## Kinetics Homework.

1. The following data was recorded for the decomposition of ammonia gas into nitrogen gas and hydrogen gas at  $1000^{\circ}$ C. Determine the rate law of the reaction. Then, assuming no loss of product, determine the concentrations of the products at t=500 sec.

Time, s	[NH <sub>3</sub> ], M
0	.0256
12	.0247
56	.0216
224	.0131
532	.00519
746	.00273

- 2. Problem 20.57
- 3. Problem 20.60. Report the activation energy of the process.
- 4. Problem 20.62.