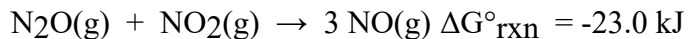


3. Given the following equation,

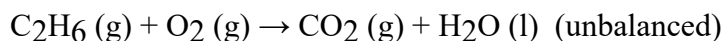


Calculate $\Delta G^\circ_{\text{rxn}}$ for the following reaction.



- A) -23.0 kJ
- B) 138 kJ
- C) -138 kJ
- D) -3.83 kJ
- E) 23.0 kJ

4. Calculate ΔG° (in kJ/mol) for the following reaction at 1 atm and 25 °C:



$\Delta G_f^\circ \text{C}_2\text{H}_6(\text{g}) = -32.89 \text{ kJ/mol}$; $\Delta G_f^\circ \text{CO}_2(\text{g}) = -394.4 \text{ kJ/mol}$; $\Delta G_f^\circ \text{H}_2\text{O}(\text{l}) = -237.13 \text{ kJ/mol}$

Preview from Notesale.co.uk
Page 2 of 3

5. Overall reaction: $\text{Cu}(\text{s}) + 2\text{Ag}^+(\text{aq}) \rightarrow \text{Cu}^{2+}(\text{aq}) + 2\text{Ag}(\text{s})$

(a) Assign oxidation numbers

(b) break into half reactions, and label them as oxidation half reaction and reduction half reaction