

Italian restaurants interactive activity

```
library(tidyverse)
nyc <- read_csv("http://www.math.smith.edu/~bbaumer/mth241/nyc.csv")
```

1. Let's start with some basic exploratory data analysis. Create a scatterplot illustrating the relationship between *Price* (the response variable) and *Food* (the primary explanatory variable).
2. Now add the binary explanatory variable *East* to your plot, using color. Use the `moderndive::geom_parallel_slopes()` function to add parallel lines to the plot.
3. Fit the parallel slopes model using `lm()`. Display the `summary()` of the model.
4. Interpret the slope coefficient for food quality. How much extra should you expect to pay for a slightly better meal?
5. Interpret the coefficient for location (relative to [5th Avenue](#)). Which side of Manhattan is more expensive?
6. Now add a third explanatory variable for quality of service to your model. What changes?

