

R University

Statistics Exam 2024-03-13

Exam ID 00001

Name: _____

Student ID: _____

Signature: _____

1. (a) ☐ (b) ☐ (c) ☐ (d) ☐ (e) ☐

1. The waiting time (in minutes) at the cashier of two supermarket chains with different cashier systems is compared. The following statistical test was performed:

Two Sample t-test

data: Waiting by Supermarket

t = 4.1777, df = 108, p-value = 2.996e-05

alternative hypothesis: true difference in means between group Sparag and group Consumo is g

95 percent confidence interval:

1.241878 Inf

sample estimates:

mean in group Sparag mean in group Consumo

5.419987

3.360063

Which of the following statements are correct? (Significance level 5%)

- (a) The absolute value of the test statistic is larger than 1.96.
- (b) A one-sided alternative was tested.
- (c) The p-value is larger than 0.05.
- (d) The test shows that the waiting time is longer at Sparag than at Consumo.
- (e) The test shows that the waiting time is shorter at Sparag than at Consumo.