R Exams

Statistics Exam 2019-03-14 **Exam ID 00001**

Name: _____

Student ID: _____

Signature: _____

1. (a) ☐ (b) ☐ (c) ☐
2. (a) ☐ (b) ☐ (c) ☐
3. (a) ☐ (b) ☐ (c) ☐
4. (a) ☐ (b) ☐ (c) ☐
5. (a) ☐ (b) ☐ (c) ☐
6. (a) ☐ (b) ☐ (c) ☐
7. (a) ☐ (b) ☐ (c) ☐
8. (a) ☐ (b) ☐ (c) ☐
9. (a) ☐ (b) ☐ (c) ☐
10. (a) ☐ (b) ☐ (c) ☐
11. (a) ☐ (b) ☐ (c) ☐
12. (a) ☐ (b) ☐ (c) ☐

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) Not enough information
   (c) TRUE
2. Sample statistics are usually represented using Roman letters (normal ABCs).
   (a) Not enough information
   (b) TRUE
   (c) FALSE
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) Not enough information
   (b) FALSE
   (c) TRUE
5. What is the statistical meaning of population?
   (a) It's always all of the people in an entire country.
   (b) All of the members of a group you're interested in.
   (c) There's no such concept in statistics.
6. Data are skewed when there are extreme values on one side of the distribution.
   (a) TRUE
   (b) FALSE
   (c) Not enough information
7. If data are normally distributed, the mean and the medial will not be equal.
   (a) FALSE
   (b) Not enough information
   (c) TRUE
8. The mode is always an actual value in the data set.
   (a) FALSE
   (b) Not enough information
   (c) TRUE
9. The mean is not affected by outliers.
   (a) TRUE
   (b) Not enough information

(c) FALSE

10. When the mean is larger than the median, there are unusually large values in the data set.

    (a) TRUE
    (b) FALSE
    (c) Not enough information

11. Outliers strongly influence the mean, the variance, and the range.

    (a) TRUE
    (b) Not enough information
    (c) FALSE

12. IQR stands for “I quit reading.”

    (a) Not enough information
    (b) FALSE
    (c) TRUE

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) Not enough information
    (b) TRUE
    (c) FALSE

15. Given the following data set [1,2,3,4,5], what is the variance?

    (a) 4
    (b) 2
    (c) 3
    (d) 1.58
    (e) 2.5

16. Given the following data set [1,2,3,4,5], what is the standard deviation?

    (a) 1.58
    (b) 3
    (c) 2.5
    (d) 2
    (e) 4

17. Given the following data set [1,3,5,7,9], what is the first quartile?

    (a) 3.16
    (b) 3
    (c) 4

(d) 10
(e) 5
(f) 7
(g) 8

18. Given the following data set [1,2,3,4,5], what is the median?

(a) 3.16
(b) 5
(c) 10
(d) 3
(e) 8
(f) 7
(g) 4

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) 3
(c) 7
(d) -2.5

20. Histograms are usefule for seeing how data are distributed.

(a) Not enough information
(b) TRUE
(c) FALSE

21. Probable outliers can't be seen on a histogram.

(a) TRUE
(b) Not enough information
(c) FALSE

22. What type of plot is appropriate for ordinal level data.

(a) bar chart
(b) histogram
(c) box plot
(d) scatter plot

23. Based on the plot, select the statements that are true.

(a) The data are platykurtic.
(b) The data are normally distributed.
(c) The data are right skewed.
(d) The data are leptokurtic.
(e) The data are left skewed.

24. Based on the plot, select the statements that are true.

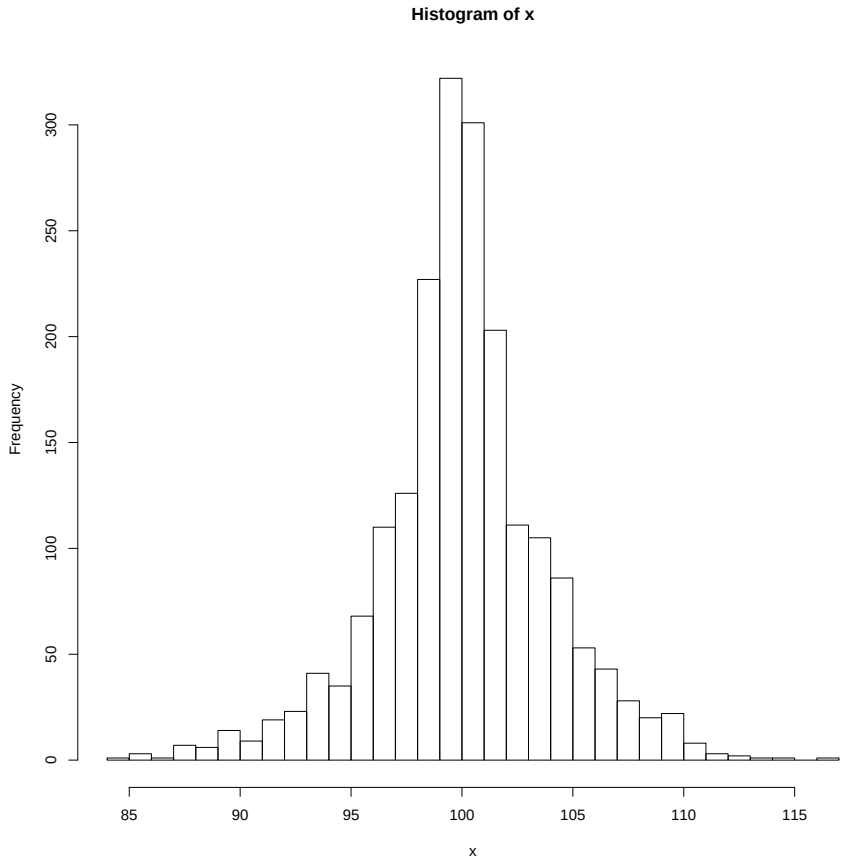
Histogram of x
Frequency
0
50
100
150
200
250
300
85
90
95
100
105
110
115
x

Figure 1:

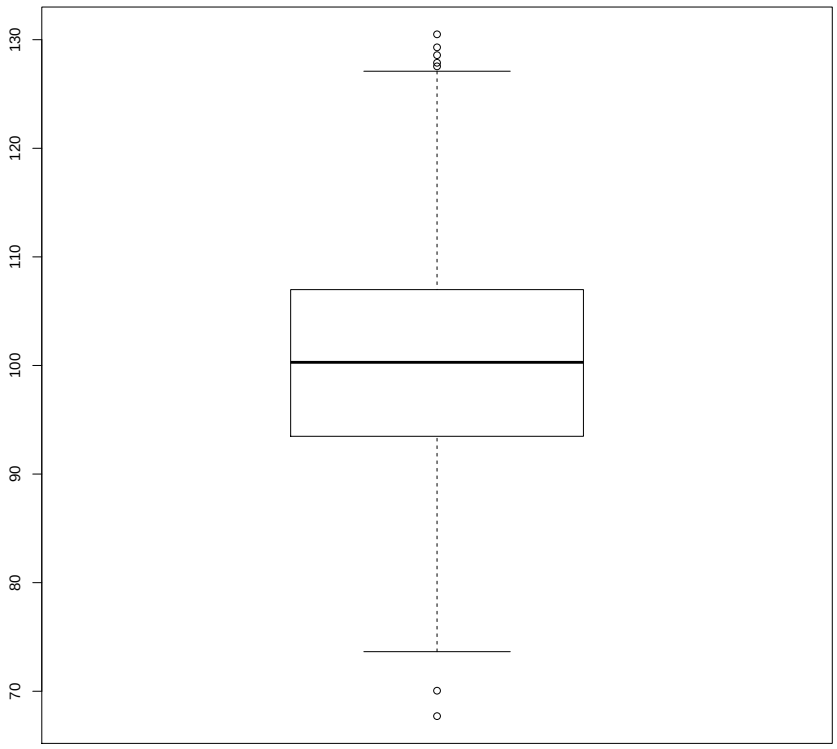

Figure 2:

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