

Class begins at 9:15 am, and will be like other class days until approximately 9:45. The Quiz will be administered at 9:50 am, giving you 30 minutes to work on it. Calculators are not allowed.

You should recognize, when reading a scenario's description, distinctions between

- sample and population
- statistic and parameter
- biased sampling vs. unbiased
- SRS vs. iid samples
- univariate vs. bivariate research questions
- evidence of an association between variables vs. lack of such evidence
  - when both variables are categorical
  - when one variable is categorical and the other is quantitative
- a skewed (left or right?) distributions vs. a symmetric one
- unimodal vs. multimodal data
- statistics which are **resistant** vs. those which are **sensitive** to outliers

You should be able to interpret frequency tables, bar graphs, histograms, dot plots and boxplots, so as to estimate/identify from each

- the range and interquartile range (quantitative data)
- the first, second and third quartiles (quantitative data)
- frequencies or relative frequencies of values
- the most frequently-occurring value (sometimes called the **mode**)

For the R commands listed below, you should

- be able to describe what the command does and/or give context for when it is typically used
- write a syntactically-correct version to achieve a specified purpose

Commands include:

```
read.csv(), filter(), help()
head(), names(), nrow()
c(), sum(), sort(), sqrt()
mean(), sd(), median(), qdata(), fivenum()
tally(), gf_histogram(), gf_bar(), gf_boxplot()
sample(), resample()
```