

$$\pi = MRT$$

$$\Delta T = k_{\mathrm f} m$$

$$\Delta T = k_{\mathrm b} m$$

$$R = 0.08206 \, \frac{L \cdot atm}{mol \, K}$$

$$P = X_{\textit{solvent}} P^{\circ} \textit{solvent}$$

$$[A]_t = -kt + [A]_o$$

$$t\frac{1}{2} = \frac{[A]_o}{2k}$$

$$\ln[A]_t = -kt + \ln[A]_o$$

$$t\frac{1}{2} = \frac{0.693}{k}$$

$$\frac{1}{[A]_t} = kt + \frac{1}{[A]_o}$$

$$t\frac{1}{2} = \frac{1}{k[A]_o}$$

$$S_{\textit{gas}} = k_H \, P_{\textit{gas}}$$

$$1\, atm = 760\, mm\, Hg = 760\, torr$$

$$k = Ae^{-Ea/RT}$$

$$\ln \frac{k_2}{k_1} = \frac{Ea}{R} \left(\frac{1}{T_1} - \frac{1}{T_2} \right)$$

$$R = 8.314 \frac{J}{mol\,K}$$

$$K = \,^{\circ}\!C + 273$$