Final exam sample questions

1 You wonder if students with a higher GPA do better in foreign language classes. You hack the BYU mainframe and get student GPAs and their grades in foreign language classes. How would you test your hypothesis? What statistic would you use?

2 You are writing up the results of your study in which your analysis gave you:

   degrees of freedom = 32
   probability is less than .001
   t value is 45.98

   What is the correct format to summarize these data?

3 It seems to you that saying “try and see, try and go” and other “try and verb” expressions are taking over (or sound more modern than) the “try to see” and “try to go” type of expression. What resource could you use to prove this?

4 Compare two different sets of test scores that both have a mean of 145. The first has a standard deviation of 15 and the second has a standard deviation of 48. What does this difference tell you?

5 While listening to an audio book you notice the narrator has an interesting pronunciation and decide to do a phonetic study of his speech. According to IRB guidelines, would you need to get his approval to carry out the study? Why or why not?

6 What is the null hypothesis?

I will not ask questions about coding or the syntax used in Qualtrics or DMDX, just how they can be used.