

Ch. 18.5: Free Energy

Homework #18-2: Problems pg. 790-793 #17, 19, 43, 44, 60

17 (a) $\Delta G^\circ = 173.4 \text{ kJ/mol}$

(b) $\Delta G^\circ = 8.6 \text{ kJ/mol}$

(c) $\Delta G^\circ = -2470 \text{ kJ/mol}$

19 Reaction A: $\Delta G = 1560 \text{ J/mol}; T = 350 \text{ K}$

Reaction B: $\Delta G = 35,500 \text{ J/mol}; T = -16 \text{ K}$ (an impossibility)

60 ΔS for 0.50 mol = 56 J/K