

# Republic of the Philippines BATANGAS STATE UNIVERSITY

## **The National Engineering University**

### Lipa Campus

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### **College of Informatics and Computing Sciences**

#### Quiz 1

Math 408 – Data Analysis First Semester, AY 2024 – 2025

Name:	Score:
Section:	Date:
VISION	
A premier national university that develops leaders in the global knowledge economy.	
MISSION	
A university committed to producing leaders by providing a 21 st century learning environment through innovations in education,	
multidisciplinary research, and community and industry partnerships in order to nurture the spirit of nationhood, propel the national economy,	
and engage the world for sustainable development.	

### **General Directions:**

- 1. **BOX** your final answers
- 2. Answers must be *complete*.
- 3. *Unanswered questions* will be marked wrong.
- 4. **NO SOLUTION** will be marked wrong.
- 5. Use short bond paper
- 6. Write the problems in your answer sheet
- 1. The average weight of all residents in town ABC is 168 lbs. A nutritionist believes that true mean to be different. She measured the weight of 36 individuals and found the mean to be 169.5 lbs with a standard deviation of 3.9. (a) State the null and alternative hypotheses. (b) At 97 % confidence level, is there enough evidence to discard the null hypothesis? (Use the p-value method).
- 2. A Telecom service provider claims that individual customers pay on an average Php 400.00 per month with standard deviation of Php 25.00. A random sample of 50 customers' bills during a given month is taken with a mean of 250 and standard deviation of 15. What to say with respect to the claim made by the service provider?