

# Survey of mathematical methods

[Science](#), [Mathematics](#)



One of the most important things a buyer must do before making a purchase is to review any and all of the statistical research on a product. According to Bluman (2005), Statistical research is used to provide knowledge and information in order to enable us to make intelligent decisions about our health and welfare" (p. 680). Although this information is very important to us, we must also be skeptical of the results. There are many types when the results cannot be reliable.

According to Bluman (2005), " statistics can be misrepresented in the following ways: Suspect Samples, Ambiguous Averages, Detached Statistics, Implied Connections, Misleading Graphs, Faulty Survey Questions, Asking Biased Questions, Using Confusing Words, Asking Doubled-Barreled Questions, and Using Double Negatives" (p. 680-685). The following are example of misuses of statistics. 4. In many ads for weight loss products, under the product claims and in small print, the following statement is made: " These results are not typical. What does this say about the product being advertised? Detached Statistics and/or Implied Connections. This statement is telling the buyer that the results for some will not be the same results for all. In many ways, the results that are shown on the product could be exaggerated in order to get buyers to buy the product. The reason those words are included now days are because of new guidelines by the Federal Trade Commission. In the end, it is basically telling the buyer not to expect the results.

Furthermore, there are no results shown on the label to compare it to. 14. " How often do you run red lights? " Asking biased questions and/or faulty survey questions. The reason this question might lead to an erroneous

conclusion is because it is taken into consideration that someone has a driver's license. It can be asked in order to manipulate the overall results. If you were to answer the question, you could be opening yourself up to admitting guilt or showing that it is a common practice for you.

The two above assignment questions are examples of misuses of statistics. They can both be taken in many different ways. It is very important to ensure that you read each and every label and/or question very carefully. If you do not, you risk buying or answering something that may end up getting you in trouble or wasting money. This assignment was very informative for me to complete because it gave me better insight into the misuse of statistics. I will continue to use this information throughout my educational experiences.