

Lab 1 Due Wednesday, 8/21

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Try These! Identify the sampling technique used.

- Using random digit dialing, researchers ask 300 U.S. adults if they care about the next election.
Simple Random Sample
- A student asks 12 friends in her dorm to participate in a psychology experiment.
Convenience Sampling or Voluntary Response Sampling
- A study of water quality in Rio de Janeiro, Brazil randomly selects and collects water samples from each of the 55 communities from the Rio metropolitan area.
Stratified Sampling
- Law enforcement officials at the Kaaboo concert stop and check the driver of every third vehicle for their blood alcohol content.
Systematic Sampling
- Twenty-six students are randomly selected from each grade level at a high school and surveyed about their study habits.
Stratified Sampling
- Soybeans are planted on a 48-acre field. The field is divided into one-acre subplots. In order to estimate the harvest amount, 10 subplots are randomly selected and harvested.
Cluster Sampling
- Using random digit dialing, researchers call 1400 people and ask what obstacles (such as childcare) keep them from exercising.
Simple Random Sample
- Soybeans are planted on a 48-acre field. The field is divided into one-acre subplots. A sample is taken from each subplot to estimate the harvest.
Stratified Sampling
- After a hurricane, a disaster area is divided into 200 equal grids. Thirty of the grids are selected, and every occupied household in the grid is interviewed to help focus relief efforts on what residents require the most.
Cluster Sampling
- Chosen at random, 500 rural and 500 urban people age 65 or older are asked about their health and their experience with prescription drugs.
Stratified Sampling
- After a hurricane, a disaster area is divided into 200 equal grids. Thirty occupied households from each grid are randomly selected, and interviewed to help focus relief efforts on what residents require the most.
Stratified Sampling

For each sample listed below, determine if there are any obvious sources of bias. If bias is present state whether it is selection bias, measurement (response) bias or nonresponse bias.

- Using random digit dialing, researchers call 1400 people and ask what obstacles (such as childcare) keep them from exercising.
Selection Bias, Non Response Bias
- Sally and Bill are amongst those being randomly selected and surveyed today over the phone, but each refused to respond.
Non Response Bias
- Joe and Bobby are the researchers asking the telephone survey questions. They both included their responses to the survey question in the sample.
Measurement Bias
- After a hurricane, a disaster area is divided into 200 equal grids. Thirty of the grids are selected, and every occupied household in the grid is interviewed to help focus relief efforts on what residents require the most.
Selection Bias
- One part of the Nurses' Health Study is concerned with possible causes of skin cancer. Nurses were asked about different behaviors and aspects of their health when they entered the study. Then, the nurses were given the questionnaire again if they were diagnosed with cancer. When the questionnaires were analyzed, the investigators discovered that after the nurses were diagnosed with cancer they tended to report a reduced ability to tan. It is thought that the shift in reporting might be caused by an awareness of their diagnosis.

16. ANS:

- a) This is an example of response bias, since the awareness of their diagnosis may have caused them to change their response. It isn't non-response bias since they were able to obtain responses from the nurses and it isn't selection bias since they did not attempt to generalize to a larger population.