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Show all work to receive full credit. Supply explanations when necessary. You must work INDIVIDUALLY.

1. (2 points) A researcher is interested in determining how U.S. senators feel about a certain issue. The researcher interviews 15 senators. Identify the population and the sample.
2. (2 points) The average age of those killed in the World Trade Center attacks is 40 years. Is this number a parameter or a statistic? Briefly explain your reasoning.
3. (2 points) Determine the level of measurement. Choose from nominal, ordinal, interval, or ratio.
(a) Distances that students commute to school
(b) Places of athletes finishing a marathon
4. (1 point) If you give $100 \%$ to Math 153 , how much will you have to give to your other classes?
5. (1 point) A ten-student committee is formed by selecting 6 full-time students and 4 part-time students at random. Is this a simple random sample? Explain.
6. (2 points) Ten students are to be selected from a group of 100 students.
(a) Explain how you could do so with systematic sampling.
(b) Explain how you could do so with stratified sampling.
