

USING THE ATTACHED NUMERICAL DATA:

WEEK 10 – ASSIGNMENT 1

- Write a 2-3 page report in which you:
 - Calculate the mean, median, and standard deviation for ounces in the bottles.
 - Construct a 95% Confidence Interval for the ounces in the bottles.
 - Conduct a hypothesis test to verify if the claim that a bottle contains less than 16 oz. is supported. Clearly state the logic of your test, the calculations, and the conclusion of your test.
 - Provide the following discussion based on the conclusion of your test.
- A: If you conclude that there are less than 16 ounces in a bottle of soda, speculate on 3 possible causes. Next, suggest the strategies to avoid the deficit in the future.

OR

- B: If you conclude that the claim of less soda per bottle is not supported or justified, provide a detailed explanation to your boss about the situation. Include your speculation on the reason(s) behind the claim, and recommend 1 strategy geared toward mitigating this issue in the future.

Your assignment must follow these formatting requirements:

- Be typed, double spaced, using times new roman – size 12 – with one-inch margins on all sides. No citations and references are required, but if you use them, they must follow APA format.

Assignment must include these highlights:

- Calculate measurement of central tendency and dispersal
- Determine confidence intervals for data
- Describe the vocabulary and principles of hypothesis testing

- **Discuss application of course content to professional contexts**
- **Use technological tools to solve problems in statistics**
- **Write clearly and concisely about statistics using proper writing mechanics**