

R Exams

Statistics Exam 2019-03-14

Exam ID 00002

Name: _____

Student ID: _____

Signature: _____

- | | | | | | |
|---------|--------------------------|-----|--------------------------|-----|--------------------------|
| 1. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |
| 2. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |
| 3. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |
| 4. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |
| 5. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |
| 6. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |
| 7. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |
| 8. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |
| 9. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |
| 10. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |
| 11. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |
| 12. (a) | <input type="checkbox"/> | (b) | <input type="checkbox"/> | (c) | <input type="checkbox"/> |

13. (a) (b) (c)
14. (a) (b) (c)
15. (a) (b) (c) (d) (e)
16. (a) (b) (c) (d) (e)
17. (a) (b) (c) (d) (e) (f) (g)
18. (a) (b) (c) (d) (e) (f) (g)
19. (a) (b) (c) (d)
20. (a) (b) (c)
21. (a) (b) (c)
22. (a) (b) (c) (d)
23. (a) (b) (c) (d) (e)
24. (a) (b) (c) (d) (e) (f)

1. Population parameters are used to estimate sample statistics.
 - (a) FALSE
 - (b) TRUE
 - (c) Not enough information
2. Sample statistics are usually represented using Roman letters (normal ABCs).
 - (a) Not enough information
 - (b) FALSE
 - (c) TRUE
3. The standard deviation of quantitative variables is often represented with a Greek sigma (σ) for the sample statistic.
 - (a) TRUE
 - (b) Not enough information
 - (c) FALSE
4. A characteristic of interest is called a statistic when it refers to the characteristic in an entire population.
 - (a) TRUE
 - (b) Not enough information
 - (c) FALSE
5. What is the statistical meaning of population?
 - (a) There's no such concept in statistics.
 - (b) It's always all of the people in an entire country.
 - (c) All of the members of a group you're interested in.
6. Data are skewed when there are extreme values on one side of the distribution.
 - (a) FALSE
 - (b) Not enough information
 - (c) TRUE
7. If data are normally distributed, the mean and the medial will not be equal.
 - (a) Not enough information
 - (b) FALSE
 - (c) TRUE
8. The mode is always an actual value in the data set.
 - (a) TRUE
 - (b) Not enough information
 - (c) FALSE
9. The mean is not affected by outliers.
 - (a) Not enough information
 - (b) TRUE

- (c) FALSE
- 10. When the mean is larger than the median, there are unusually large values in the data set.
 - (a) Not enough information
 - (b) TRUE
 - (c) FALSE
- 11. Outliers strongly influence the mean, the variance, and the range.
 - (a) Not enough information
 - (b) FALSE
 - (c) TRUE
- 12. IQR stands for "I quit reading."
 - (a) TRUE
 - (b) FALSE
 - (c) Not enough information
- 13. Variance is the sum of all deviation scores squared divided by the total number of scores.
 - (a) TRUE
 - (b) Not enough information
 - (c) FALSE
- 14. The standard deviation units are squared units.
 - (a) TRUE
 - (b) FALSE
 - (c) Not enough information
- 15. Given the following data set [1,2,3,4,5], what is the variance?
 - (a) 4
 - (b) 3
 - (c) 2
 - (d) 1.58
 - (e) 2.5
- 16. Given the following data set [1,2,3,4,5], what is the standard deviation?
 - (a) 3
 - (b) 2
 - (c) 2.5
 - (d) 1.58
 - (e) 4
- 17. Given the following data set [1,3,5,7,9], what is the first quartile?
 - (a) 8
 - (b) 5
 - (c) 3.16

- (d) 4
 - (e) 7
 - (f) 10
 - (g) 3
18. Given the following data set [1,2,3,4,5], what is the median?
- (a) 3
 - (b) 8
 - (c) 4
 - (d) 7
 - (e) 10
 - (f) 5
 - (g) 3.16
19. A data point has the value of 7.5 and the mean of the data set is 10. What is the deviation score?
- (a) 3
 - (b) -2.5
 - (c) -3
 - (d) 7
20. Histograms are useful for seeing how data are distributed.
- (a) FALSE
 - (b) TRUE
 - (c) Not enough information
21. Probable outliers can't be seen on a histogram.
- (a) Not enough information
 - (b) FALSE
 - (c) TRUE
22. What type of plot is appropriate for ordinal level data.
- (a) scatter plot
 - (b) histogram
 - (c) bar chart
 - (d) box plot
23. Based on the plot, select the statements that are true.
- (a) The data are normally distributed.
 - (b) The data are leptokurtic.
 - (c) The data are right skewed.
 - (d) The data are left skewed.
 - (e) The data are platykurtic.
24. Based on the plot, select the statements that are true.

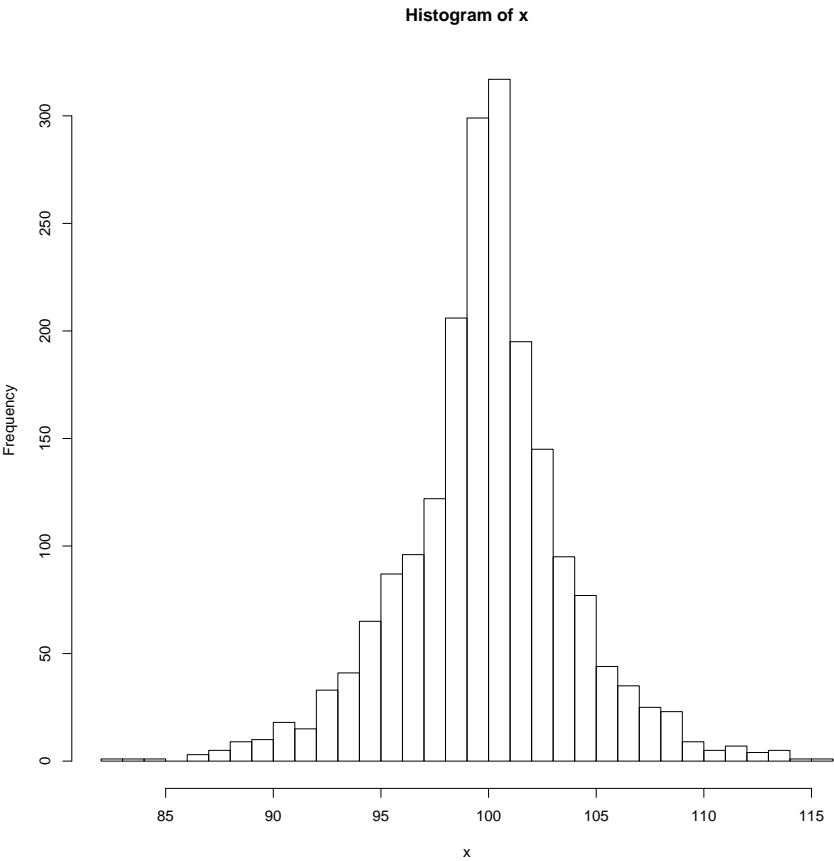


Figure 1:

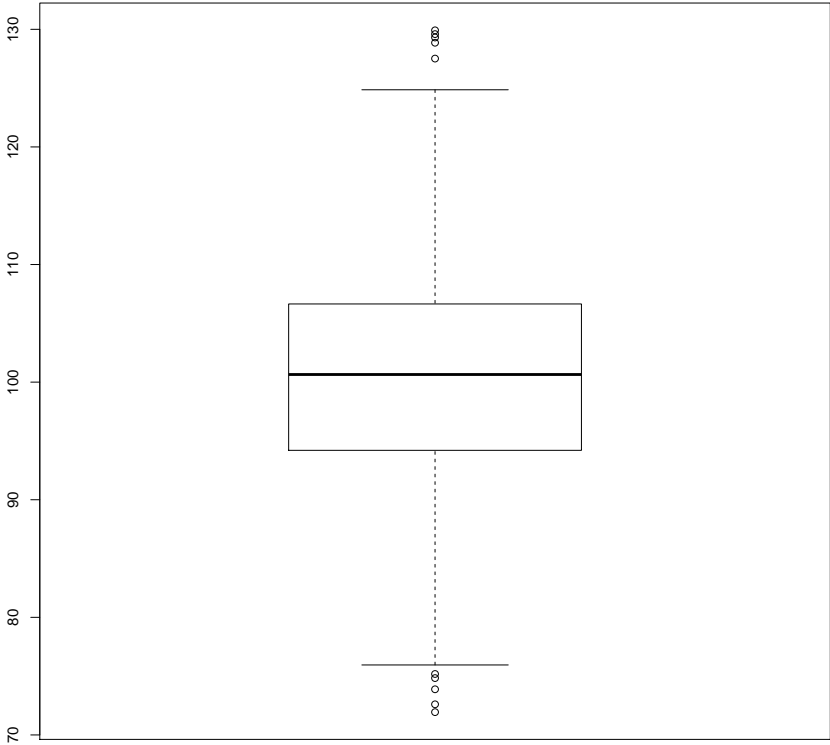


Figure 2:

- (a) There are outliers with small values.
- (b) The data are symmetrically distributed.
- (c) There are outliers with large values.
- (d) The data are left skewed.
- (e) The data are right skewed.
- (f) There are no outliers.