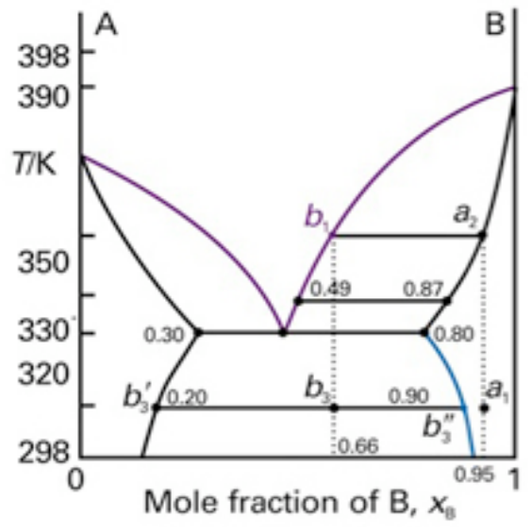

Friday, November 14

Readings:

•Levine: 16.1–4

Last Time:

– Measuring reaction rates

– Integrated rate laws & half lives

Handouts: Homework 10

Today:

– Temperature effects

– Reaction mechanisms

Reminders:

http://titania.stockton.edu/pchem

	Rate Law	Integrated Rate Law	Half life
Zeroth Order	$rate = -\frac{d[A]}{dt} = k$	$[A](t) = [A]_o - kt$	$t_{1/2} = \frac{[A]_o}{2k}$
First Order	$rate = -\frac{d[A]}{dt} = k[A]$	$[A](t) = [A]_o e^{-kt}$ $\ln[A] = \ln[A]_o - kt$	$t_{1/2} = \frac{\ln 2}{k}$
Second Order	$rate = -\frac{d[A]}{dt} = k[A]^2$	$\frac{1}{[A](t)} = \frac{1}{[A]_o} + kt$	$t_{1/2} = \frac{1}{k[A]_o}$