Biol 570 Lab 7 Worksheet
Name: _____ Sorting Number: ____

Proportional model: Last digit problem.

Question 1. How many variables are represented in the frequency table?

Question 2. Expected numbers for each category, if H_0 was true?

Question 3. Show the work for calculated the χ^2 term associated with the "0" last digit category.

Question 4. What is the *df* for the test?
Question 5. Write a summary of the test (include sample size, test statistic, P-value, and *df*). It would be cumbersome to list the descriptive statistics, so no need to do this in a paper you would probably include a graph. However, do make sure that your results provide a sense of the data (i.e. if they deviate from the H_0, what is the pattern of the deviation?)

Specific hypothesis or model problem: Trisomy problem

Question 6. H_0:
H_A:
Question 7. Expected numbers:

Question 8. Conclusion:

Question 9. There are four criteria that are central to the binomial distribution. For the three listed below, briefly state whether they are consistent with this problem. Also, state the numerical value for n and p. Let "female" = "success".

1. 2 outcomes
2. fixed n
3. fixed p

Question 10. Show your work usint the binomial formula and calculate the expected number of classes with six men and one woman, given the null hypothesis.

Question 11. Conclusion:

Question 12. Without doing any calculations, do you expect to "reject" or "not reject" the null hypothesis with this much larger data set?