

- **Review Homework Chap 15:** pg. 673 #98, 100, 104, 106\*, 107\*, 108, 109, 112, 117, 120\*, 123\*, 125, 129, 133, 138, 139. *See review list for hints for questions with \*.*

104  $K = 4.0 \times 10^{-2}$

107  $\frac{[\text{Nov}]}{[\text{HNov}^+]} = 0.028$

112  $\text{pH} = 1.79$

120 At equilibrium:

$$\begin{aligned}[\text{Na}^+] &= 0.200 \text{ M} \\[\text{HCO}_3^-] &\approx 4.6 \times 10^{-3} \text{ M} \\[\text{H}_2\text{CO}_3] &= 2.4 \times 10^{-8} \text{ M} \\[\text{OH}^-] &\approx 4.6 \times 10^{-3} \text{ M} \\[\text{H}^+] &= 2.2 \times 10^{-12} \text{ M}\end{aligned}$$

123 Amount of NaCN =  $7.4 \times 10^{-3}$  g NaCN

125  $\text{pH} = 1.000$