*Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

1. Write out the reaction catalyzed by MDH. Oxaloacetate and malate do not absorb in the visible ultraviolet range – thus one is not able to measure MDH activity (gain or loss of products or reactants) directly. With this information in mind, answer the following:
2. Explain which wavelength you would use to measure the reaction by MDH converting oxaloacetate to malate and why you’d use that particular wavelength.
3. Would you expect the absorbance to increase or decrease over time? Why?
4. Research other ways of measuring protein concentration. Describe two of them and compare the differences between the Bradford method you used and the others you found
5. There are several interfering agents in a Bradford assay. Name a few and describe how could you measure protein if you had a high concentration of one of these agents in your protein sample.
6. Most measurements for compounds including biomolecules are in Molarity. Yet the common unit for protein concentration is mg/ml.
7. Why do you think mg/ml is used instead of molarity?
8. Calculate the molarity of a solution of MDH (32.2 kDa molecular weight) at a 1.25 mg/ml concentration.