Presenting Data - Quiz

Questions

Question 1

What is the code to produce a basic pie chart in R?

- a. p.chart()
- b. piechart()
- c. *pie()*
- d. chart()

Question 2

What does the following R command do: par(mfrow=c(1,2))?

- a. It creates a numerical vector with the numbers 1 and 2 stored in an object called "par"
- b. It performs a parametric test between the variables 1 and 2 of a dataset called "mfrow"
- c. It displays two plots graphed in R after this command side by side
- d. It adds the numbers 1 and 2 together

Question 3

What kind of output would you expect from the following R command: table(mydata[,6])?

ANSWER:

Question 4

What kind of output would you expect from the following R command: prop.table(table(mydata[,2]))*100?

ANSWER:

What argument do you use to adjust the length of the y-axis of a plot in R?

- a. xlab =
- b. ylab =
- c. ylim=
- d. main=

Question 6

What argument do you use to add a label to the y-axis of a plot in R?

- a. xlab =
- b. ylab =
- c. ylim=
- d. main=

Question 7

What argument do you use to add a label to the x-axis of a plot in R?

- a. xlab =
- b. ylab =
- c. ylim=
- d. main=

Question 8

What argument do you use to add an overall title to a plot in R?

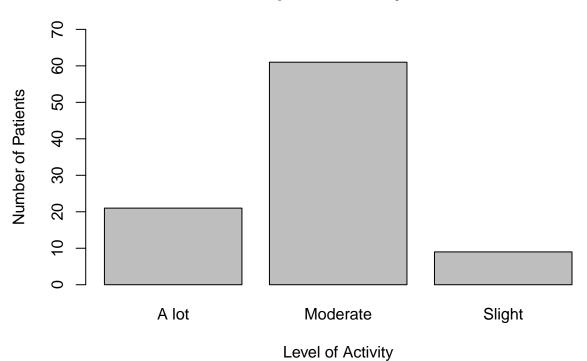
- a. xlab =
- b. ylab =
- c. ylim=
- d. main=

Question 9

What is the code to produce a basic histogram in R?

- a. *histogram()*
- b. *histo()*
- c. *hist.plot()*
- d. hist()

What code was used to produce the following bar plot in R?



Self-reported activity levels

To produce the plot, the following data were stored in an object called "levels":

A lot Moderate Slight ## 21 61 9

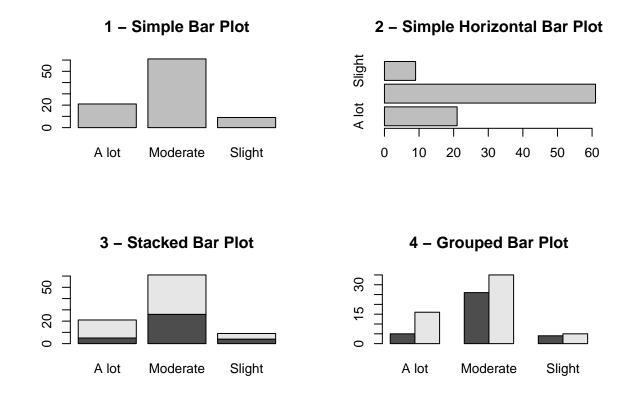
ANSWER:

Question 11

What is the code to produce a basic scatter plot in R?

- a. *scatter()*
- b. *plot()*
- c. *scatterplot()*
- d. sct.plot()

Match each of the following four bar plot with the corresponding code segments (A, B, C and D) that were used to produce the bar plot in R:



- A. barplot(counts2, main="XXX")
- B. barplot(counts, horiz = TRUE, main="XXX")
- C. barplot(counts2, beside=TRUE, main="XXX")
- D. barplot(counts, main="XXX")

ANSWER:

R Code

Which of the following can be used to visually explore the distribution/spread of data within one numerical variable?

- a. *hist()*
- b. *boxplot()*
- c. barplot()
- d. pie()

Question 14

Which of the following R commands can be used to find measures of location?

- a. mean(), median(), table()
- b. average(), median(), table()
- c. mean(), median(), mode()
- d. *mean()*, *med()*, *mode()*

Question 15

Which of the following is NOT a way of calculating the mean in R?

- a. sum(data\$variable)/dim(data)[1]
- b. avg(data\$variable)
- c. sum(datavariable)/length(datavariable)
- d. mean(data\$variable)

Question 16

Which of the following are ways to calculate measures of spread in R?

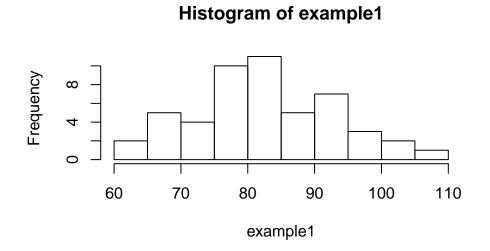
- a. sd(data\$variable)
- b. var(data\$variable)
- c. *IQR(data\$variable)*
- d. All of the above

Question 17

Which TWO of the following measures are highly sensitive to outliers?

- a. Mean
- b. Median
- c. Standard Deviation
- d. IQR

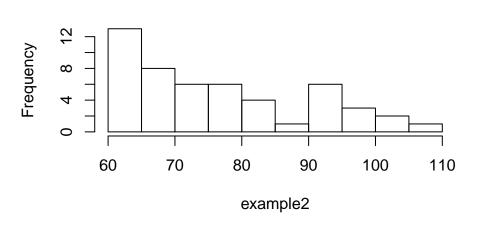
Which measures of location and spread should be used for data that is distributed as shown in this histogram?



ANSWER:

Question 19

Which measures of location and spread should be used for data that is distributed as shown in this histogram?



Histogram of example2

ANSWER:

What information is included in the output for the *summary()* command in R?

- a. Minimum, 1st Quartile, Median, Mean, Mode, 3st Quartile, Maximum
- b. 1st Quartile, Median, Mean, 3st Quartile, Standard Deviation, Variance
- c. Minimum, 1st Quartile, Median, Mean, 3st Quartile, Maximum
- d. Minimum, Median, IQR, Mean, Standard Deviation, Maximum