

MATH-CCTH 1080H – Mathematics for Everyday Life
TRENT UNIVERSITY, Winter 2018 in Peterborough

Assignment #7
Liar, liar, stats on fire ...
Due on Friday, 9 March.

The bestselling book about statistics over the last few decades is probably *How to Lie with Statistics*, by Darrell Huff, with pictures by Irving Geis, first published in 1954 and still in print. It is intended for a very general audience, doesn't get into the technicalities of statistics, and is very entertaining in places. For this assignment, please track down a copy of the book* and skim through the first three chapters (about forty paperback pages).

1. Find a recent news story that cites statistics such as opinion polls, medical or scientific studies, or economic data and try to evaluate whether it suffers (or at least might suffer) from the sort of abuses of statistics discussed in the first three chapters of *How to Lie with Statistics*. [10]

Medicine makes people ill, mathematics makes them sad, and theology makes them sinful.

Martin Luther

[How much did he know whereof he spoke?]

Detest it [a certain difficult math problem] just as much as lewd intercourse; it can deprive you of all your leisure, your health, your rest, and the whole happiness of your life.

Wolfgang Bolyai

[It's pretty hard to convince people that math is better than sex!]

* As far as I can tell, the copyright shouldn't have expired yet, but the book is nevertheless widely available in various electronic formats from more-or-less reputable sources on the internet, including the Internet Archive at archive.org/details/HowToLieWithStatistics.