Name: _____

Exam 4 Equations (Chapters 8-10)

$$q = mC\Delta T$$

$$PV = nRT$$

$$\Delta T_F = i\kappa_F C_{molal}$$

$$\Delta T_B = i\kappa_B C_{molal}$$

$$C_1 V_1 = C_2 V_2$$

$$K_w = \left[OH^-\right]\left[H_3O^+\right] = 1.00 \times 10^{-14}$$

$$pH = -log\left[H_3O^+\right]$$

$$\frac{P_1 V_1}{T_1} = \frac{P_2 V_2}{T_2}$$

$$q = n\Delta H_{fus,vap,etc.}$$

$$\pi = \frac{nRT}{V} = [molar]RT$$

$$K_A = \frac{\left[H_3O^+\right]\left[A^-\right]}{[HA]}$$

$$\left[H_3O^+\right] = 10^{-pH}$$

$$pH = pK_A + log\frac{B}{A}$$

$$C_A V_A = C_B V_B$$