QUESTION 1:

If you found that your unknown was insoluble in water, boiled between 45°C and 50°C, and froze in a dry ice ice bath, what information would clarify the elimination process to show that the unknown was methylene chloride?” Explain thoroughly the process.

2. An unknown liquid was mixed with water, and two layers formed. When a blue solution of CuSO4 was added and mixed, the top layer was colored blue. A fresh sample of the same unknown froze in dry ice, and the boiling point of the unknown was measured to be 77°C. What is the identity of the unknown? Acetonitrile has similar data, the boiling point is listed as 82°C, but the thermometer was later calibrated and shown to be off by ± 3°C. What information can you use to distinguish between acetonitrile and the unknown