**BINGO BONUS (10 POINTS):**

Download this MS Word file. Type in your answer in ***GREEN*** and then email it to me.

Let’s consider the logistic regression model, which we will refer to as Model 1, given by

log(pi / [1-pi]) = 0.25 + 0.32\*X1 + 0.70\*X2 + 0.50\*X3

In the above formula, X3 is an indicator variable with X3=0 if the observation is from Group A and X3=1 if the observation is from Group B.

1. For X1=2 and X2=1 compute the **log-odds** for each group, i.e. X3=0 and X3=1.
2. For X1=2 and X2=1 compute the **odds** for each group, i.e. X3=0 and X3=1.
3. For X1=2 and X2=1 compute the **probability** of an event for each group, i.e. X3=0 and X3=1.
4. Using the equation for Model 1, compute the relative odds associated with X3, i.e. the relative odds of Group B compared to Group A.
5. Use the odds that you found in QUESTION 2 to compute the relative odds of Group B to Group A. How does this number compare to the result in Question #4. Does this make sense?

HOW TO SUBMIT YOUR BINGO BONUS WORK:

1. Rename Your DOC File to be LOGIT\_ANALYSIS\_lastname\_firstname.docx
2. Email the DOC File to your Instructor