Math 150, Spring 2021 Jo Hardin WU # 7 in-class: Monday, 2/15/2021 due: Tuesday, 2/16/2021

Your Name: _____

Names of people you worked with: _____

Instructions: Work on this problem in class with your group (if you are attending class synchronously) or out of class (hopefully with a person or two! if you are attending class asynchronously). The problem should be done on a piece of paper with a pencil or on some kind of tablet. The problem should **not** by typed up or done in LaTeX.

Work for a *maximum* of 15 minutes on the problem (regardless of what time you are working). *Do not* come back to the problem to "fix it up" or "finish it." Be sure to write down the names of the people you worked with during class (or outside of class).

Take a picture of your work and use a scanning app to create a pdf (or create a pdf directly from your tablet). Upload your work to Gradescope (via Sakai) within 24 hours of class.

Task: The following is taken from the article Case-Control Study of Use of Personal Protective Measures and Risk for SARS-CoV 2 Infection, Thailand (https://wwwnc.cdc.gov/eid/article/26/11/20-3003_article):

...odds ratio (OR) for infection was 0.08 (95% CI 0.02-0.31) for those maintaining a distance of >1 m from a COVID-19 patient; 0.13 (95% CI 0.04-0.46) for those whose duration of contact was \leq 15 minutes; 0.41 (95% CI 0.18-0.91) for those who performed handwashing sometimes; 0.19 (95% CI 0.08-0.46) for those who washed hands often; and 0.16 (95% CI 0.07-0.36) for those wearing a mask all the time during contact with a COVID-19 patient.

For one of the comparisons, write down in words an interpretation of the numerical values (include an explanation of the odds ratio as well as the confidence interval).¹

 $^{^{1}}$ n.b., the information in Table 1 provides counts, but the OR are all computed using logistic regression with random effects. https://wwwnc.cdc.gov/eid/article/26/11/20-3003-t1