Chemical Engineering 436 Special Problem #3

Objective: To use the *Design Tools* feature of the *Control Station* Software in order to fit a FOPDT model to dynamic data.

- a) Rework problems Q3.1 and Q3.3 to get the process dynamic constants using *Design Tools* instead of graphically fitting the data. Please use a doublet test to span the range rather than doing two separate step tests. For example on Q3.1, start at 55%, then do the doublet (to 70 then 40 and back to 55%). Q3.3 is 52 to 42 to 62 to 42%. You do not have to re-answer any other parts of these problems besides determining new values for the FOPDT constants.
- b) Compare the values you calculated with those obtained graphically. Are they the same? Why or why not? Which values would you use? Why?