

Homework 2

Fall 2016, Math 107, Prof. Adam Loy

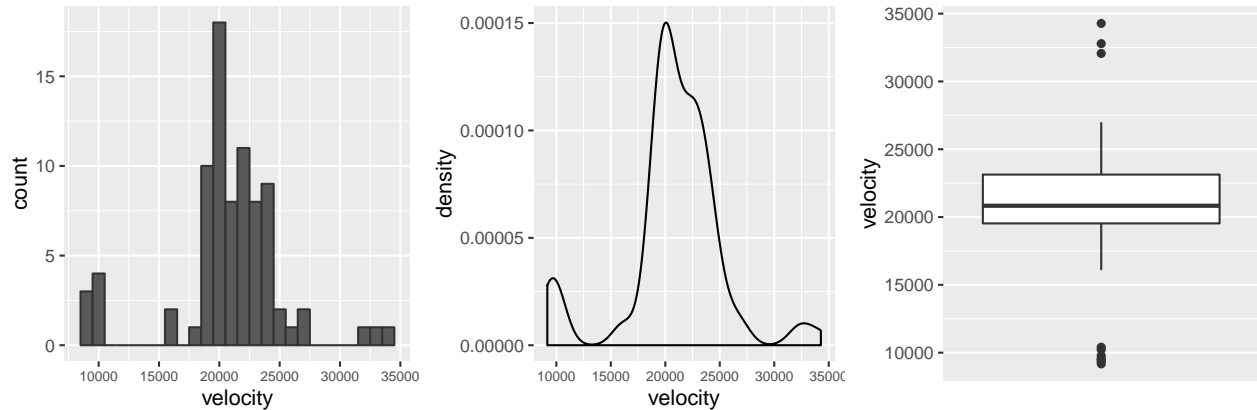
Due Tuesday, September 20 by 4:00 p.m.

Problem 1

The bar chart and the pie chart below show the distribution of pre-existing medical conditions of children involved in a study on the optimal duration of antibiotic use in treatment of tracheitis, which is an upper respiratory infection.

- What features are apparent in the bar chart but not in the pie chart?
- What features are apparent in the pie chart but not in the bar chart?
- Which graph would you prefer to use for displaying these categorical data?

Problem 2



- Describe the shape of the distribution of velocities. Specifically address the number of modes, symmetry/skew, and any unusual features present.
- What features are apparent in the histogram but not in the density plot?
- What features are apparent in the histogram and density plot but not in the boxplot?
- Which graph would you prefer to use for displaying these data? Justify your answer.

Problem 3

SIDE-by-SIDE plots

Problem 4

SCATTERPLOT