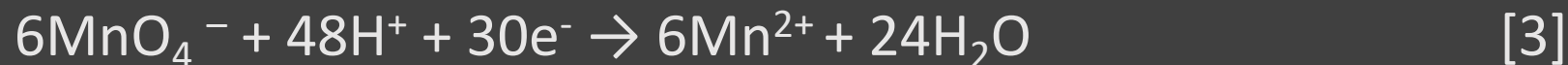
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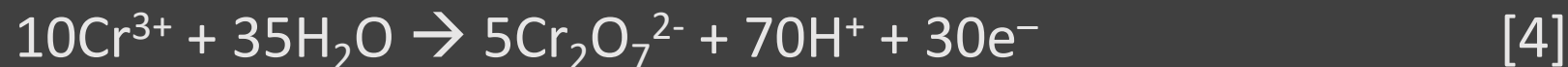
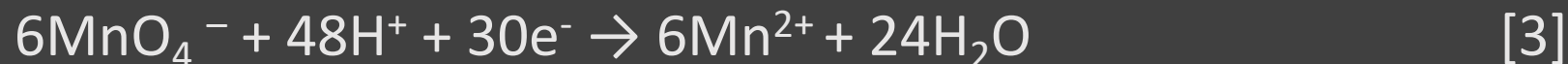
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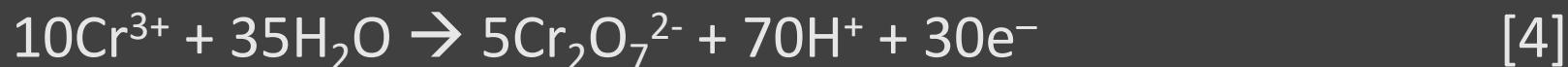
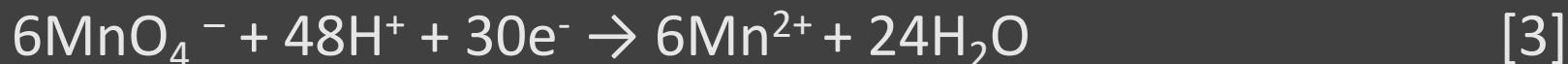
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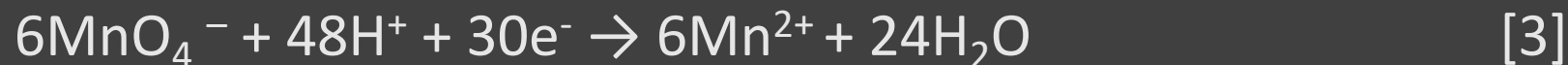
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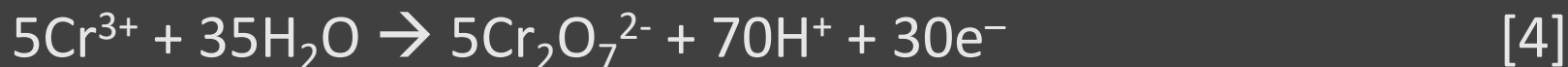
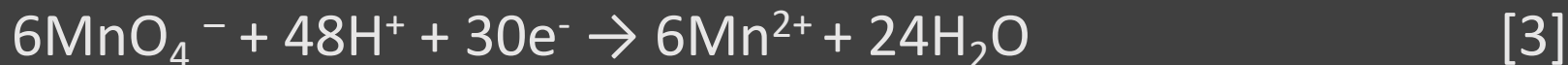
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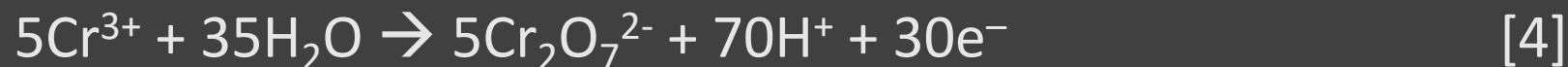
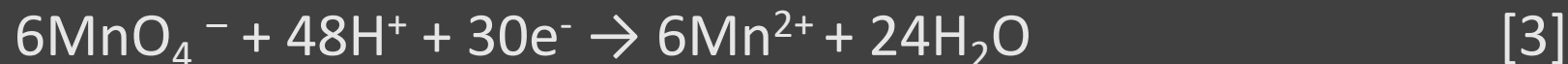




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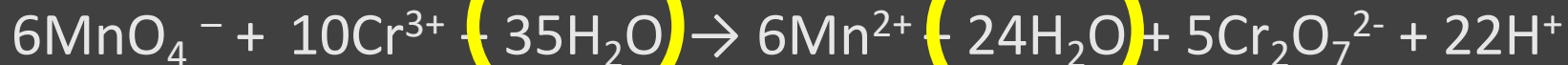
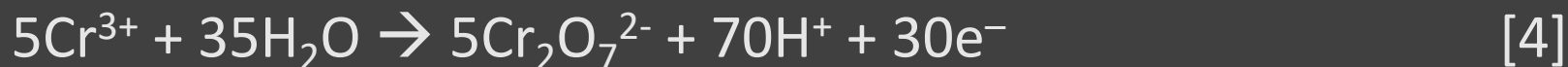
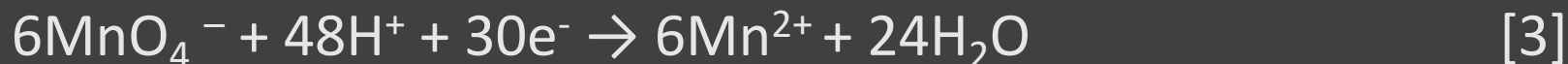
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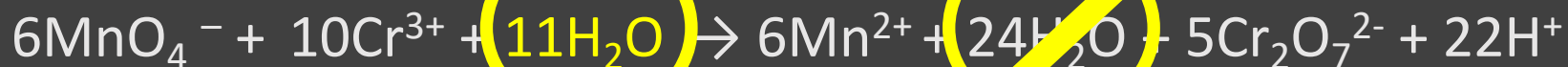
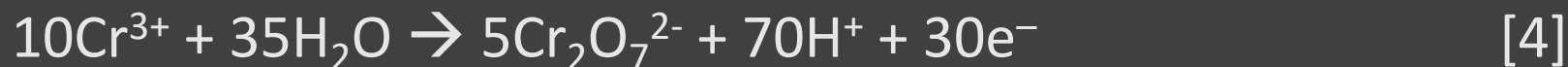
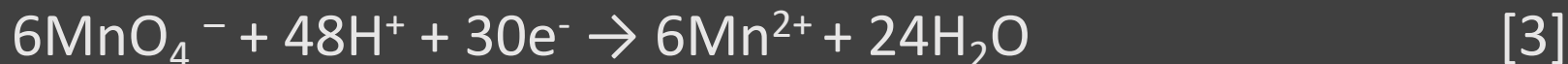
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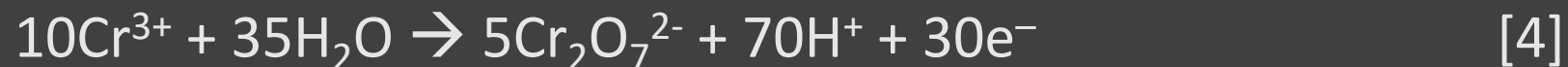
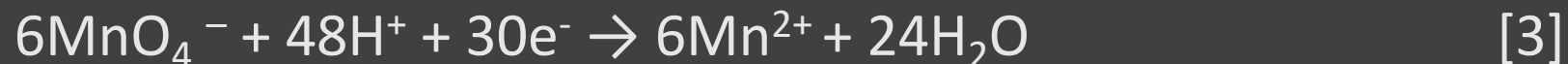
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