

Math 1030 Summer 2013 – Unit Commentaries

Choose three (3) of the topics below to write commentaries. Each paper should be turned in the class following the test which covers the topic. Find an example of the topic in the news and explain how it is an example of the quantitative reasoning that the class has covered. Commentaries are usually one page, plus a copy of the news article.

chapter 1 – Logical Fallacy

Find at least one fallacy in a statement which purports to make a logical argument and explain the fallacy. Many arguments and “logical statements” contain numerous fallacies and you could go on and on, but limit this report to no more than three different fallacies – no matter how much fun it is to find the fallacies.

chapter 3 – Simpson’s Paradox

Find an article that could incorporate Simpson’s paradox in order to be a complete report. Explain how the variables could be examined differently to obtain a different conclusion than the article gives. An example of an older article that *does* incorporate Simpson’s paradox is

http://rwdacad01.slcc.edu/academics/dept/math/dnelson/How_well_are_Utah_students_doing.pdf .

chapter 5 – Correlation vs. Causation

Find an article which compares two quantitative variables and makes a conclusion about how one of the variables influences the other. Comment on the legitimacy of the article’s conclusion: (1) Is the correlation strong or weak, or superficial? (2) Is there enough data to support the conclusion? (3) Is there reason to think there might be a cause and effect? Explain.

chapter 8 – Logistic Growth

Find an article reports on how a quantitative variable is changing. Explain what the independent and dependent variables are, what the initial value is for the article, why its initial growth is not expected to continue, and what the limit or carrying capacity is. Comment on if the article’s claim is reasonable for the domain involved, and if the conditions in the article remain the same for a larger domain.