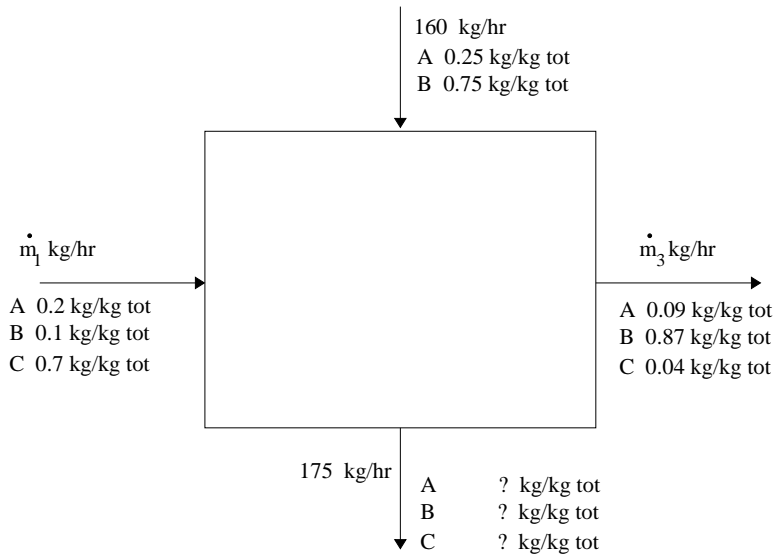


Homework 5
due October 2, 2008

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. 95 mass% of C leaves the process in stream 4, which flows at 175 kg/hr.

Write a set of independent equations (balances, etc.) that can be used to solve for the missing variables. Conduct a degree of freedom analysis, and then solve the equations for the missing variables.



2. Felder and Rousseau, problem 4.36 (recycle). [Yes, this is the in-class problem. In your homework, work through the problem again from scratch.]
3. Felder and Rousseau, problem 4.34 (recycle)
4. Felder and Rousseau, problem 4.40 (introduction to reactions)