

A First Course on Kinetics and Reaction Engineering

Unit 15 Additional Quiz Questions

1. True or false? For batch reactor data, an integral analysis is preferred over a differential analysis.
2. Before the design equation for a batch reactor can be integrated
 - a. the concentrations must all be converted to units of moles per cubic foot.
 - b. all variables appearing in the equation must be re-written in terms of the independent variable
 - c. all variables appearing in the equation must be re-written in terms of the dependent variable
 - d. any variables other than the dependent and independent variables must be re-written in terms of the dependent and independent variables
 - e. all exponentials must be re-expressed as power-law series
3. The number of data points that can be obtained from a single isothermal batch reactor experiment is
 - a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. as many as the experimenter wants
4. True or false? PFRs typically have a vapor phase headspace when a liquid reactions are being run.
5. True or false? The concentration of a non-reactant gas phase species can change along the length of a PFR.
6. True or false? The design equation for a PFR is an algebraic equation that can often be fit directly to experimental data.