

SIE 330R Homework, Spring 2023

Quiz 1 (Chapter 1, due Jan 17, 2023)

Homework must be readable! Do not just send in numbers or charts. You must explain the homework answers Preferred to receive homework in Word doc format with any excel or Minitab results pasted into word document. You may choose to use pdf which is also OK.

Put answers to all questions in one document NOT in separate documents

1.2: Suppose that you want to investigate the factors that potentially affect cooking rice.

- a. What would you use as a response variable that could impact the response?
- b. List all of the potential sources of variability that could impact the response?
- c. Complete the first 3 steps of the guidelines (State Problem, Identify Response, Choice of Factor) for designing experiments (from section 1.4).

1.8: What is replication? Why do we need replication in an experiment? Present an example that illustrates the differences between replication and repeated measures.

1.9: Why is randomization important in an experiment?

