

#43

(a)



$$E^{\circ} \text{ cell} = E^{\circ} \text{ cathode} - E^{\circ} \text{ anode} = 0.154 \text{ V} - 0.535 \text{ V} = -0.381 \text{ V} \text{ (not spontaneous)}$$

(b)

$$E^{\circ} \text{ cell} = E^{\circ} \text{ cathode} - E^{\circ} \text{ anode} = 0.890 \text{ V} - 0.60 \text{ V} = 0.29 \text{ V} \text{ (spontaneous)}$$

#44

(a)

$$E^{\circ} \text{ cell} = -0.140 \text{ V} \text{ (not spontaneous)}$$

(b)

$$E^{\circ} \text{ cell} = 0.26 \text{ V} \text{ (spontaneous)}$$