

Please indicate your solutions clearly in the document using complete sentences and brief explanations. The point is that you indicate to me what the solution is and how it relates to the context of the question being asked. See the example spreadsheet I posted to the course website and the related video (<https://www.youtube.com/watch?v=1wNrxiceAiQ>) for help getting started with Excel (the steps are similar in other spreadsheet programs).

Email a single spreadsheet file with the names of all group members to [amohr@nebrwesleyan.edu](mailto:amohr@nebrwesleyan.edu) before class on the due date.

## Curve Fitting

Read the case study “Modeling Spending on Internet Advertising” at the end of Chapter 1 in the text and address the following points.

1. Create a scatter plot using the data from the “Exercises” section at the end of the case study.
2. Fit a linear function to the scatter plot.
3. Display the equation and correlation coefficient (“R-squared value”) on the chart.
4. Title the chart and label both axes.
5. Make any aesthetic changes you think enhances the clarity of your data, such as changing the domain and range shown in your chart if either is too big.
6. Create a second scatterplot using the same data and repeat all these steps for a quadratic (polynomial order 2) function.
7. According to each model, what should the spending be in 2017?
8. According to the correlation coefficient, which function is the better model of this data?