

## Homework #1

42.

- a) All fitness members
- b) Fitness members that week
- c) Mean amount in all members
- d) Mean fitness members that week
- e) Time 1 client exercises that week
- f) Time all clients exercise that week

44.

- a) All patients
- b) Patients who have had heart attacks
- c) Mean recovery period for all patients
- d) Mean recovery for patients who have had heart attacks
- e) Recovery time for only 1 patient
- f) Recovery period for all patients

46.

- a) Voters in district
- b) Voters who think he is doing a good job
- c) Proportion of all voters
- d) Proportion of voters who think he is doing a good job
- e) A single voters opinion
- f) All voters who think he is doing a good job

51. X is an example of an A. variable.

52. A mean number of days absent of 3.5 days. Value is an example of a C. Statistic

54. Quantitative Continuous

56. Quantitative Discrete

58. Qualitative

60. Quantitative Discrete

**66. Suppose you want to determine the mean number of students per statistics class in your state. Describe a possible sampling method in three to five complete sentences. Make the description detailed.**

If I wanted to figure out the mean number of students per statistics class in my state, I would first start off with separating my samples into three groups. A small/private school like Whittier College, a Medium school such as UC's, and A Large school like Cal States. I would sample a minimum of 3 statistics classes per school, and get the average from each category, then I would get the mean of each school and average it out once more.

76.

**a) Think about the state of the United States in 1936. Explain why a sample chosen from magazine subscription lists, automobile registration lists, phone books, and club membership lists was not representative of the population of the United States at that time.**

Although the automobile registrations and the phone books sample choices were random, I think people with magazine subscriptions and club memberships have similar interest and beliefs therefore they would probably get more voters with similar interests and making it an unfair survey.

**b) What effect does the low response rate have on the reliability of the sample?**

Low response rates have an effect on the poll because the more participants, the more accurate the outcome will be.

**c) Are these problems examples of sampling error or nonsampling error?**

Sampling Error

**d) During the same year, George Gallup conducted his own poll of 30,000 prospective voters. These researchers used a method they called "quota sampling" to obtain survey answers from specific subsets of the population. Quota sampling is an example of which sampling method described in this module?**

Quota sampling is an example of a Convenience Sample.

90.

- a) 4% of students at Long Beach City College do not have access to a computer at home
- b) About 100 students in the survey live at least 16 miles away from the campus
- c) The statistics would be similar because in both surveys they are interviewing college students

