Practice Test Questions for Midterm: Review Ch 1 – 6

1. Download the HSB2 Dataset and import into a SAS session.

2. Test the claim that the mean writing score is equal to 50. Write all steps.

3. Test the claim that the mean writing score is different for males and females. Include all steps.

4. There are 4 unique race categories. Test to see if the 1st race has a different mean writing score than the 4th race.

5. In the Midterm Review PowerPoint, we found that there was strong evidence that the 12 packs had a higher mean amount sold than the 18 or 30 packs. This may be due to a lot of factors. We would like to investigate if price is one of them. Maybe, on average, the 12 pack cans were priced lower (per can) than the 18 or 30 packs and this was the reason they sold more. Divide each price by the number of cans for each of the 52 weeks and create a column for “price per can.” Conduct a test to detect any difference in price per can for the three case amounts (12, 18, 30). The above analysis does not need to be long … in fact I would prefer it not be … but it should be thorough. Provide the plots and arguments necessary to address the assumptions and fully interpret each model and / or analysis. Be selective in which plots you choose and minimize them on your paper. Organize your presentation to make the most of your space. In short, think about what YOU would want to see if you asked for the information / analysis / report.

Numbers 1-4 are covered in the review.