

Review Chapter 19: Electrochemistry

Problems pg. 835 #61, 67, 69, 70, 73, 77, 81, 82, 86, 91, 96, 98

69 $K_{\text{sp}} = 5 \times 10^{-13}$

70 (a) $E_{\text{cell}}^{\circ} = 0.80 \text{ V}$

(c) (i) $E = 0.92 \text{ V}$

(ii) $E = 1.10 \text{ V}$

73 $E = 0.035 \text{ V}$

81 $t_{\text{min}} = 3.06 \times 10^4 \text{ min}$

82 (a) $\Delta G = -1356.8 \text{ kJ/mol}$

(b) $E_{\text{cell}}^{\circ} = 1.17 \text{ V}$

86 $\Delta G^{\circ} = 6.8 \text{ kJ/mol}$

$K = 0.064$

91 $E_{\text{cell}}^{\circ} = 1.97 \text{ V}$

96 $K_{\text{f}} = 2 \times 10^{20}$

98 (b) $E_{\text{cell}}^{\circ} = 0.59 \text{ V}$