

Chapter 18 Review: Problems pg. 792 #28, 38(a & b), 52, 54, 56, 57, 61, 62, 64, 66, 68

28 (a) $\Delta G^\circ = -2.46 \times 10^4 \text{ J/mol} = -24.6 \text{ kJ/mol}$

(b) $\Delta G = -1.10 \times 10^3 \text{ J/mol} = -1.10 \text{ kJ/mol}$

38 (a) $\Delta G = 0.$

(b) $\Delta G = 4.0 \times 10^4 \text{ J/mol}$

52 $T = 976 \text{ K} = 703^\circ\text{C}$

56 $\Delta S = 55 \text{ J/K}\cdot\text{mol}$

62 $K_p = 4.5 \times 10^5$

64 $P_{\text{O}_2} = 4.5 \times 10^{-75} \text{ atm}$

68 $K = 6.1$