

Math 140 Types of Bias Notes

Bias – When a data set does not reflect the population

Question Bias – People phrase their question in order to make people answer a certain way.

Ex) Should a president have the power of line item veto? (48% yes, 52% no)

Ex) Should a president have the power of line item veto in order to eliminate waste and help the economy? (86% yes, 14% no)

Response Bias – People will not answer truthfully or accurately. (Controversial topics)

Ex) Random sample of women and ask them if they are alcoholics?

Sampling Bias – Did not incorporate randomization into sampling process. Used bad method like convenience or voluntary response. Also taking a sample that is too small can create bias.

Deliberate Bias – Taking a random data set of people living in Los Angeles, and we intentionally did not ask any people that are homeless. (Really bad)

Non-response bias – People refuse to be part of your study. Refuse to fill out data.