

CHE 201 HW# 6

Q1. Solve question 4.29 from the book provided that the liquid mixture containing 20 mole % benzene (B) and 25 % toluene (T) and the balance xylene (X) is fed to a distillation column.

Q2. Solve question 4.34 from the book excluding part (e).

Q3. Solve question 4.36 from the book provided that beans containing 26 wt % oil and 74 wt % solids are ground and fed to a stirred tank.

Q. 4 Sea water is to be desalinated by reverse osmosis using the scheme indicated in the figure below. Use the data given in the figure to determine:

- The rate of waste brine removal (B).
- The rate of desalinated water production (D).
- The fraction of the brine leaving the osmosis cell (which acts like a separator) that is recycled.

