Name: _____ ID #: _____

1) The mean account balance is SR500 and the standard deviation is SR120 for a large population of bank accounts. Find the standard deviation of the average balance of a group of 8 randomly chosen accounts.

2) At a medical clinic, patient visits are found to last a mean time of 17 minutes with a standard deviation of 10 minutes. Assume the distribution of time is normal.
   a) What is the probability that 25 randomly chosen patients will require more than 7 hours?

   b) What is the probability that the average time of those 25 randomly chosen patients will be more than 20 minutes?

3) In a study of brand recognition, out of 763 people chosen at random, 152 were unable to identify yopur product.

   a) Estimate the percentage of the population who would be unable to identify your product.

   b) If the true proportion of people in the population who are unable to identify your product is 21%, what is the probability that the sample proportion is less than 25%?