Lab Check

Answer the following questions to prove you have completed the lab successfully.

You have a maximum of **one** attempt to answer each question correctly. After you submit your answer, you will be unable to change it. Your scores from all labs will be combined to determine your overall grade for the course.

If you have any questions about grading or specific questions, please post them in the course discussion forum. However, please avoid posting any information that will reveal answers to your fellow students. In the event of a dispute, the decision of the course staff is final.

Question 1

3.0/3.0 points (graded)

In the lab, you calculated summary statistics for Temperature.

What values did you calculate for the following measures of central tendency?

Your answers must be accurate within 0.01.

Mean:

60.73 ✔

60.73

Median:

61.10 ✔

61.10

Mode:

55.9 ✔

55.9

Submit You have used 1 of 1 attempt

Question 2

2.0/2.0 points (graded)

What values did you calculate for the following measures of variance?

Your answers must be accurate within 0.01.

Population Variance:

261.6003 ✔

261.6003

Population Standard Deviation:

16.174 ✔

16.174

Submit You have used 1 of 1 attempt

Question 3

1/1 point (graded)

In the lab, you created a histogram and a box and whiskers chart for temperature.

Which description of the temperature distribution is most accurate?

- ○ Left-skewed
- ◉ Approximately normal ✔
- ○ Right-skewed
- ○ Uniform

Submit You have used 1 of 1 attempt

Question 4

2/2 points (graded)

In the lab, you calculated the correlation between Rainfall and Sales.

What value did you calculate for this correlation?

-0.909213932 ✔

-0.909213932

Your answer must be accurate within 0.01.

What does the correlation value you calculated for Rainfall and Sales indicate?

- ○ High levels of rainfall cause low sales.

- High levels of rainfall cause high sales.
- Days with low levels of rainfall tend to have higher sales than days with more rain. ✔
- Days with high levels of rainfall tend to have higher sales than days with less rain.

Submit You have used 1 of 2 attempts

Question 5

1/1 point (graded)

In the lab, you performed a hypothesis test with the following hypotheses:

- **H_0**: Higher mean sales on days with lower than average rainfall can be explained by random variance.
- **H_1**: Mean sales on days with lower than average rainfall are significantly higher than the population mean and can't be explained by random variance.

You used a critical value of *0.05* to determine whether to reject the null hypothesis in favor of the alternative hypothesis.

What was the outcome of the test?

- The null hypothesis should be rejected in favor of the alternative hypothesis. ✔
- There is insufficient evidence to reject the null hypothesis

Submit You have used 1 of 1 attempt

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