**Colligative Properties Homework**

1. What will the melting point of a 0.325 m aqueous galactose solution be? (Kf = 1.86o C/m)
2. If I make a solution by adding 1.25 grams of glucose (C6H12O6) to 0.55 kg of water, what will the boiling point of this solution be? (Kb = 0.512o C/m)
3. Which will have a lower boiling point, a 4.4 m solution of L-leucine or a solution of sucrose (C11H22­O11) made by dissolving 180 grams of sucrose in 1,250 mL of water?
4. Aniline (C6H5NO2) has a boiling point of 184.3o C. If I were to try and increase the boiling point to 190.0 degrees, how concentrated a solution would I need to make? (Kf of aniline is 3.69o C/m)
5. A solution of water will have a higher boiling point than a colloid that contains water. Why is this?