Hi All,

You are asked to draw a graph through Excel using your experimental results of Experiment-7 by considering the information given below:

1) Create the following table through excel according to the experimental data.					
Temperature (K)	$\Delta$ (Time) (s)	$\Delta[MnO_4](M)$	Rate (M/s)	1/T (1/K)	In(Rate) (M/s)
298					
308					
318					
328					
338					

Graphs that will be prepared through Excel:

2) Draw the graph of In(Rate) (y-axis) vs. 1/T (x-axis), display the trendline equation on the chart, and select the display equation on the chart check box.

Print the drawn graph, created table, and attach it to your report.

3) According to the Arrhenius equation, there is a linear relation between Ink and 1/T and the slope of the Ink vs 1/T graph gives -Ea/R and R=8.314 J/molK. Then, using this information, find the activation energy (Ea) of the reaction and indicate your result on your report. (Consider In(Rate) as Ink)

To find more information, please watch the video of the experiment.

With this e-mail, I also wanted to remind you to bring your reports of Exp-7 and Exp-8 to our course time next week.

Also, prepare yourself for the quizzes on the 9th and 10th experiments.

Best wishes,