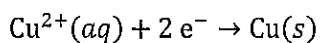
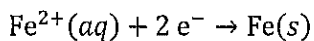


Multiple Choice Practice: Wheel!

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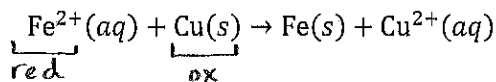


$$E_{\text{red}}^{\circ} = +0.34 \text{ V} \Rightarrow E_{\text{ox}}^{\circ} = -0.34 \text{ V}$$



$$E_{\text{red}}^{\circ} = -0.44 \text{ V}$$

7. Based on the reduction potentials given above, what is the reaction potential for the following reaction?



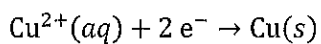
a. -0.78 V

b. -0.10 V

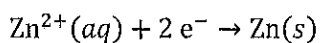
c. +0.10 V

d. +0.78 V

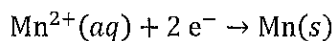
$$E_{\text{cell}}^{\circ} = E_{\text{ox}}^{\circ} + E_{\text{red}}^{\circ} = -0.34 + (-0.44) = -0.78 \text{ V}$$



$$E_{\text{red}}^{\circ} = +0.34 \text{ V}$$

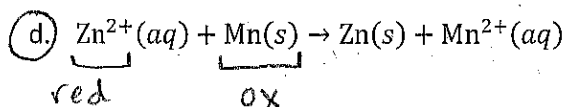
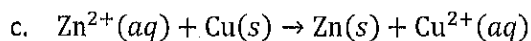
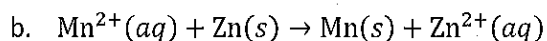
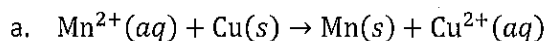


$$E_{\text{red}}^{\circ} = -0.76 \text{ V}$$



$$E_{\text{red}}^{\circ} = -1.18 \text{ V}$$

8. Based on the reduction potentials given above, which of the following reactions will be thermodynamically favored?



$$E_{\text{cell}}^{\circ} = -0.76 + 1.18 = 0.42 \text{ V}$$