

## Question 2

Using the setup in problem 1 (but now using a new sample of  $N=100$ ), we now fit a regression including an interaction between our two main explanatory variables.

- Explain both statistically and substantively the meaning of each of the parameters in the model.
- Write out the prediction equation for people from the south and another prediction equation for those not from the south. Explain why they are different and provide a substantive interpretation. This means that you need to tell me what this interaction model tells us about the political world.

Outcome variable is thermometer rating of Clinton

Intercept	36.00 (5.44)
Party ID	8.09 (2.49)
South	-10.53 (7.06)
South $\times$ Party ID	-3.57 (0.88)
R-squared: 0.35	

Stand. errors are in parentheses.

1. Substantively, each parameter is a defining feature of either a voters political identification, their geographic location, or the ~~geographic location~~ political identity within a singular geographic location. The statistical meaning is based on these substantive parameter how voters feel about Clinton.

2. Predictions  
people from the south are less likely to support Clinton, while people from the "north" are. They are different likely because of the political climate in these states, southern states tend to vote red, and Clinton is a blue candidate.