Name:_____ Solutions _____
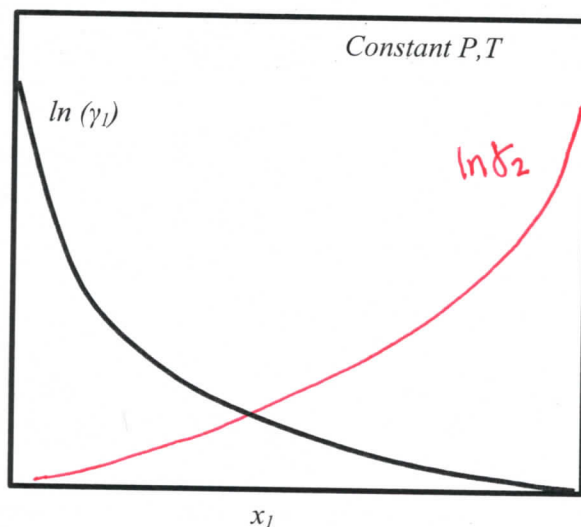
Problem 1: For a binary mixture of 1 & 2, sketch how the activity coefficient of component 2 will likely vary with x_1.

Constant P,T

$ln(\gamma_1)$

$ln\gamma_2$

x_1

Problem 2: True/False

(a) An excess property is the difference in the solution property and the ideal gas property at the same temperature, pressure and composition. ___False___

(b) The activity coefficient is the ratio of the real solution fugacity and the fugacity predicted by the Lewis-Randall rule._____True_____

(c) All excess properties become zero for equimolar mixtures._____False_____