

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

**German Tank Problem** Your goal is to come up with your estimate of the total number of tanks based on the 5 serial numbers that you have taken off of the tanks that you have captured.

1. Our five serial numbers were:
2. Come up with two estimators for the total number of tanks. For one, utilize maximum likelihood and sketch a plot of the likelihood function. For the other, use whatever method (though not Bayes) will lead to a reasonable estimate. It may be helpful to sketch a plot of the data.
3. Calculate your two estimates based on your data.