STA2023 Example for Application 2: Sample Data and Inferential Statistics

Do not number these items in your application. Create a single document with these items, numbering the tables as stated in the assignment.

Item 1: Title Page

Item 2: Introduction

Item 3: Tables

26.3	34.5	40.4	46.5	49.5
30.3	34.5	41.0	47.1	50.1
32.0	35.4	41.9	47.3	52.5
32.9	37.2	42.4	47.3	53.2
34.2	38.5	42.7	47.3	58.1

Table 1: Sorted Set of Sample Data

Statistic	Value
$\bar{x}$	41.72
Median	41.9
s	8.08
s^2	65.33
Range	31.8
n	25

Table 2: Important Statistics

Statistic	Value
Minimum Usual Value $\bar{x} - 2s$	25.56
Maximum Usual Value $\bar{x} + 2s$	57.88

Table 3: Minimum and Maximum Usual Values

Confidence Level	98%
$\overline{x}$	41.72
$t_{\frac{\alpha}{2}}$	2.492
E	4.03
Confidence Interval	37.69 < μ < 45.75

Table 4: Confidence Interval One

Confidence Level	2nd confidence level
$\overline{x}$	41.72
$t_{\frac{\alpha}{2}}$	2nd critical value
E	2nd error
Confidence Interval	2nd confidence interval

Table 5: Confidence Interval Two

Item 4: Summary