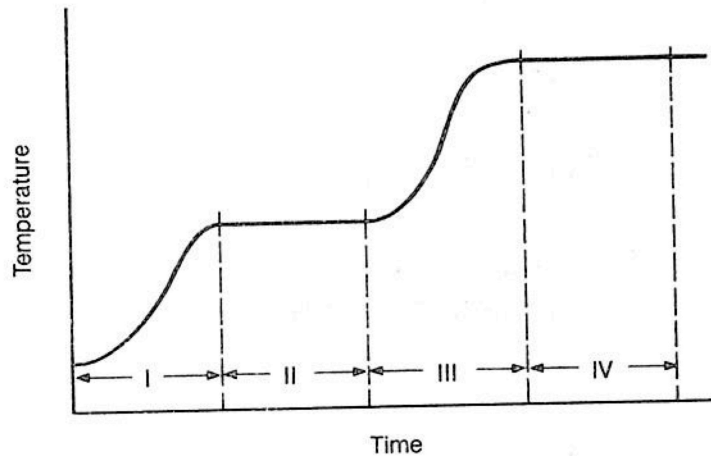


Experiment 5.1 Post Lab Questions

1. What substances made up the mixture? What substances were in **each** of the fractions?
2. Explain how you know which substances made up the mixture.
3. What other tests might you complete to help identify these substances?
4. Explain why we are able to separate the 2 substances by fractional distillation?
5. What was your density of the mixture and the 3 fractions? Was your data close to the "correct" data? If it wasn't, come up with a possible solution to fix yours.
6. The temperature - time graph shown in Figure A was made during the fractional distillation of a mixture of 2 liquids, E and F. Fractions were collected during the time intervals I, II, III, and IV. Liquid E has a higher boiling point than liquid F. What liquid or liquids were collected during each of the time intervals?

Figure A
For problem 2



7. A student separated the mixture by using fractional distillation. When completing the boiling point for fraction 1, they found 2 boiling points. One at 80 degrees Celsius and one at 100 degrees Celsius. Explain how they could have gotten 2 boiling points when fraction 1 was supposed to be all isopropyl alcohol.