**CHEM525 Experiment 4 Prelab Questions: Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. (4 points) What would you expect to see if you had a mixture of 3 proteins (Molecular masses of 10, 45 and 105 kDa) and ran the sample on a 12.5% SDS-PAGE gel? If you ran them on a 20% gel? Sketch an example gel for each situation (don’t forget a ladder!) and explain why you would see any differences between the 2 gels.
2. (4 points) How exactly will we use your SDS-PAGE gel to determine the molecular weight of the pectate lyase protein you purified? (Be certain to include the specific manner by which you will determine the molecular weight of the protein from the gel)
3. (2 points) What is the basis of separation of proteins by gel electrophoresis?