

# STA 130 Tutorial 3

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# Agenda

- 1  $\frac{2}{3}$  Game
- 2 Vocabulary
- 3 Group Discussion
- 4 Writing Exercise

## $\frac{2}{3}$ Game

Pick a number between 1 and 1,000 and write it down on a scrap of paper and hand it in. The winner will be the student which chooses the number that is  $\frac{2}{3}$  the average of the other guesses.

“Even perfectly rational players playing in such a game should not guess 0 unless they know that the other players are rational as well and that all players’ rationality is common knowledge.”

[https://en.wikipedia.org/wiki/Guess\\_2/3\\_of\\_the\\_average](https://en.wikipedia.org/wiki/Guess_2/3_of_the_average)

- Outlier, interquartile range, boxplot, proportion
- Cleaning data, tidy data, create dummy variable, removing the column, replace values above/below a certain threshold, taking subset of variables, filtering data frame based on a condition, renaming the variables, grouping the categories

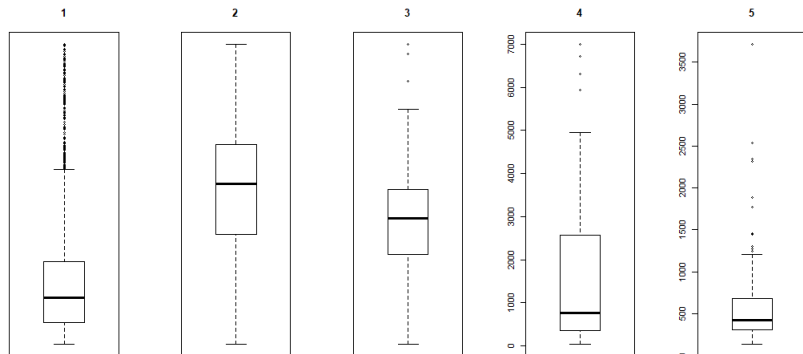
# Kahoot Quiz

Log on at [kahoot.it](https://kahoot.it)



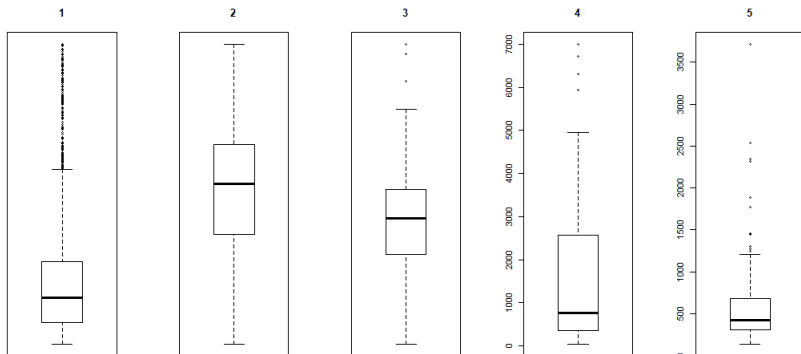
# Boxplots - Which is Which?

- Lengths of Major North American Rivers
- Seven years daily closing prices of German Stock Market
- Annual Canadian Lynx Trapping 1821-1934
- Five months of daily windspeeds in NYC
- 1875-1972 Yearly Level Lake Huron



# Boxplots - Which is Which? - Answers

- 7 yrs daily closing prices of German Stock Market
- 1875-1972 Yearly Level Lake Huron
- 5 months of daily windspeeds in NYC
- Annual Canadian Lynx Trapping 1821-1934
- Lengths of Major North American Rivers





*For Question 1D, you used both histograms and boxplots to visualize your data. Which features were easier/harder to observe from each of the visualizations? In what situations may you want to choose a boxplot over a histogram or vice-versa? Explain.*

Answer all of the following three questions. Full marks for thoughtful answers.

- What questions, if any, do you have so far regarding the course materials?
  - What is your favourite thing about tutorial?
  - What is your least favourite thing about tutorial?
- Submit in 10 minutes on Quercus.