

Homework 4  
due September 25, 2008

If you find yourself without enough information, make and justify a reasonable approximation. Please answer all parts of a question! (This is good practice for an exam setting.)

1. Solve the quiz 2 problem given the additional information that the mass fraction of lysine is 0.01 kg L/kg total in the second input stream.
2. Write a Matlab program that calculates the solution to the quiz problem for mass fractions of lysine that range from 0.009 to 0.015 (in steps of 0.001).
3. Felder and Rousseau, problem 4.24
4. Felder and Rousseau, problem 4.29  
Notice that this problem contains examples of *process specifications*. One specification is that 96% of the xylene is recovered in the bottoms product of the first column.  
(pre-a) List two of the other process specifications given in the problem.  
(a) and (b) Do the problem itself as outlined in the text.