

A.P. Statistics
Assignment 3-1

Remember to show your thinking through your work.

- 1) Fill in the table below regarding populations and samples. The first column represents the question the statistician is trying to answer. Fill in the blank(s) for each row.

Question	Population	Sample
Who will win the next U.S. presidential election?		
Is my well water safe?		
Are as many girls born as boys in the world?		
Which works better, Advil or Tylenol?		
Do students who take more math classes in high school get into better colleges?		

- 2) A friend of yours, who is not taking statistics, wonders why it is that anyone would choose to take a sample. "Obviously," she says, "you would get better information from a census." In a short paragraph, explain why it is that statisticians take samples rather than taking a census.

<type answer here>

- 3) A sociologist wants to know the opinions of students about online education. He obtains a list of 750 students who have completed an online course recently and mails a questionnaire to 100 of these students. The 100 recipients of the questionnaire were randomly selected. Only 41 of the questionnaires were returned. Clearly define the population and the sample in this study.

<type answer here>
