Chapter 14

1. For what do we use a goodness-of-fit test?

To describe the population of nominal data.

2. Which variable is used in a goodness-of-fit test?

The chi-square random variable

3. What chance does H0 describe in a goodness-of-fit test?

The probability that an observation falls into each category.

4. How do you calculate the degrees of freedom of a chi-squared random variable when the population parameters are estimated?

(K-m-1).

5. What is being tested with the Jarque-Bera test?

The normality of a distribution.

6. What are the two parts of a Jarque-Bera test?

The skewness and kurtosis.

7. How do we formulate the null hypothesis at a chi-squared random variable for contingency table?

H0: there is no relationship between two characteristics in the population.

8.What can we calculate with a sign test?

The probability that the difference is negative or positive.

9. How do we formulate the null hypothesis of a sign test?

$H_0: P = 0.5$

10. What is a disadvantage of the sign test?

That is only processes a limited part of the information, only the sign of difference.

11. What method can be used to associate the magnitude of the difference in the test?

The Wilcoxon Signed rank test.

12. When does the Mann-Whitney U test approximate the normal distribution?

When each sample contains at least 10 observations

13. What is the Spearman rank correlation coefficient?

If x_i *and* y_i *are each ranked in ascending order and the sample correlation of these ranks is calculated, the resulting coefficient is called the Spearman rank correlation coefficient.*

14. What is the null hypothesis of a runs test?

H_0 : *the series is random*