HW 3 – Graphing Equilibrium Data

Assignment:

The following assignment is to be completed using appropriate computer software for graph preparation. You are free to use whatever program you wish for this assignment. All graphs should be of an acceptable format. For example, x-y plots should be prepared with axes labeled from 0.0 to 1.0 having the same length. Please refer to the "Tech-Writing" link previously provided for information about the acceptable format for graphs and figures.

1. Using the data in Problem 2.22 (SH64) develop a T-x-y diagram for the benzene-cyclohexane system at 1.0 atm.

2. Using the following data develop an x-y diagram for the hexane/octane system at 1.0 atm. Assume ideal behavior.

T, ^{o}C	n-C6, mm Hg	n-C8, mm Hg
68.7	760	121
79.4	1025	173
93.3	1480	278
107.2	2130	434
125.7	3420	760

3. Using the vapor pressure data provided on the Cox chart (SH38), develop a x-y diagram for the n-octane/n-decane system

4. Using the K-chart (SH40), develop a T-x-y diagram for the isopentane/n-pentane system at 1.0 atm.