

Lecture 3 Review Quiz

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Class Logistics

1. Have you started studying for the midterm?
 - The correct answer is “Yes”
2. When is it?
 - Next Wednesday
3. Have you started thinking about your R project?
 - The correct answer is “Yes” but I will also accept “Kinda, I looked at some of the links you suggested”

Test Questions

1. Will we get a formula sheet?
 - No. If there's a formula that does not make sense, ask and we can remedy that.
2. Will R be tested?
 - Yes, but I will not ask you to write code on the exam.
3. What will be tested?
 - Everything through the end of today's lecture
4. Will we still have class before/after the exam?
 - Yes. The material we cover will depend upon how far we get today.
5. Will you post practice exams?
 - Yes

Homework-Inspired Test Questions

1. Do my answers have to be organized?
 - Yes. The easier it is for me to understand your reasoning and thought process, the easier it will be to give you points.
2. Does notation matter?
 - Yes. μ and σ are parameters while \bar{x} and s_x are statistics. This will become more important as we progress through the course.
3. Can I give examples instead of proofs?
 - No. Examples can help frame your intuition, but the proof is what establishes the facts.
4. What other things do I need to be careful of?
 - Equal signs. If you use equal signs, make sure the two sides are equal.
 - Proving things are equal. Start with what you know, not what you're trying to prove.

Real Questions

1. What is the difference between a ratio and an interval variable?
 - An interval variable only has meaningful differences, but no natural zero while a ratio variable has meaningful differences and ratios as well as a natural zero.
2. What is the gambler's fallacy?
 - The belief that short-run probabilities should reflect long-run probabilities.
3. What is the formula for $P(A \cap B)$?
 - $P(A) + P(B) - P(A \cup B)$
4. How many different Chipotle burritos can I make? There are 5 meats, 2 rice, 2 beans, and 4 salsas. I can only pick one of each ingredient.
 - $5 * 2 * 2 * 4 = 80$ burritos!
5. Ready for the next lecture?

