Homework #5: Confidence Intervals & Samples Sizes

This assignment need not be typed but must be legible. (The instructor is the arbiter of legibility.) Be as complete as possible in your answers. On this and all assignments, put all answers in prose form (sentences and paragraphs); single-word or phrase answers are not sufficient. Be explicit and complete in explaining your answers. Show all work done, including any calculations, & explain all of the steps involved and all of the parts of each calculation.

Hint for all problems: Draw a picture first!!   .

I. From the Agresti & Finlay problems for chapter 5 (pp. 133-141), do these 7 problems, *in this order*:

   22, 20, 4, 40, 14, 67, and 68

II. Using the GSS84.SAV dataset in SPSS, find 95% and 99% confidence intervals for the mean age and for the proportion female in the sample (four confidence intervals, in total). Use SPSS to get the summary statistics only; calculate the confidence intervals by hand, and show all work. Be sure to include your calculations, interpretations (!), and conclusions.