

Group Assignment #2

Name(s): _____

Q1

- Load the internal R dataset “MLB”
 - First load the package: `library(openintro)`
- View the dataset in the source window
- Determine the mean and median of the variable ‘salary’
- What does this tell us about the skewness of the distribution?
- Prove your findings by generating a histogram for the variable
- *Answer:* True or False: The distribution of the variable ‘salary’ is considered left skewed.

Q2

- Load the internal R dataset “ageAtMar”
 - First load the package: `library(openintro)`
- View the dataset in the source window
- Calculate the 6-number summary for the variable ‘age’
- Generate a boxplot for the variable ‘age’
- Observe the connections between the 6-number summary and the boxplot
- *Answer:* True or False: The 75% (Q3) percentile is the “top” line of the box on the boxplot.

Q3

- Load the internal R dataset “gifted”
 - First load the package: `library(openintro)`
- View the dataset in the source window
- Calculate the mean, variance, and standard deviation of the variable ‘cartoons’
- *Answer:* What is the IQR of the variable ‘edutv’?

Q4

- Using the previously loaded internal R dataset “gifted”...
- What type of relationship do you believe exists between how a “gifted” kid scores on an aptitude test and their mother’s IQ? Rhetorical question...
- Create a scatterplot (`plot(x, y)`) for the variables, ‘motheriq’ (x) and ‘score’ (y)
- What type of relationship exists based on the scatterplot? Does this confirm your initial thoughts?
- *Answer:* In order to be more definitive, calculate the correlation coefficient for the two variables and record your answer.