

## Assignment 1

**Instructions.** Answer the questions below. Your responses should be in clear, concise, and well-organized prose.

Suppose the “Analyzing the Addition of Baristas at the Nimitz Coffee Bar” report had the following Conclusion section instead:

### Conclusion

The baristas make a huge difference in the cafe. It’s clear that having 4 baristas is the the best and one is the worst. Having 2 makes a big difference tho. Whether three or two should be the question as one makes the delay 18.2 seconds and the other makes the delay 2.7 seconds. So if delay is really a bad thing for people leaving the line, then three baristas and otherwise two is best.

1. Suppose you are a manager of the cafe. You are trying to determine your staffing and scheduling needs. From your experience, you have noticed that a few customers tend to start leaving the line if they are waiting longer than approximately 5 minutes. The number of customers leaving increases as the wait in the line grows longer. Moreover, some customers decide not to join the line at all if the line is long enough. You notice that customers seem more patient during the busy periods of the day.
  - (a) How can the above Conclusion section help or hinder you make decisions on how many baristas to have during any given shift?
  - (b) Consider the Conclusion section in the original report. How does that report help or hinder your decisions?
  - (c) Consider the simulation study performed. What, if any, additional information would help you with your decisions?
2. Using the given rubric, evaluate the above Conclusion section in the given categories. Be sure to briefly justify your reasons for your evaluation.