

Tutorial 2

Week of January 21, 2019

Question 1.33, Page 34

Consider the following dataset of home sale amounts in 1000s of \$:

| | | | | |
|------|-----|-----|-----|-----|
| 590 | 815 | 575 | 608 | 350 |
| 1285 | 408 | 540 | 555 | 679 |

- (a) Calculate and interpret the sample mean and median.
- (b) Suppose the 6th observation had been 985 rather than 1285. How would the mean and median change?
- (c) Calculate a 20% trimmed mean by first trimming the two smallest and two largest observations.
- (d) Calculate a 15% trimmed mean.

Question 1.56, Page 46

Below is (sorted) data on distilled alcohol content (%) for a sample of 35 port wines.

| | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 15.30 | 16.20 | 16.35 | 17.15 | 17.48 | 17.73 | 17.75 | 17.85 | 18.00 |
| 18.68 | 18.82 | 18.85 | 19.03 | 19.07 | 19.08 | 19.17 | 19.20 | 19.20 |
| 19.33 | 19.37 | 19.45 | 19.48 | 19.50 | 19.58 | 19.60 | 19.62 | 19.90 |
| 19.97 | 20.00 | 20.05 | 21.22 | 22.25 | 22.75 | 23.25 | 23.78 | |

Calculate summary statistics and construct a boxplot.

$$n = 35, \quad \sum x_i = 674.01, \quad \sum x_i^2 = 13093.7689$$